

**Errata Sheet**

**No. 1**

**Construction Equipment Ownership and Operating Expense Schedule  
All 12 Regions (volumes)**

**EP 1110-1-8**

**31 July 2007**

In reference to Appendix B, pages B-1 and B-2, cost per gallon: gasoline, diesel on-road, and diesel-off road prices are in error in volumes 1 through 12. The correction of these fuel prices results in recalculation of Table 2-1 and Table 2-2 in Chapter 2. As a result, Chapter 2, Tables 2-1 and 2-2 (pgs. 32-203; 205-260 respectively), and Appendix B have been replaced in the corrected 10 Sept 07 version.



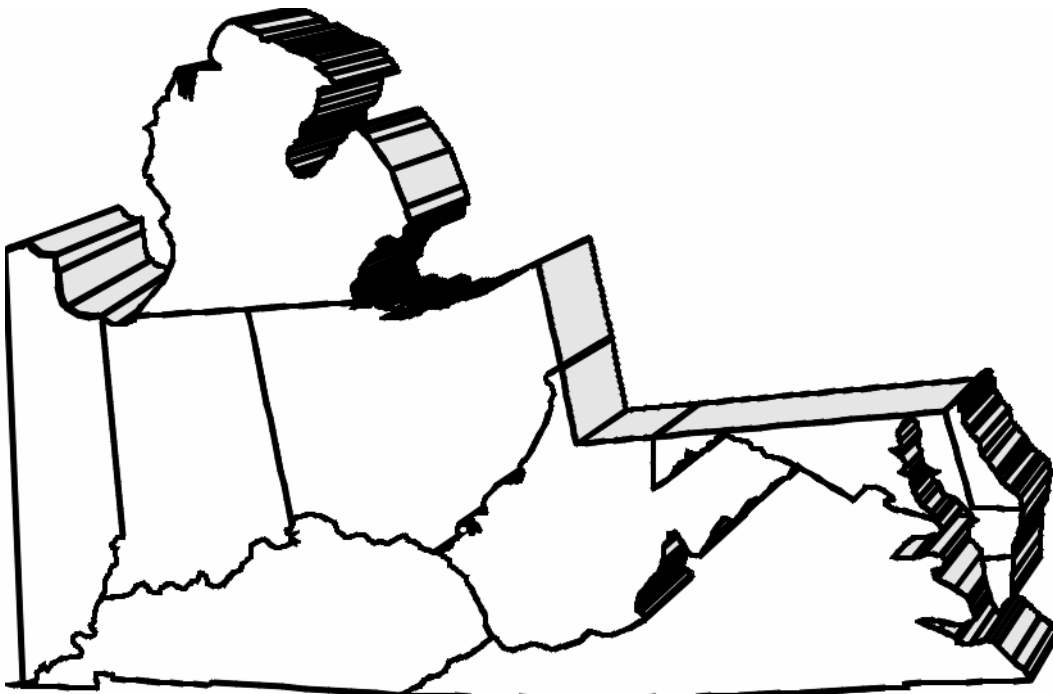
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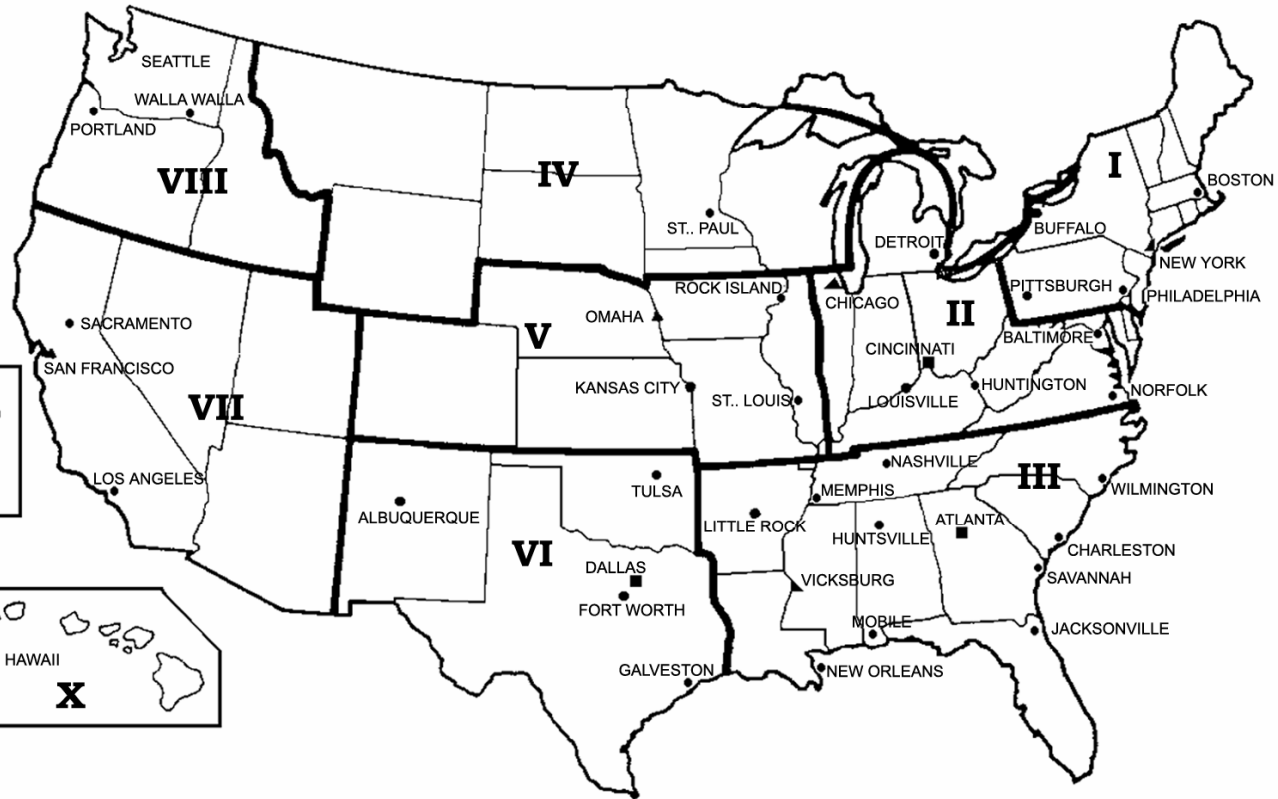
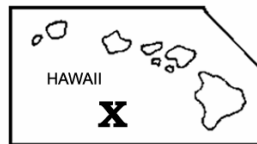
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# Construction Equipment Ownership and Operating Expense Schedule

## Region II



# Regions for the Construction Equipment Ownership and Operating Expense Schedule





DEPARTMENT OF ARMY  
U.S. Army Corps of Engineers  
Washington, DC 20314-1000

REPLY TO  
ATTENTION OF:

CECW-EC

Pamphlet  
No. 1110-1-8, Vol. 2

31 July 2007

CONSTRUCTION EQUIPMENT OWNERSHIP AND  
OPERATING EXPENSE SCHEDULE

1. Purpose. This pamphlet is authorized by and established in accordance with Federal Acquisition Regulation (FAR) 31.105 and Engineer Federal Acquisition Regulation (EFAR) SUBPART 31.105. This pamphlet establishes predetermined equipment ownership and operating expense rates for construction equipment. This pamphlet also establishes a method to calculate equipment ownership and operating expense rates for construction equipment when the predetermined rates are not considered appropriate. The overall intent of this pamphlet is to determine equipment costs that are fair and reasonable. Expense factors for calculating dredge plant and marine equipment costs are provided in chapter 4.

2. Applicability. This pamphlet applies to all USACE commands. It is applicable to all solicitations and contracts for construction expected to exceed the Simplified Acquisition Threshold of \$100,000 when actual cost data for both ownership and operating costs cannot be determined. This volume is for use in Region II, which includes the following states:

Delaware  
District of Columbia  
Illinois (East of U.S. Highway 51)  
Kentucky (East of U.S. Highway 51)  
Indiana


Maryland  
Michigan (Lower Peninsula)  
Ohio  
Virginia  
West Virginia

3. References. See **APPENDIX A**.

4. Distribution Statement. Approved for public release, distribution is unlimited.

FOR THE COMMANDER:

13 Appendixes  
(See Table of Contents)

  
YVONNE J. PRETTYMAN-BECK  
Colonel, Corps of Engineers  
Chief of Staff

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## CHAPTER 1.0 - INTRODUCTION

### 1.1 Use

The use of this pamphlet is for rate determination on construction contracts, dredging contracts, and negotiated procurements and relates only to contractor-owned equipment. The overall intent of the pamphlet is to determine equipment costs that are fair and reasonable.

a. This pamphlet shall be used for determining hourly equipment rates that are contained in the independent government estimate.

b. In addition, the use of this pamphlet will be required by contractors for pricing contractor-owned equipment in negotiated procurements when:

(1) Cost or pricing data is not required, as defined in Federal Acquisition Regulation (FAR) Part 15.400, *Contract Pricing*.

(2) Cost or pricing data is required and the actual cost data to support either ownership or operating costs for equipment or equipment groups of similar model and series is not available.

(3) Cost or pricing data is required and available, but all or part of the data is determined not to be in accordance with the FAR cost principles.

### 1.2 Decision Flow Process

A flow chart (figure 1-1) is provided at the end of this chapter to help the user better understand the process for developing an hourly equipment rate. The flow chart shows the decision points that allow the user to decide whether to use the predetermined rate tables or calculate the rate using the method shown in figure 2-1 or using CHECKRATE (also see paragraph 3.4).

### 1.3 How to Obtain Assistance

When assistance is needed in understanding the methodology for calculating equipment rates, contact the Chief, Cost Engineering Branch, Engineering and Construction Division, Walla Walla District, U.S. Army Corps of Engineers, (CENWW-EC-X), 509-527-7511, 509-527-7510, or visit the Web Site at <http://www.nww.usace.army.mil/cost/>.

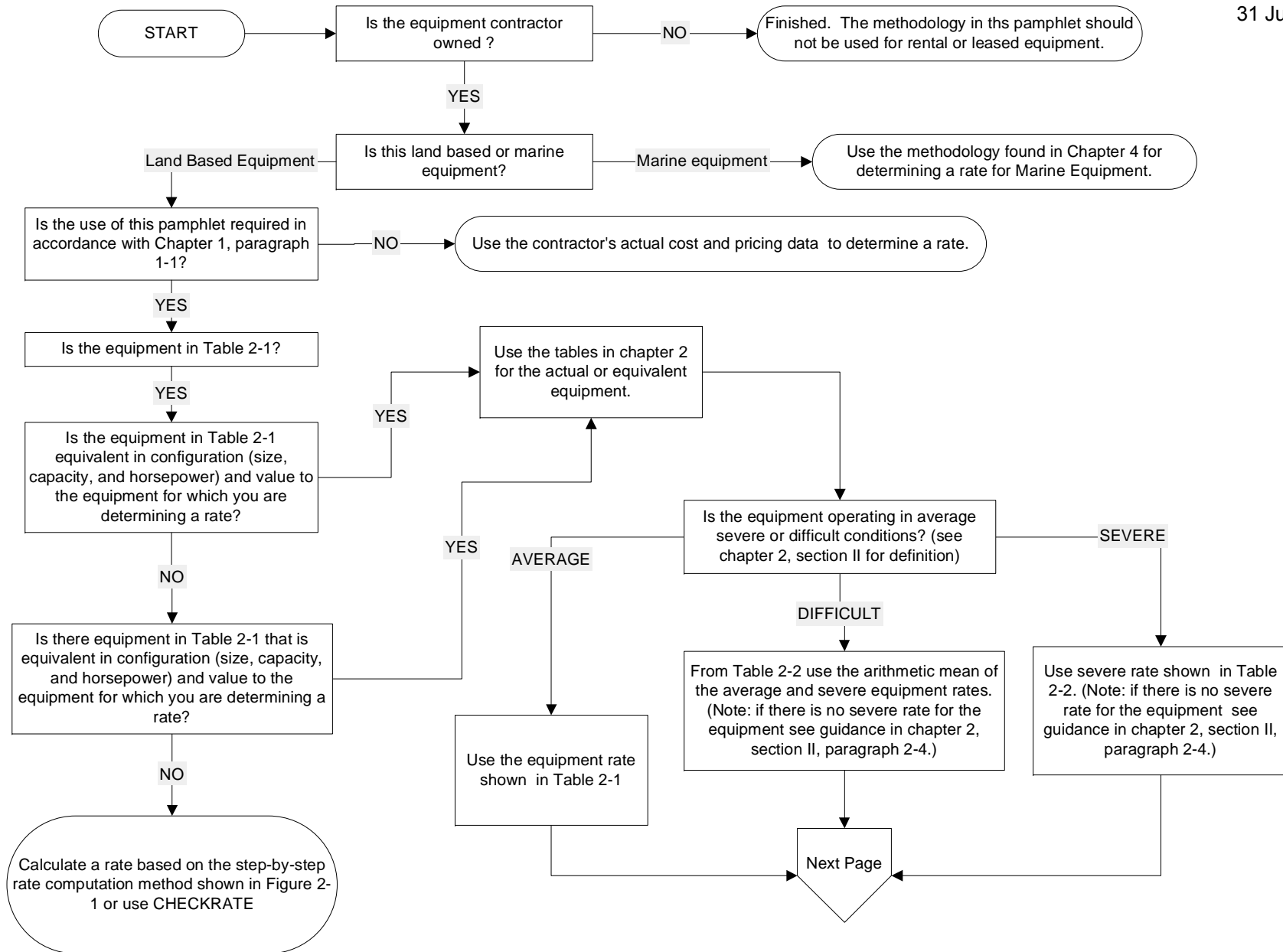
### 1.4 How to Obtain CHECKRATE Spreadsheet

A Microsoft Excel® spreadsheet, named "CHECKRATE," has been developed to calculate equipment rates using the methodology required by this pamphlet. The user must have Microsoft Excel® to run the application. The factors needed in the hourly cost calculations are located in the appendixes of this pamphlet. A copy of the

spreadsheet may be obtained by choosing the CHECKRATE link on the following Web Site: <http://www.nww.usace.army.mil/cost/>.

## **1.5 How to Obtain this Publication**

Volumes 1-12 of this pamphlet are available in portable document format (PDF) and can be viewed or downloaded at <http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/cecw.htm>. Copies of the pamphlet are also available on CD-ROM (Volumes 1-12) through the Superintendent of Documents or government bookstores (see appendix A). For additional information, telephone 202-512-1800, fax 202-512-2104, toll-free 866-512-1800, or access on the Internet at <http://bookstore.gpo.gov/>.



**Figure 1-1. Methodology for Developing an Hourly Ownership and Operating Rate for Construction Equipment**

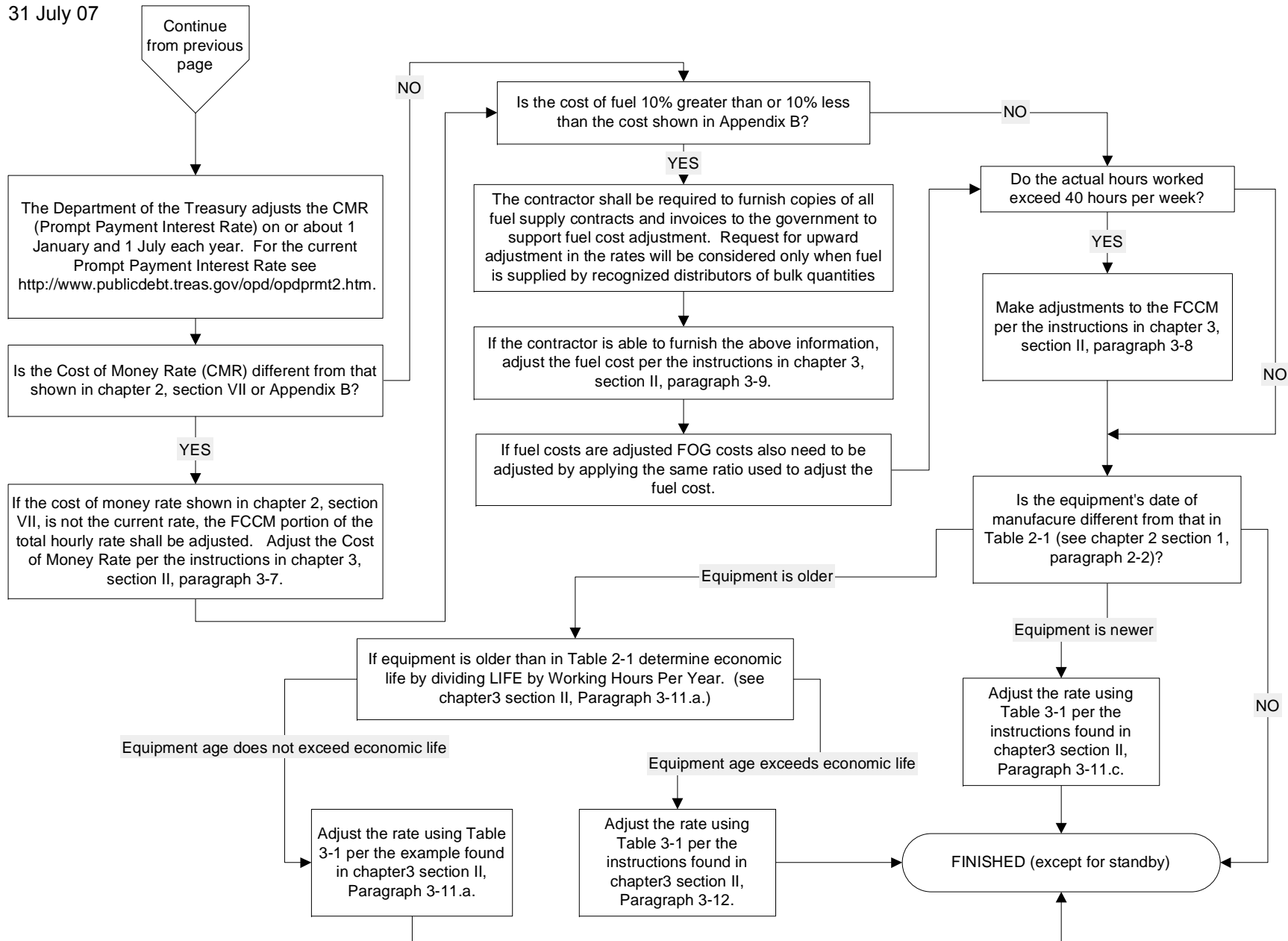


Figure 1-1. Methodology for Developing an Hourly Ownership and Operating Rate for Construction Equipment (Continued)

## CHAPTER 2.0 - METHODOLOGY FOR CONSTRUCTION EQUIPMENT

### SECTION I. GENERAL

#### 2.1 Contents

This chapter provides the methodology used to compute the total hourly ownership and operating rates for construction equipment and marine equipment (except dredging plant). This detailed methodology includes the formulas and factors used to develop both total hourly rates and hourly standby rates. If the equipment is determined to be older than its estimated economic life (overage) or was purchased used, refer to chapter 3.

#### 2.2 Basis for Equipment Rates

The hourly rates shown in table 2-1 reflect catalog list prices of equipment manufactured in 2004 (3 years old). List prices for equipment manufactured in years other than 2004 have been adjusted to a 2004 price level using economic indexes. Ownership and operating expenses are computed using area factors, found in appendix B, which are specific to each region and volume. This hourly rate methodology assumes that equipment furnished to the job is in sound, workable condition. Furthermore, the methodology applies only to equipment that prime contractors or subcontractors either own or control. These hourly rates and cost factors do not represent rental charges for those in the business of renting equipment.

#### 2.3 Total Hourly Rate

Hourly rates for average conditions are shown in table 2-1 and are computed based on a 40-hour (hr) workweek. The hourly rate is the sum of ownership and operating costs. Table 2-2 contains all individual rate elements for both average and severe conditions. An example of the methodology used to compute the total hourly rate is shown in figure 2-1. For standby calculation, see section IX.

a. Ownership Cost Elements. The ownership portion of the rate consists of an allowance for depreciation (DEPR) and facilities capital cost of money (FCCM).

b. Operating Cost Elements. Operating costs include allowances for the following:

- Fuel
- Filters, oil, and grease (FOG) (includes servicing)
- Repairs (includes maintenance and major overhauls)

- Tire wear (replacement)
- Tire repair

c. Exclusions to Hourly Rates. Total hourly rates for owning and operating equipment do not include allowances for the following:

- Operating labor
- Mobilization and demobilization
- Field office overhead expenses
- Home office or general and administrative (G&A) overhead expenses
- Investment tax credit
- Contingency allowance
- Profit
- Parts and labor escalation

It should also be noted that replacement cost is not included in the rates, as it is not an allowable item of cost per FAR 31.105(d)(2)(i).

d. Other Ownership Elements. The following elements of cost are not included in the total hourly rates. These costs are allowable and would normally be included in the contractor's field office or home office overhead rate calculation.

(1) License fees, property taxes, storage, and insurance costs are considered indirect costs and are not included in the total hourly rates.

(2) Jobsite security, inspection fees, recordkeeping, mechanic training, and highway permits are also not included in the total hourly rates.

## **SECTION II. OPERATING CONDITIONS**

### **2.4 Average, Difficult, or Severe Conditions**

Operating conditions may be average, difficult, or severe. Hourly rates for both average and severe operating conditions are determined in accordance with appendix C. The rate for the difficult condition is the arithmetic mean of the average and the severe rates. When only the average rate is shown in table 2-2, the rate applies for all operating conditions or as determined by the contracting officer. Average condition rates are included in both tables 2-1 and 2-2. Only table 2-2 contains the severe condition rates.

### **2.5 Determination of Condition**

For contract modifications, the contracting officer determines the equipment operating condition to be used. This determination is based on contract specifications, site conditions, basis of any supporting evidence, and guidance in appendix C. Evaluation of operating conditions for equipment not listed in appendix C will be

consistent with examples shown in appendix C. The operating condition of the equipment relates to the average and severe factors as detailed in appendix D.

## **SECTION III. EQUIPMENT SELECTION**

### **2.6 General**

Equipment shown in table 2-1 is representative of equipment that is used in general construction. Note that some equipment may require additional attachments or accessories. Each unit of equipment is grouped into a main group called a category (CAT) and a subgroup called a subcategory (SUB). This type of grouping is displayed in table 2-1 and appendix D. Also, an identification number (ID No.) is assigned to each unit of equipment. The ID No. consists of three parts. The first three characters are the CAT, the second two characters are the manufacturer's code, and the last three characters are the sequence number.

### **2.7 Truck Selection**

Because of the large number of possible combinations of highway truck chassis and bodies, both are listed separately. For estimating purposes, use the gross vehicle weight (GVW) rating of the truck chassis to make a selection with the following conditions:

- a. The combined weight of the truck chassis, truck body, and payload must not exceed the GVW rating shown for the truck chassis.
- b. The gross combined weight (GCW) of the truck, trailer, and payload must not exceed the GCW rating shown.

### **2.8 Crawler Tractor Selection**

A wide range of combinations of ripper and various blade options are available for each crawler tractor. For ease of use, all tractors include a universal blade attachment. Other blade and ripper attachments are shown separately and should be substituted for the universal blade to match actual equipment configuration. Only the hourly expense for those attachments that are required to perform the work shall be allowed.

### **2.9 Equipment Accessories**

Equipment accessories included on the major pieces of equipment in table 2-1 are listed in appendix J.

## **SECTION IV. EQUIPMENT VALUE**

### **2.10 List Price and Accessories**

The total list price includes those accessories normally purchased by the contractor plus required safety features.

### **2.11 Discount Code (DC)**

A 7.5-percent discount is used for all equipment except highway trucks that are discounted at 15 percent. The total discounted price is derived by subtracting the appropriate discount from the total list price. The identification of the discount is shown in appendix D under column heading DC. Two codes are used to identify the discount, B equals the basic discount of 7.5 percent and S equals the special discount of 15 percent.

### **2.12 Sales or Import Tax**

Total state sales tax (which includes local taxes) or import tax is computed as a percentage of the discounted price. The average tax for the region is shown in appendix B.

### **2.13 Freight**

Estimated allowances for freight are provided in appendix B. This allowance includes preparation and delivery. Multiply the shipping weight based on hundredweight (cwt) by the freight rate to determine freight charges.

### **2.14 Total Equipment Value (TEV)**

Freight is added to the total discounted price (which includes sales tax) to arrive at the TEV. The estimated TEV is indicated in table 2-1 under the column heading VALUE.

## **SECTION V. LIFE**

### **2.15 Economic Life (LIFE)**

The expected economic life of the equipment will vary based on the type of equipment and the condition of use. It is established from manufacturers' or equipment associations' recommendations. The expected economic life in hours is given in appendix D, under the column heading LIFE, for both average and severe conditions.

### **2.16 Working Hours Per Year (WHPY)**

Annual average operating hours have been established for equipment working within the region covered by this pamphlet. The number of WHPY as shown in



appendix B is equivalent to 1 year's use for a single shift operation. Average annual hours of use per year are determined by reducing the maximum available hours per year (40 hours per week, 52 weeks per year) to allow for lost working days due to the following factors:

- Weather
- Employee holidays
- Equipment maintenance and repairs
- Mobilization and demobilization
- Miscellaneous downtime

## **SECTION VI. SALVAGE VALUE**

### **2.17 Salvage Value (SLV)**

The salvage value for equipment is based on advertisements of used equipment for sale as displayed in current engineering and construction magazines, manufacturer's recommendations, and the *Green Guide Volumes I and II, Handbook of New and Used Construction Equipment Values*, Equipment Watch.

### **2.18 Salvage Value Percentage**

The salvage value percentage used for each type of equipment is listed in appendix D under the heading SLV as a percentage of the equipment value. It is equal for both average and severe conditions.

## **SECTION VII. OWNERSHIP COST**

### **2.19 Ownership Elements**

The ownership portion of the rate consists of allowances for depreciation (DEPR) and facilities capital cost of money (FCCM). These two cost elements are computed based on the TEV. Other ownership elements may be allowed (see paragraph 2-3.d.). Total ownership rate per hour is expressed by formula, as follows:

$$\text{Ownership Rate/hr} = \text{DEPR/hr} + \text{FCCM/hr}$$

### **2.20 Depreciation**

The straight-line method is used to compute depreciation.

a. For rubber-tired equipment, the tire cost index (TCI) must first be calculated to complete the depreciation formula.

b. Hourly depreciation is calculated by dividing the “depreciable” value (TEV less estimated salvage and tire cost) by the expected economic life of the unit of equipment in hours. Expressed by formula, depreciation cost equals the following:

$$\text{DEPR/hr} = \frac{[(\text{TEV})(1 - \text{SLV})] - [(\text{TCI})(\text{Tire Cost})]}{\text{LIFE}}$$

Where:

(1) TEV is the total equipment value found in table 2-1.

(2) SLV is the salvage value from appendix D.

(3) TCI is the tire cost index, which is determined by dividing the year of manufacture tire index by the present-year tire index. For table 2-1, the present year is 2007 and the year of manufacture is 2004 (3 years old). These indexes are listed as part of appendix E [see Economic Key (EK) 100, All Tires and Tubes].

(4) Tire cost is the total tire and/or conveyor belt cost. The total tire cost is the sum of the cost of all front, drive, and trailing tires. The tire cost for rubber-tired equipment is based on tire values at the time the equipment was manufactured.

(5) The LIFE is the economic life, which is based on the number of operating hours throughout the economic life of the equipment (see paragraph 2-15). Hours for LIFE are provided in appendix D.

## 2.21 Facilities Capital Cost of Money (FCCM)

The FCCM, as defined in FAR 31.205-10, is included in the total hourly rates. This cost is computed by multiplying a discounted cost of money rate (CMR) by the average value of equipment and prorating the result over the annual operating hours. The January 2007 CMR [5.25 percent as shown in appendix I determined by the Secretary of the Treasury pursuant to Public Law 92-41 (85 Stat. 97)] is discounted by a reduction of 25 percent to avoid duplication when applying estimated markups for overhead and profit. The discounted CMR is then 4.20 percent. The Department of the Treasury adjusts the CMR on or about 1 January and 1 July each year; these revisions are printed in the Federal Register or can be found on the Internet at [http://www.treasurydirect.gov/govt/rates/tcir/tcir\\_opdprmt2.htm](http://www.treasurydirect.gov/govt/rates/tcir/tcir_opdprmt2.htm). The CMR should be adjusted to the actual period that the equipment is used. Expressed by formula, FCCM cost equals the following:

$$\text{FCCM/hr} = \frac{(\text{TEV})(\text{AVF})(\text{discounted CMR})}{(\text{WHPY})}$$

Where:

(1) TEV is the total equipment value found in [table 2-1](#).

$$(2) \text{ Average Value Factor (AVF)} = \frac{[(N - 1)(1 + SLV)] + 2}{2N}.$$

$$(a) \text{ Number of Years (N) in Depreciation Period} = \text{LIFE/WHPY}.$$

(b) LIFE is the economic life, which is based on the number of operating hours throughout the economic life of the equipment (see paragraph 2-15). Hours for LIFE are provided in appendix D.

$$(3) \text{ Discounted CMR} = 5.25\% (\text{Jan} - \text{Jun } 2007 \text{ rate}) / 1.25 = 4.20\%.$$

$$(4) \text{ WHPY} = \text{Working hours Per Year found in appendix B}.$$

## SECTION VIII. OPERATING COST

### 2.22 Operating Cost Elements

The total operating cost is the sum of the following five elements: fuel, FOG, repairs, tire wear, and tire repair.

### 2.23 Fuel Cost

Fuel costs are computed for each gas, diesel, or electric engine. When the unit of equipment has two engines, as in the case of a truck crane, this methodology treats each engine separately for fuel costs. The hourly fuel cost for each unit of equipment is shown under the column heading FUEL in tables 2-1 and 2-2. When the unit of equipment has no engine, no fuel cost will be shown. Hourly fuel costs are calculated for each engine, as expressed in the following formula:

$$\text{Fuel Cost/hr} = \text{Horsepower (hp)} \times \text{Fuel Cost/Gallon (gal)} \times \text{Fuel Factor (gal/bhp-hr)}$$

a. Horsepower is the engines rated horsepower. All horsepower ratings for engine-driven equipment are listed with the equipment description in table 2-1.

b. Fuel Cost/Gallon is based on values shown in appendix B. See chapter 3 for fuel cost adjustments.

c. Fuel Factor - Gas or Diesel Fuel. The fuel factor in gallons per brake horsepower-hour (bhp-hr) is listed in appendix D for both average and severe conditions. Fuel factors are also listed for both the engine powering the main equipment (prime engine) and the engine providing power to the carrier vehicle. For severe conditions, the fuel consumption rate is 30 percent greater than the average condition rate. Gas or diesel fuel factors are computed by using the following formula:

$$\text{Fuel Factor (Gal/bhp - hr)} = \frac{\text{Horsepower Factor (HPF)} \times \text{lbs Fuel per bhp - hr}}{\text{lbs of Fuel per Gal}}$$

Where:

(1) The HPF is the horsepower factor used in the fuel and electricity consumption formulas and represents an average percent of full-rated horsepower being used by the engine. The fuel consumption factors, which are shown in appendix D under column headings Fuel Factor-Equipment and Fuel Factor-Carrier, are computed based on the HPF shown under these column headings. This HPF is an estimate of the engine load under average working conditions. It is necessary to modify the rated horsepower as engines and motors in actual production do not work at their full-rated horsepower at all times. Periods spent at idle, travel in reverse, traveling empty, close maneuvering at part throttle, and operating downhill are examples of conditions that reduce the HPF. Professional judgment regarding cycle time and equipment loading is applied to determine this average HPF. Normal field application can also vary according to: operator efficiency, type of material, type of work cycle, and overall jobsite efficiency. This pamphlet provides an estimated average HPF, not a specific factor.

(2) Pounds (lbs) fuel per bhp-hr is an average based on a variety of engine applications from manufacturer engine data. The following represent an average of the normal application of equipment and are indicative of engine fuel consumption industry wide. Pounds fuel (consumed) per bhp-hr is based on the following averages and is used consistently throughout this pamphlet:

Gasoline = 0.60 lbs per bhp-hr  
Diesel = 0.36 lbs per bhp-hr

(3) Pounds fuel per gallon is the factor that determines the weight of the fuel consumed. The following are used as constants in this pamphlet:

Gasoline = 6 lbs per gal  
Diesel = 7 lbs per gal

d. Fuel Factor - Electricity. Assuming that an electric motor uses 1 kilowatt (kW) per horsepower (considering all inefficiencies), and using the same HPF for gas or diesel fuel consumption, the electricity consumption is computed by the following formula:

$$\text{Fuel Factor (kW/hr)} = \text{HPF} \times 1 \text{ kW per electric hp - hr}$$

e. Fuel and Electricity Cost. The cost per gallon for gasoline and diesel fuel used to compute the hourly fuel cost is shown in appendix B. The hourly fuel cost for all gasoline-powered equipment, diesel-powered highway trucks, and truck crane carriers includes an allowance for Federal and state road taxes, sales taxes, and rental for fuel storage tanks and pumps. Cost per kilowatt-hour used to compute electricity cost are also shown in appendix B.

## 2.24 Filters, Oil, and Grease (FOG) Cost

The FOG cost is computed as a percentage of the hourly fuel costs.

a. The FOG contains items of cost for routine servicing of the equipment, which includes the following:

- Base wages for servicing labor
- Fringe benefits and labor burden costs for servicing
- Service truck, tools, and fuel truck allowance
- Shop allowance when shop servicing is required
- Other equipment costs for servicing
- FOG material allowance
- Taxes and shipping for FOG supplies
- Handling and disposal of hazardous materials and oil

b. The hourly FOG cost is calculated for each engine using the following formula:

$$\text{FOG Cost/hr} = \text{FOG Factor} \times \text{Fuel Cost/hr} \times \text{LAF}$$

Where:

(1) The FOG Factor is the percent allowance expressed as a decimal factor under each fuel type heading E (electricity), G (gas), or D (diesel). See appendix D.

(2) Fuel cost/hr is a calculated value shown under the column heading FUEL in tables 2-1 and 2-2.

(3) The LAF (labor adjustment factor) is a decimal factor to account for regional variations in labor and parts costs. This factor is provided in appendix B.

c. The FOG percentage allowance includes the cost for servicing. For equipment that is normally serviced by an oiler assigned to the unit of equipment, the FOG percentage is reduced. This reduction applies to the following equipment: cranes, draglines, hydraulic excavators, and shovels (except equipment under category numbers C75, C80.01, C85.11, C85.12, C85.21, C90.01, H25.11, H25.12, H30.01, H30.02, and M10.32).

d. When a unit of equipment has no engine (therefore no fuel costs calculated) and the equipment requires some type of fuel (*i.e.*, propane, kerosene), an alternative hourly fuel and FOG allowance may be used in lieu of the regularly calculated fuel and FOG hourly costs. A FOG allowance may also be added when the equipment has no engine and has parts that require FOG. The alternative fuel allowance is added to the alternative FOG allowance for a total alternative fuel and FOG cost. (See figure 2-1, 5.c.)

## 2.25 Repair Cost

a. The repair cost accounts for equipment repairs, maintenance, and major overhauls (including undercarriage wear, ground engaging tools, and designated attachments) performed in either the field or the shop. Where tire cost is the cost of the tires when the equipment was manufactured, use the same TCI and tire cost as shown in the depreciation calculation (see section 2-20). The estimated hourly rate for repairs is computed as follows:

$$\text{Repair Cost/hr} = \frac{[(\text{TEV}) - (\text{TCI})(\text{Tire Cost})] \times \text{RF}}{\text{LIFE}}$$

Where:

(1) TEV is the total equipment value found in table 2-1.

(2) TCI is the tire cost index, which is determined by dividing the year of manufacture tire index by the present-year tire index. For table 2-1, the present year is 2007 and the year of manufacture is 2004 (3 years old). These indexes are listed as part of appendix E [see Economic Key (EK) 100, All Tires and Tubes].

(3) Tire cost is the total tire and/or conveyor belt cost. The total tire cost is the sum of the cost of all front, drive, and trailing tires. The tire cost for rubber-tired equipment is based on tire values at the time the equipment was manufactured.

(4) Repair factor (RF) is calculated as follows:

$$\text{RF} = \text{RCF} \times \text{EAF} \times \text{LAF}$$

Where:

(a) The RCF (repair cost factor) is shown in appendix D. This factor varies depending on the operating condition of the equipment (average or severe).

(b) The EAF (economic adjustment factor) is used to adjust the RCF to current price levels. The EAF is equal to the economic index for the present year divided by the economic index for the year of manufacture. Indexes listed in appendix E are used to develop the EAF. Economic indexes are determined as follows:

Economic Index for the Present Year. This is the economic index for the present year (2007 for table 2-1 calculations). Obtain the economic index from appendix E. The index is located in the column with the present year and the row with the type of equipment in question. When the column for the present year has not been included, the index can be estimated using a straight-line projection.

Economic Index for the Year of Manufacture. This is the economic index for the year the equipment was manufactured (2004 for

table 2-1 calculations). Obtain the economic index from appendix E. The index is located in the column with the year of manufacture and the row with the type of equipment in question. When the actual age of the equipment is beyond the last year of its economic life, the equipment is considered overage. Economic life is determined by dividing hours of LIFE (from appendix D) by WHPY (appendix B).

(5) The LIFE is the economic life, which is based on the number of operating hours throughout the economic life of the equipment (see paragraph 2-15). Hours for LIFE are provided in appendix D.

b. Items Included in the Repair Cost Factor. The estimated percentage allowances for the RCF are shown in appendix D under the column heading RCF and are expressed as decimal factors. These RCFs (for both the average and severe conditions) compensate for the following cost elements:

(1) Mechanic's labor includes base wages, fringe benefits, supervision, travel, and all other costs for labor associated with craft workers engaged in the direct repair of equipment either in the field or the shop.

(2) Repair parts and supplies include those items that are required for all repairs and major overhauls complete with applicable sales taxes and freight charges.

(3) Service trucks and other equipment used during field or shop repair and maintenance work including tools.

(4) Supporting repair facilities include field and main repair shops, complete with parts and supplies inventory, and shop overhead.

## **2.26 Tire Wear Cost**

a. Tires included on rubber-tired equipment are generally the type and ply rating recommended as standard tires by the equipment manufacturer. Tire costs include both tire wear (replacement) and tire repair as individual elements of cost. Conveyor belt wear is also included under this cost element. The belt wear is treated like tire wear. The wear factors are listed in the front tire wear factor column in appendix D. Belt life and cost are listed in appendix F.

b. The formula for calculating tire wear applies to each tire position: front (FT), drive (DT), and trailing (TT). However, all tires performing the drive function are considered drive tires and are listed in the drive position. The total hourly tire wear cost for each unit of equipment is the sum of the hourly cost for each position. The total hourly tire wear cost equals the current cost of new tires plus the cost of one recapping divided by the expected life of the new tires plus the life of the recapped tires. This hourly allowance for determining tire wear cost is expressed in the following formula:

$$\text{Tire Wear Cost/hr} = \frac{\text{Tire Cost Factor} \times \text{Current Tire Cost}}{\text{Tire Life Factor} \times \text{Tire Wear Factor} \times \text{Maximum Tire Life}}$$

Where:

(1) Tire Cost Factor is estimated at 1.5, which represents the purchase of the original tire plus one recap. It has been estimated that a recap costs approximately 50 percent of the new tire cost.

(2) Current Tire Cost is the estimated cost that applies to all tires on the equipment in that position. For example, four new drive tires valued at \$500 each would result in an amount of \$2,000 for total drive tire cost. The size and cost of each tire used in the pamphlet are listed for information in appendix F.

(3) Tire Life Factor is estimated at 1.8, which represents the original tire life plus one recap. It has been estimated that a recap lasts approximately 80 percent of the life of a new tire.

(4) Tire Wear Factor is based on the position of the tire, type of equipment, and condition of use. Tire wear factors have been developed and are listed in appendix D. These factors will provide a percentage reduction to the maximum tire life. Appendix G contains the methodology used to develop these factors and a computation example for a rear dump wagon.

(5) Maximum Tire Life expressed in hours is shown for various new tire types in appendix F. The tire life is estimated from information provided by Goodyear Tire and Rubber Company and by using the method and tables in *Production and Cost Estimating of Material Movement with Earthmoving Equipment*, Terex Corporation, Hudson, Ohio.

## **2.27 Tire Repair Cost**

It has been estimated that tire repairs are 15 percent of the total hourly tire wear cost. The LAF is used to adjust the tire repair cost to account for regional variations in labor and parts costs. This cost element has been calculated and listed separately in table 2-2. It is expressed as a formula as follows:

$$\text{Tire Repair Cost} = \text{Total Hourly Tire Wear Cost} \times 0.15 \times \text{LAF}$$

## **SECTION IX. STANDBY HOURLY RATE**

### **2.28 Standby Hourly Rate**

The standby rate is computed by allowing the full FCCM hourly cost (based on a 40 hour workweek) plus one-half of the hourly depreciation. It is expressed as a formula, as follows:

$$\text{Standby Rate/hr} = (\text{DEPR/hr} \times 0.50) + \text{FCCM/hr}$$



a. Paid standby shall not exceed 40 hours per week (7 calendar days) (based on a 40 hour workweek) per unit of equipment. Actual operating hours during a week will be credited against the 40 hours maximum standby allowance.

b. Standby costs will not be allowed during periods when the equipment would have otherwise been in idle status.

c. When the equipment is purchased used, standby will be computed on the basis that the equipment was purchased new by the contractor in the year it was actually manufactured. Refer to chapter 3 for rate adjustments.

## **SECTION X. RATE CALCULATION EXAMPLE**

### **2.29 Computation Example**

Figure 2-1 is an example of how the total hourly rates in table 2-1 are computed. A blank Equipment Rate Computation Worksheet is included in appendix A and can be copied as needed.

a. When an hourly rate for a specific unit of equipment is not included in this pamphlet and a rate must be computed, the methodology contained in chapter 2 shall be followed. However, when a unit of equipment is not included in this pamphlet and the necessary factors to compute a rate are not found in appendix D, please contact the Chief, Cost Engineering Branch, Engineering and Construction Division, Walla Walla District, U.S. Army Corps of Engineers, for assistance as explained in chapter 1. A Microsoft Excel<sup>®</sup> spreadsheet (**CHECKRATE**) is also available for rate computation (see chapter 1).

b. See chapter 3 for further guidance on the procedure for rate adjustments.

**Example:** The piece of equipment shown in this example is based on a known piece of equipment for illustration purposes only.

USE THIS WORKSHEET TO COMPUTE A HOURLY RATE FOR EQUIPMENT THAT IS NOT IN THIS PAMPHLET OR IS IN THE PAMPHLET BUT NOT EQUIVALENT IN SIZE, CAPACITY, HORSEPOWER OR VALUE (see Appendix A for blank form).

**Region 02**

**1. EQUIPMENT INFORMATION AND EXPENSE FACTORS**

ID No: C90LB001

a. Equipment Specification Data:

- (1) Equipment Description: CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 150 TON / 260' BOOM, 8X4
- (2) Model and Series: HC-238H II
- (3) Present Year or Year of Use: 2007
- (4) Year Manufactured: 2004
- (5) Horsepower - Equipment: 207
- (6) Horsepower - Carrier: 430
- (7) Fuel
  - **Equipment:** 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel  
 Enter number from 0 to 6 ==> 3 D-off
  - **Carrier:** 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel  
 Enter number from 0 to 6 ==> 4 D-on
- (8) Shipping Weight (cwt): 1,913 cwt

(9) Tire size and number of tires: (Cost of tires based on present year, see 1.a.(3) and App. F):

	<u>Size/Ply</u>	<u>App F Code</u>	<u>No.</u>	<u>Unit Price</u>	<u>Cost</u>
(a) Front (FT):	<u>14-25/20</u>	<u>ANMB1</u>	<u>4</u>	<u>\$1,327</u>	<u>\$5,308</u>
(b) Drive (DT):	<u>14-25/20</u>	<u>ANMB1</u>	<u>8</u>	<u>\$1,327</u>	<u>\$10,616</u>
(c) Trailing (TT):	<u></u>	<u></u>	<u>0</u>	<u>\$0</u>	<u>\$0</u>
(d) Total Tire Cost:					<u>\$15,924</u>

- (10) List Price + Accessories: \$1,327,898 OR actual purchase price: \$0  
 [at Year (yr) of Manufacture]

**USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:**

- b. Category and Subcategory Number: C90 0.04
- c. Hourly Expense Calculation Factors:
  - (1) Economic Key (EK): 20
  - (2) Condition (C): **A**=Average **D**=Difficult **S**=Severe A AVERAGE
  - (3) Discount Code (DC): **B** = 7.5% (0.075) or **S** = 15.0% (0.15) B 0.075
  - (4) Life in Hours (LIFE): 20,000
  - (5) Salvage Value Percentage (SLV): 0.20
  - (6) Fuel Factor - Equipment [Electric (E) Gas (G) Diesel (D)]: 0.024
  - (7) Fuel Factor - Carrier (E G D): 0.005
  - (8) Filter, Oil, and Grease (FOG) Factor (E G D): 0.110
  - (9) Tire Wear Factor:
    - (a) Front (FT): 0.66
    - (b) Drive (DT): 0.58
    - (c) Trailing (TT): 0.73
  - (10) Repair Cost Factor (RCF): 0.90

Figure 2-1. Equipment Rate Computation Worksheet

**Region 02**

**2. EQUIPMENT VALUE**

a. List Price + Accessories: [at Year (yr) of Manufacture]					=	<u>\$1,327,898</u>
(1) Discount:	(List Price + Accessories) x (Discount Code)					
	1.a.(10)		[1.c.(3)]			
	<u>(\$1,327,898)</u>	+	<u>\$0.00</u>	x	<u>( 0.075 )</u>	= <u>-\$99,592</u>
(2) Subtotal [2.a.] - [2.a.(1)]					Subtotal =	<u>\$1,228,306</u>
(3) Sales or Import Tax:	(Subtotal)	x	(Tax Rate)			
	[2.a.(2)]		[Appendix B]			
	<u>(\$1,228,306)</u>	x	<u>( 5.40% )</u>			= <u>\$66,329</u>
(4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)]					Subtotal =	<u>\$1,294,635</u>
b. Freight:	(Shipping Weight)	x	(Freight Rate per cwt)			
	[1.a.(8)]		[Appendix B]			
	<u>(1,913 cwt)</u>	x	<u>(\$4.88 /cwt)</u>			= <u>\$9,335</u>
c. <b>TOTAL EQUIPMENT VALUE (TEV):</b>			<b>TOTAL[2.]:</b>		=	<u>\$1,303,970</u>
	[(2.a.(4)) + [ (2.b)]]					
	<i>(See chapter 3 for used and overage equipment rate adjustments.)</i>					

**3. DEPRECIATION PERIOD (N)**

a.	(LIFE)	/	(Working Hours Per Year (WHPY)) = N			
	[1.c.(4)]		[Appendix B]			
	<u>(20,000 hr)</u>	/	<u>(1,450 hr/yr)</u>			= <u>13.79 yrs (N)</u>

**4. OWNERSHIP COST**

a. Depreciation

(1) Tire Cost Index (TCI):						
(Tire Index, Year of Manufacture,	(Tire Index, Present Year or Year of Use,					Tire Cost
1.a.(4)	1.a.(3))	/				Index (TCI)
[Appendix E, EK=100]	[Appendix E, EK=100]					
<u>(2614)</u>	<u>(3058)</u>	/				= <u>0.855 (TCI)</u>
(2) [(TEV)	x [1.0-(SLV)]	-	[(TCI)	x (Tire Cost)] /	(LIFE)	
[2.c.]	[1.c.(5)]		[4.a.(1)]	[1.a.(9)(d)]	[1.c.(4)]	
<u>[( \$1,303,970 )</u>	x <u>[1.0-(0.20)]</u>	-	<u>[( 0.855 )</u>	x <u>(\$15,924 )]</u>	/ <u>(20,000 hr)</u>	= <u>\$51.48 /hr</u>

Figure 2-1. Equipment Rate Computation Worksheet

**Region 02**

**4. OWNERSHIP COST (Continued)**

b. Facilities Capital Cost of Money (FCCM):

(1)	[[ (N) - 1.0 ] [3.a.]	x	[1.0 + (SLV)] [1.c.5.]	+	2.0]	/	[2.0 x (N)] [3.a.]	=	Avg Value Factor (AVF)	
	[[ (13.79 yr) - 1.0 ]	x	[1.0 + (0.20)]	+	2.0]	/	[2.0 x (13.79 yr)]	=	<u>0.629 (AVF)</u>	
(Adjusted Cost-of-Money) [Appendix B]										
(2)	(TEV) [2.c.]	x	(AVF) [4.b.(1)]	x	(Adjusted Cost-of-Money) [Appendix B]	/	(WHPY) [Appendix B]	=		
	<u>(\$1,303,970)</u>	x	<u>(0.629)</u>	x	<u>(4.20%)</u>	/	<u>(1,450 hr/yr)</u>	=	<u>\$23.76 /hr</u>	

c. **TOTAL HOURLY OWNERSHIP COST:** **TOTAL [4.]: = \$75.24 /hr**  
 [4.a.(2)] + [4.b.(2)]

**5. OPERATING COST**

a. Fuel Costs:

(1) Equipment:

(Fuel Factor) [1.c.(6)]	x	(Horsepower (hp)) [1.a.(5)]	x		(Fuel Cost per Gallon (gal)) [Appendix B]				
<u>(0.024)</u>	x	<u>(207 hp)</u>	x		<u>(\$2.50 /gal)</u>	=	<u>\$12.42 /hr</u>		

(2) Carrier:  
[1.c.(4)]

(Fuel Factor) [1.c.(7)]	x	(hp) [1.a.(6)]	x		(Fuel Cost per gal) [Appendix B]				
<u>(0.005)</u>	x	<u>(430 hp)</u>	x		<u>(\$2.43 /gal)</u>	=	<u>\$5.22 /hr</u>		

(3) **Total Hourly Fuel Cost:** **Total [5.a.] = \$17.64 /hr**  
 [(5.a (1)) + [5.a (2)]

b. FOG Cost:

(1) Equipment:

(FOG Factor) [1.c.(8)]	x	(Equipment Hourly Fuel Cost) [5.a.(1)]	x		(Labor Adjustment Factor (LAF)) [Appendix B]				
<u>(0.110)</u>	x	<u>(\$12.42 /hr)</u>	x		<u>(\$ 1.07 /hr)</u>	=	<u>\$1.47 /hr</u>		

Region 02

5. **OPERATING COST (Continued)**

(2) Carrier:

		(Carrier Hourly					
(FOG Factor)	x	Fuel Cost)	x	(LAF)			
[1.c.(8)]		[5.a.(2)]		[Appendix B]			
<u>(0.110)</u>	x	<u>(\$5.22 /hr)</u>	x	<u>(1.07)</u>	=	<u>\$0.62 /hr</u>	

(3) Total Hourly FOG Cost: Total [5.b.] = \$2.09 /hr  
 [(5.b.(1)) + (5.b.(2))]

c. Alternative Fuel/FOG Cost: Total [5.c.] = \$0.00 hr  
 (See chapter 2, paragraph 2.24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):  
 (EK is from [1c. (1)])

(Economic Index, Present Year or Year of Use, 1.a.(3))	/	(Economic Index, Year of Manufacture, 1.a.(4))		
[Appendix E, EK=1.c.(1)]		[Appendix E, EK=1.c.(1)]		
<u>(6661)</u>	/	<u>(5869)</u>	=	<u>1.135 (EAF)</u>

*(See table 3-1 for last year of economic life.)*

(2) Repair Factor (RF):

		(RCF)		(EAF)		(LAF)		
	x	[1.c.(10)]		[5.d.(1)]		[Appendix B]		= Repair Factor (RF)
	x	<u>(0.90)</u>	x	<u>(1.135)</u>	x	<u>(1.07)</u>		= <u>1.093 (RF)</u>

(3) Repair Cost:

		[(TEV)		[(TCI)		x (Tire Cost)]		x (RF)		/ (LIFE)
	-	[2.c.]		[4.a.(1)]		[1.a.(9)(d)]		[5.d.(2)]		[1.c.(4)]
	-	<u>[\$1,303,970]</u>	-	<u>[(0.855)</u>	x	<u>(\$15,924)]</u>	x	<u>(1.093)</u>	/	<u>(20,000)</u>

(4) Total Hourly Repair Cost: Total [5.d.] = \$70.52 /hr

**Region 02**

**5. OPERATING COST (Continued)**

e. Tire Wear Cost: *(Use current price levels. See Appendix F.)*

(1) Front Tires (FT):

$$\begin{array}{rclclcl} [1.5 \times (\text{FT Cost})] & / & [1.8 \times (\text{FT Wear Factor}) & \times & (\text{Maximum Tire Life Hours}) \\ [1.5 \times (\$5,308)] & / & [1.8 \times (0.66)] & \times & (2,500 \text{ hr}) \\ & & & & \text{[Appendix F]} \end{array} = \underline{\$2.68 / \text{hr}}$$

(2) Drive Tires (DT):

$$\begin{array}{rclclcl} [1.5 \times (\text{DT Cost})] & / & [1.8 \times (\text{DT Wear Factor}) & \times & (\text{Maximum Tire Life Hours}) \\ [1.5 \times (\$10,616)] & / & [1.8 \times (0.58)] & \times & (2,500 \text{ hr}) \\ & & & & \text{[Appendix F]} \end{array} = \underline{\$6.10 / \text{hr}}$$

(3) Trailing Tires (TT):

$$\begin{array}{rclclcl} [1.5 \times (\text{TT Cost})] & / & [1.8 \times (\text{TT Wear Factor}) & \times & (\text{Maximum Tire Life Hours}) \\ [1.5 \times (\$0.00)] & / & [1.8 \times (0.73)] & \times & (0 \text{ hr}) \\ & & & & \text{[Appendix F]} \end{array} = \underline{\underline{\$0.00 / \text{hr}}}$$

(4) Total Tire Wear Cost: Total [5.e.] = \$8.78 /hr  
 [Sum 5.e.(1) through 5.e.(3)]

f. Tire Repair Cost:

$$\begin{array}{rclcl} (\text{Total Tire Wear Cost} & & & & \\ \text{per Hour}) & \times & 0.15 \times (\text{LAF}) & & \\ [5.e.(4)] & \times & [\text{Appendix B}] & & \\ (\$8.78 / \text{hr}) & \times & 0.15 \times (1.07) & & \\ & & & & \text{Total [5.f.] = } \underline{\underline{\$1.41 / \text{hr}}} \end{array}$$

**g. TOTAL HOURLY OPERATING COST:** Total [5.] = \$100.44 /hr  
 [Sum 5.a. through 5.f.]

Region 02

6. **HOURLY RATES**

a. Total Hourly Rate: [based on 40 hours per week (wk)]

(Ownership Cost) [4.c.]	+	(Operating Cost) [5.g.]		
<u>(\$75.24 /hr)</u>	+	<u>(\$100.44 /hr)</u>		= <u>\$175.68 /hr</u>

b. Other Work Shifts Hourly Rate:

*(Refer to Chapter 3, Adjustments to Rates, for methodology.)*

[(Depreciation) [4.a.(2)]	+	[(FCCM) [4.b.(2)]	x (40 hr/wk) / (Work hr/wk) (example:60 hr/wk)		+ (Operating Cost) [5.g.]	
<u>[\$51.48 /hr]</u>	+	<u>[\$23.76 /hr]</u>	x <u>(40 hr/wk) / (60 hr/wk)</u> (example:60 hr/wk)	+	<u>(\$100.44 /hr)</u>	= <u>\$167.76 /hr</u>

c. Standby Hourly Rate:

*(Refer to Chapter 2, paragraph 2.28 for guidance on use.)*

[(Depreciation) x 0.50] [4.a.(2)]	+	(FCCM) [4.b.(2)]	
<u>[\$51.48 /hr] x 0.50</u>	+	<u>(\$23.76 /hr)</u>	= <u>\$49.50 /hr</u>

*(Refer to Chapter 3, paragraph 3.12 for guidance for overage equipment.)*

**See Chapter 3 if rate adjustments are necessary.**

## Table 2-1. Hourly Equipment Ownership and Operating Expense

### EXPLANATION OF TABLE HEADINGS

Example unit of equipment: Link Belt, Model HC-238H II, 150 Ton, 260'-boom.

**CAT:** C90 is the category number and identifies it as Cranes, Mechanical, Lattice Boom, Truck Mounted (from appendix D).

**ID No.:** C90LB001 is the unique identification number for the above Link Belt crane. AM equals the manufacturer (see appendix H). 001 equals the numeric order of this unit of equipment within the manufacturer's listing.

**MODEL:** HC-238H II is the equipment model number.

**EQUIPMENT DESCRIPTION:** Specific information for each particular unit of equipment is described, such as "150 ton with a 260-foot boom" for the Link Belt crane.

**ENGINE HORSEPOWER AND FUEL TYPE:** The amount of horsepower and type of fuel used is stated for the main and carrier engines. The Link Belt crane carrier has a 430-horsepower engine, and the crane has a 207-horsepower engine. Both engines are diesel (D).

**VALUE (TEV):** This column reflects the predetermined "equipment cost" used to compute the rates and is based on equipment purchased new in 2004.

**TOTAL HOURLY RATES (\$/HR):** All ownership and operating expenses for the average condition are included. All cost elements, including fuel, are totaled in the AVERAGE column. The STANDBY column includes the hourly allowance for equipment on legitimate standby status (see section 2-27 for more information).

**ADJUSTABLE ELEMENTS:** This column shows ownership elements and fuel costs used to develop the average total hourly rates so they can be adjusted as indicated in chapter 3. Operating costs may be determined by subtracting the ownership cost elements (DEPR plus FCCM) from the total hourly rate for the average condition.

**CWT:** The shipping weight of the equipment is stated in hundredweight.



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>A10 AGGREGATE / CHIP SPREADERS</b>											
<b>SUBCATEGORY 0.10 SELF-PROPELLED</b>												
<b>ROSCO, A LeeBoy COMPANY</b>												
A10RS003	SPRH		CHIP SPREADER, SELF PROPELLED, 10' WIDE, 1.70 CY, 2WD	152 HP	D-off	\$96,880	35.68	6.59	9.40	1.89	11.68	149
A10RS004	SPRH		CHIP SPREADER, SELF PROPELLED, 11' WIDE, 1.80 CY, 2WD	152 HP	D-off	\$97,470	35.81	6.63	9.46	1.90	11.68	153
A10RS005	SPRH		CHIP SPREADER, SELF PROPELLED, 12' WIDE, 2.03 CY, 2WD	152 HP	D-off	\$97,887	35.92	6.67	9.51	1.91	11.68	159
A10RS006	SPRH		CHIP SPREADER, SELF PROPELLED, 13' WIDE, 2.28 CY, 2WD	152 HP	D-off	\$98,170	35.97	6.68	9.53	1.91	11.68	153
A10RS007	SPRH		CHIP SPREADER, SELF PROPELLED, 15' WIDE, 2.53 CY, 2WD	152 HP	D-off	\$99,289	36.25	6.77	9.65	1.94	11.68	159
A10RS008	SPREADPRO		CHIP SPREADER, SELF PROPELLED, 16' WIDE, 4.50 CY, 4WD	205 HP	D-off	\$192,736	62.61	13.19	18.85	3.76	15.75	158
<b>SUBCATEGORY 0.20 TOWED &amp; TAILGATE</b>												
<b>AMERICAN ROAD MACHINERY, INC.</b>												
A10AR001	TG-505C		CHIP SPREADER, TAILGATE, 8' WIDE (ADD DUMP TRUCK)			\$3,762	1.03	0.33	0.50	0.08	0.00	5
A10AR002	ODELL 900		CHIP SPREADER, TOWED, 8' WIDE, 3 CY (ADD DUMP TRUCK)			\$9,372	2.77	0.82	1.25	0.19	0.00	22
<b>SEALMASTER, INC.</b>												
A10SE001	R-1 E2310		CHIP SPREADER, TAILGATE, 8' WIDE, 1.13 CY (ADD DUMP TRUCK)			\$11,811	3.24	1.03	1.57	0.24	0.00	21
A10SE002	R-1 E2500		CHIP SPREADER, TOWED, 8' WIDE, 1.13 CY (ADD DUMP TRUCK)			\$13,901	3.81	1.21	1.85	0.28	0.00	30

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A15 AIR COMPRESSORS, PORTABLE</b>												
	<b>SUBCATEGORY 0.10</b>		<b>ROTARY SCREW</b>									
	<b>INGERSOLL RAND ROTARY-REC COMPRESSOR DIV</b>											
A15IA001	P175WJD		AIR COMPRESSOR, 175 CFM, 100 PSI (ADD HOSE)	56 HP	D-off	\$20,408	9.00	1.20	1.61	0.39	4.56	21
A15IA002	HP300WCU		AIR COMPRESSOR, 300 CFM, 150 PSI (ADD HOSE)	110 HP	D-off	\$44,080	18.38	2.59	3.50	0.84	8.95	38
A15IA003	VHP400WCU		AIR COMPRESSOR, 400 CFM, 200 PSI (ADD HOSE)	174 HP	D-off	\$52,770	25.94	3.09	4.16	1.01	14.16	53
A15IA004	HP450WCU		AIR COMPRESSOR, 450 CFM, 150 PSI (ADD HOSE)	174 HP	D-off	\$52,770	25.94	3.09	4.16	1.01	14.16	53
A15IA005	XP525WCU		AIR COMPRESSOR, 525 CFM, 125 PSI (ADD HOSE)	174 HP	D-off	\$52,770	25.94	3.09	4.16	1.01	14.16	53
A15IA006	XHP650WCAT		AIR COMPRESSOR, 650 CFM, 350 PSI (ADD HOSE)	300 HP	D-off	\$116,437	49.50	6.81	9.18	2.22	24.41	136
A15IA007	XHP750WCAT		AIR COMPRESSOR, 750 CFM, 300 PSI (ADD HOSE)	300 HP	D-off	\$122,124	50.57	7.15	9.64	2.33	24.41	136
A15IA008	VHP825WCU		AIR COMPRESSOR, 825 CFM, 200 PSI (ADD HOSE)	335 HP	D-off	\$92,297	48.19	5.39	7.25	1.76	27.26	96
A15IA009	XP1000WCAT		AIR COMPRESSOR, 1,000 CFM, 125 PSI (ADD HOSE)	310 HP	D-off	\$92,356	45.91	5.39	7.26	1.76	25.22	104
A15IA010	XHP1070WCAT		AIR COMPRESSOR, 1,070 CFM, 350 PSI (ADD HOSE)	400 HP	D-off	\$164,746	67.73	9.67	13.05	3.14	32.54	152
	<b>SULLAIR CORPORATION</b>											
A15SR006	125DPQJD		AIR COMPRESSOR, 125 CFM, 100 PSI (ADD HOSE)	76 HP	D-off	\$13,326	9.49	0.77	1.04	0.25	6.18	24
A15SR007	130DPQJD		AIR COMPRESSOR, 130 CFM, 100 PSI (ADD HOSE)	77 HP	D-off	\$13,341	9.59	0.77	1.04	0.25	6.26	26
A15SR004	185		AIR COMPRESSOR, 185 CFM, 100 PSI (ADD HOSE)	78 HP	D-off	\$14,563	9.92	0.85	1.14	0.28	6.35	24
A15SR005	250		AIR COMPRESSOR, 250 CFM, 100 PSI (ADD HOSE)	80 HP	D-off	\$19,341	11.00	1.13	1.52	0.37	6.51	26
A15SR008	375HDPQJD		AIR COMPRESSOR, 375 CFM, 150 PSI (ADD HOSE)	123 HP	D-off	\$30,963	17.16	1.80	2.41	0.59	10.01	42

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A15</b>	<b>SULLAIR CORPORATION (continued)</b>											
	A15SR009	425DPQJD	AIR COMPRESSOR, 425 CFM, 100 PSI (ADD HOSE)	124 HP	D-off	\$30,963	17.25	1.80	2.41	0.59	10.09	42
	A15SR010	600HDTQCA	AIR COMPRESSOR, 600 CFM, 150 PSI (ADD HOSE)	230 HP	D-off	\$56,512	31.85	3.28	4.39	1.08	18.71	100
	A15SR011	750HHTQCA	AIR COMPRESSOR, 750 CFM, 175 PSI (ADD HOSE)	300 HP	D-off	\$64,690	39.79	3.75	5.04	1.23	24.41	103
	A15SR002	900XH	AIR COMPRESSOR, 900 CFM, 350 PSI (ADD HOSE)	440 HP	D-off	\$143,516	67.49	8.39	11.29	2.74	35.80	157
	A15SR012	1050DTQCA	AIR COMPRESSOR, 1,050 CFM, 100 PSI (ADD HOSE)	300 HP	D-off	\$63,676	39.60	3.69	4.96	1.21	24.41	105
	A15SR013	1300HDTQCA	AIR COMPRESSOR, 1,300 CFM, 150 PSI (ADD HOSE)	450 HP	D-off	\$119,398	63.81	6.99	9.42	2.28	36.61	156
	A15SR014	1600HDTQCA	AIR COMPRESSOR, 1,600 CFM, 100 PSI (ADD HOSE)	450 HP	D-off	\$127,332	65.44	7.40	9.93	2.43	36.61	162
	A15SR015	1900DTQCA	AIR COMPRESSOR, 1,900 CFM, 100 PSI (ADD HOSE)	525 HP	D-off	\$123,786	71.66	7.19	9.65	2.36	42.71	164
	<b>NO SPECIFIC MANUFACTURER</b>											
	A15XX019	85G	AIR COMPRESSOR, 85 CFM, 100 PSI (ADD HOSE)	30 HP	G	\$8,660	8.74	0.51	0.67	0.17	6.18	14
	A15XX020	85D	AIR COMPRESSOR, 85 CFM, 100 PSI (ADD HOSE)	30 HP	D-off	\$16,568	5.89	0.97	1.30	0.32	2.44	24
	A15XX021	100G	AIR COMPRESSOR, 100 CFM, 100 PSI (ADD HOSE)	50 HP	G	\$11,535	13.99	0.67	0.90	0.22	10.30	17
	A15XX022	100D	AIR COMPRESSOR, 100 CFM, 125 PSI (ADD HOSE)	35 HP	D-off	\$17,012	6.42	0.99	1.33	0.32	2.85	17
	A15XX023	125G	AIR COMPRESSOR, 125 CFM, 100 PSI (ADD HOSE)	65 HP	G	\$12,126	17.63	0.70	0.94	0.23	13.39	20
	A15XX024	130	AIR COMPRESSOR, 130 CFM, 100 PSI (ADD HOSE)	50 HP	D-off	\$19,159	8.22	1.13	1.51	0.37	4.07	18
	A15XX025	160G	AIR COMPRESSOR, 160 CFM, 125 PSI (ADD HOSE)	60 HP	G	\$13,243	16.66	0.77	1.03	0.25	12.36	23
	A15XX026	175D	AIR COMPRESSOR, 175 CFM, 100 PSI (ADD HOSE)	70 HP	D-off	\$21,414	10.47	1.26	1.69	0.41	5.70	27
	A15XX027	175G	AIR COMPRESSOR, 175 CFM, 125 PSI (ADD HOSE)	90 HP	G	\$13,770	23.83	0.80	1.07	0.26	18.54	24
	A15XX028	185D	AIR COMPRESSOR, 185 CFM, 100 PSI (ADD HOSE)	80 HP	D-off	\$21,937	11.49	1.29	1.73	0.42	6.51	24

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A15</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>											
	A15XX029	185G	AIR COMPRESSOR, 185 CFM, 125 PSI (ADD HOSE)	70 HP	G	\$14,907	19.33	0.87	1.17	0.28	14.42	23
	A15XX030	250	AIR COMPRESSOR, 250 CFM, 100 PSI (ADD HOSE)	85 HP	D-off	\$29,031	13.27	1.70	2.30	0.55	6.92	31
	A15XX031	300	AIR COMPRESSOR, 300 CFM, 125 PSI (ADD HOSE)	110 HP	D-off	\$42,417	18.08	2.50	3.37	0.81	8.95	37
	A15XX032	375	AIR COMPRESSOR, 375 CFM, 125 PSI (ADD HOSE)	115 HP	D-off	\$38,688	17.88	2.26	3.03	0.74	9.36	37
	A15XX033	450	AIR COMPRESSOR, 450 CFM, 125 PSI (ADD HOSE)	170 HP	D-off	\$51,415	25.39	2.97	3.98	0.98	13.83	89
	A15XX034	600	AIR COMPRESSOR, 600 CFM, 150 PSI (ADD HOSE)	250 HP	D-off	\$71,447	36.49	4.16	5.59	1.36	20.34	99
	A15XX035	750	AIR COMPRESSOR, 750 CFM, 125 PSI (ADD HOSE)	275 HP	D-off	\$76,158	39.65	4.43	5.96	1.45	22.37	93
	A15XX036	825	AIR COMPRESSOR, 825 CFM, 125 PSI (ADD HOSE)	275 HP	D-off	\$82,018	40.74	4.78	6.43	1.56	22.37	104
	A15XX037	900	AIR COMPRESSOR, 900 CFM, 125 PSI (ADD HOSE)	310 HP	D-off	\$87,772	45.04	5.12	6.89	1.67	25.22	93
	A15XX038	1200	AIR COMPRESSOR, 1,200 CFM, 125 PSI (ADD HOSE)	360 HP	D-off	\$133,173	58.14	7.80	10.52	2.54	29.29	150
	A15XX039	1300	AIR COMPRESSOR, 1,400 CFM, 150 PSI (ADD HOSE)	460 HP	D-off	\$139,237	68.50	8.14	10.97	2.65	37.43	180
	A15XX040	1600	AIR COMPRESSOR, 1,600 CFM, 150 PSI (ADD HOSE)	500 HP	D-off	\$150,178	74.20	8.78	11.84	2.86	40.68	151
	<b>SUBCATEGORY 0.20 SHOP TYPE</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	A15XX041	80/15	AIR COMPRESSOR, 22 CFM, 80 GAL (ADD HOSE)	5 HP	E	\$2,163	0.83	0.12	0.15	0.04	0.33	3
	A15XX042	80/25	AIR COMPRESSOR, 28 CFM, 80 GAL (ADD HOSE)	7 HP	E	\$2,920	1.16	0.16	0.21	0.05	0.47	3
	A15XX043	120/35	AIR COMPRESSOR, 41 CFM, 120 GAL (ADD HOSE)	10 HP	E	\$4,399	1.68	0.24	0.31	0.08	0.67	4
	A15XX044	120/55	AIR COMPRESSOR, 58 CFM, 120 GAL (ADD HOSE)	15 HP	E	\$5,158	2.30	0.28	0.37	0.09	1.00	4
	A15XX045	120/90	AIR COMPRESSOR, 89 CFM, 120 GAL (ADD HOSE)	25 HP	E	\$7,361	3.64	0.39	0.52	0.13	1.67	4

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>A15</b>	<i>NO SPECIFIC MANUFACTURER (continued)</i>										
	A15XX046	120/112	AIR COMPRESSOR, 103 CFM, 120 GAL (ADD HOSE)	30 HP	E	\$9,031	4.40	0.48	0.64	0.16	2.00	5
<b>A20</b>	<b>AIR HOSE, TOOLS &amp; EQUIPMENT</b>											
	<b>SUBCATEGORY 0.10 AIR DRILL HOSE</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	A20XX001		AIR HOSE, 0.75", 100', HARDROCK			\$1,208	0.97	0.20	0.33	0.03	0.00	1
	A20XX002		AIR HOSE, 1.00", 100', HARDROCK			\$1,401	1.12	0.22	0.38	0.03	0.00	1
	A20XX003		AIR HOSE, 1.25", 100', HARDROCK			\$1,746	1.39	0.28	0.47	0.04	0.00	1
	A20XX004		AIR HOSE, 1.50", 100', HARDROCK			\$2,278	1.82	0.36	0.62	0.05	0.00	1
	A20XX005		AIR HOSE, 2.00", 100', HARDROCK			\$3,223	2.57	0.51	0.87	0.07	0.00	2
	A20XX006		AIR HOSE, 2.50", 100', HARDROCK			\$3,947	3.14	0.62	1.07	0.08	0.00	3
	A20XX007		AIR HOSE, 3.00", 100', HARDROCK			\$4,872	3.88	0.76	1.32	0.10	0.00	4
	A20XX008		AIR HOSE, 4.00", 100', HARDROCK			\$6,506	5.19	1.03	1.77	0.14	0.00	6
	<b>SUBCATEGORY 0.20 SANDBLAST HOSE</b>											
	<b>CLEMCO INDUSTRIES CORPORATION</b>											
	A20CM017		SANDBLAST HOSE, 0.75"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			\$449	0.38	0.07	0.12	0.01	0.00	1
	A20CM018		SANDBLAST HOSE, 1.00"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			\$485	0.41	0.08	0.13	0.01	0.00	1
	A20CM020		SANDBLAST HOSE, 1.25"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			\$472	0.40	0.08	0.13	0.01	0.00	1
	A20CM019		SANDBLAST HOSE, 1.50"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			\$575	0.49	0.09	0.16	0.01	0.00	1
	<b>SUBCATEGORY 0.30 SANDBLASTERS, BREAKERS, &amp; MISC. AIR TOOLS</b>											
	<b>CHICAGO PNEUMATIC TOOL CO.</b>											
	A20CK002	CP-0009F	ROTARY / CHIP HAMMER, 8 LB, AIR (ADD 30 CFM COMPRESSOR & BIT COSTS)	20 CFM	A	\$920	0.43	0.09	0.14	0.02	0.00	1

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A20</b>	<b>CHICAGO PNEUMATIC TOOL CO. (continued)</b>											
	A20CK001	CP-0014RR	ROTARY / CHIP HAMMER, 15 LB, AIR (ADD 30 CFM COMPRESSOR & BIT COSTS)	32 CFM	A	\$1,607	0.74	0.15	0.24	0.03	0.00	1
	A20CK003	CP-0022	ROCK DRILL, 30 LB, AIR (ADD 50 CFM COMPRESSOR & BIT COSTS)	56 CFM	A	\$1,782	0.82	0.17	0.27	0.03	0.00	1
	A20CK005	CP-0069	ROCK DRILL, 55 LB, AIR (ADD 140 CFM COMPRESSOR & BIT COSTS)	130 CFM	A	\$2,243	1.04	0.21	0.34	0.04	0.00	1
	A20CK006	CP-0111-THLA	BREAKER-FOUR BOLT, 25 LB (ADD 50 CFM COMPRESSOR & BIT COSTS)	45 CFM	A	\$1,228	0.56	0.11	0.18	0.02	0.00	1
	A20CK008	CP-1230-S1.25	BREAKER-FOUR BOLT, 60 LB (ADD 65 CFM COMPRESSOR & BIT COSTS)	63 CFM	A	\$1,349	0.63	0.13	0.20	0.03	0.00	1
	A20CK010	CP-1240-S1.25	BREAKER-FOUR BOLT, 90 LB (ADD 90 CFM COMPRESSOR & BIT COSTS)	81 CFM	A	\$1,462	0.68	0.14	0.22	0.03	0.00	1
	<b>CLEMCO INDUSTRIES CORPORATION</b>											
	A20CM010	PACKAGE TWO	SANDBLASTER, 2 CF CAP, W/0.50" D X 25'L HOSE (ADD 100 CFM COMPRESSOR & NOZZLE COST)	100 CFM	A	\$3,252	1.57	0.31	0.49	0.06	0.00	4
	A20CM011	PACKAGE FOUR	SANDBLASTER, 4 CF CAP, W/1.00"D X 25'L HOSE (ADD 170 CFM COMPRESSOR & NOZZLE COST)	170 CFM	A	\$3,617	1.74	0.34	0.54	0.07	0.00	5
	A20CM012	PACKAGE SIX	SANDBLASTER, 6 CF CAP, W/1.25"D X 25'L HOSE (ADD 200 CFM COMPRESSOR & NOZZLE COST)	200 CFM	A	\$3,878	1.92	0.36	0.58	0.07	0.00	6
	A20CM013		SANDBLASTER, 60 CF CAP, W/1.25"D X 50'L HOSE (ADD 450 CFM COMPRESSOR & NOZZLE COST)	450 CFM	A	\$17,509	8.23	1.59	2.52	0.33	0.00	30
	A20CM014		SANDBLASTER, 120 CF CAP, W/1.25"D X 50'L HOSE (ADD 700 CFM COMPRESSOR & NOZZLE COST)	700 CFM	A	\$22,326	10.36	1.97	3.08	0.43	0.00	35
	A20CM015		SANDBLASTER, 160 CF CAP, W/1.25"D X 50'L HOSE (ADD 900 CFM COMPRESSOR & NOZZLE COST)	900 CFM	A	\$25,229	11.77	2.23	3.50	0.48	0.00	45
	A20CM016		SANDBLAST ABRASIVE STORAGE HOPPER, 700 CF, 8' DEEP, 10' WIDE & 23' HIGH (ADD SAND BLASTER & ACCESSORIES)			\$13,107	6.38	1.24	1.97	0.25	0.00	69

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>WACKER CORPORATION</b>												
	A20WC002	EHB11/BL/110	BREAKER/DRILL, 40 LB, ELECTRIC (ADD 2 KW GENERATOR & BIT COSTS)	2 HP	E	\$1,496	1.01	0.14	0.22	0.03	0.12	1
	A20WC004	BH 23	BREAKER/DRIVER, 65 LB, W/POWER UNIT (ADD BIT COSTS)	4 HP	G	\$4,013	2.68	0.38	0.60	0.08	0.72	1
<b>NO SPECIFIC MANUFACTURER</b>												
	A20XX021	STANDARD 25-30 LBS	PAVEMENT BREAKER, 25-30 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM	A	\$1,120	0.52	0.11	0.17	0.02	0.00	1
	A20XX022	SILENCED 35-45 LBS	PAVEMENT BREAKER, 35-45 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM	A	\$1,307	0.60	0.12	0.20	0.02	0.00	1
	A20XX023	SILENCED 60-65 LBS	PAVEMENT BREAKER, 60-65 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM	A	\$1,575	0.73	0.15	0.24	0.03	0.00	1
	A20XX024	SILENCED 80-90 LBS	PAVEMENT BREAKER, 80-90 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM	A	\$1,625	0.75	0.15	0.24	0.03	0.00	1
	A20XX025	55DRY	ROCK DRILL, DRY, 55 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM	A	\$2,299	1.06	0.21	0.34	0.04	0.00	1
<b>A25 ASPHALT PAVING DISTRIBUTORS</b>												
<b>SUBCATEGORY 0.00 ASPHALT PAVING DISTRIBUTORS</b>												
<b>ROSCO, A LeeBoy COMPANY</b>												
	A25RS006	MAXIMIZER 11	ASPHALT DISTRIBUTOR, 1,900 GAL, 400 GPM, TRUCK MTD (ADD 32,000 GVW TRUCK)			\$53,313	19.31	5.02	8.00	1.02	0.00	70
	A25RS008	MAXIMIZER 11	ASPHALT DISTRIBUTOR, 3,000 GAL, 400 GPM, TRUCK MTD (ADD 42,000 GVW TRUCK)			\$60,987	22.56	5.74	9.15	1.16	0.00	97
<b>NO SPECIFIC MANUFACTURER</b>												
	A25XX001	1100G	ASPHALT DISTRIBUTOR, 1,100 GAL, 400 GPM, TRUCK MTD (ADD 32,000 GVW TRUCK)			\$44,977	15.96	4.24	6.75	0.86	0.00	64
	A25XX002	2600G	ASPHALT DISTRIBUTOR, 2,600 GAL, 400 GPM, TRUCK MTD (ADD 32,000 GVW TRUCK)			\$52,266	19.30	4.92	7.84	1.00	0.00	89

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>A25</b>	<i>NO SPECIFIC MANUFACTURER (continued)</i>										
	A25XX003	3600G	ASPHALT DISTRIBUTOR, 3,600 GAL, 400 GPM, TRUCK MTD (ADD 42,000 GVW TRUCK)			\$57,122	21.54	5.38	8.57	1.09	0.00	104
<b>A30</b>	<b>ASPHALT PAVERS &amp; MISCELLANEOUS ROAD EQUIPMENT</b>											
	<b>SUBCATEGORY 0.10 SELF PROPELLED</b>											
	<b>BARBER-GREENE COMPANY</b>											
	A30BG007	BG230	ASPHALT FINISHER, 8' WIDE SCREED, WHEEL, W/15' 6" SCREED EXTENSION, 190 CF HOPPER	98 HP	D-off	\$269,949	84.65	18.96	27.71	5.10	7.53	314
	A30BG004	BG225C	ASPHALT FINISHER, 8' WIDE SCREED, CRAWLER, W/15' 6" SCREED EXTENSION, 177 CF HOPPER	112 HP	D-off	\$304,200	95.23	21.90	32.32	5.74	8.61	336
	A30BG009	BG240C	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, W/19' 6" SCREED EXTENSION, 215 CF HOPPER	139 HP	D-off	\$292,625	93.40	20.57	30.08	5.53	10.68	377
	A30BG005	BG245C	ASPHALT FINISHER, 10' WIDE SCREED, CRAWLER, W/19' 6" SCREED EXTENSION, 215 CF HOPPER	158 HP	D-off	\$352,883	112.66	25.41	37.49	6.66	12.14	374
	A30BG003	BG260C	ASPHALT FINISHER, 10' WIDE SCREED, WHEEL, W/19' 6" SCREED EXTENSION, 215 CF HOPPER	158 HP	D-off	\$352,245	112.65	24.54	35.77	6.65	12.14	382
	<b>BLAW KNOX CONSTRUCTION EQUIPMENT CORP.</b>											
	A30BK010	PF-150	ASPHALT PAVER/FINISHER, 8' WIDE SCREED, WHEEL, 107 CF HOPPER	47 HP	D-off	\$139,658	42.93	9.75	14.22	2.64	3.61	154
	A30BK011	PF-161	ASPHALT PAVER/FINISHER, 8' WIDE SCREED, WHEEL, 181 CF HOPPER	107 HP	D-off	\$246,373	77.41	17.26	25.21	4.65	8.22	210
	A30BK013	PF-3172	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, WHEEL, 182 CF HOPPER	145 HP	D-off	\$259,720	84.49	18.20	26.60	4.90	11.14	299
	A30BK015	PF-3200	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, WHEEL, 225 CF HOPPER	184 HP	D-off	\$298,888	99.01	21.01	30.74	5.64	14.14	340
	A30BK017	PF-5500	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, CRAWLER, 218 CF HOPPER	184 HP	D-off	\$315,578	103.12	22.73	33.53	5.96	14.14	340
	A30BK018	PF-5510	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, CRAWLER, 218 CF HOPPER	184 HP	D-off	\$325,087	105.75	23.41	34.54	6.14	14.14	320



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A30</b>	<b>BLAW KNOX CONSTRUCTION EQUIPMENT CORP. (continued)</b>											
	A30BK019	RW 100 A	ASPHALT PAVER, SHOULDER PAVING MACHINE, 1'-10' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 72.5 CF HOPPER	105 HP	D-off	\$191,247	61.89	13.59	19.95	3.61	8.07	245
	A30BK020	RW 195 D	ASPHALT PAVER, SHOULDER PAVING MACHINE, 2'-10' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 73 CF HOPPER	173 HP	D-off	\$246,482	83.18	17.56	25.82	4.65	13.29	330
	A30BK021	TITAN 325 EPM	ASPHALT PAVER, 32.8' WIDE, CRAWLER W/DUAL TAMPER SCREED, 270 CF HOPPER	176 HP	D-off	\$319,387	103.47	23.00	33.93	6.03	13.52	399
	A30BK022	PF-2181	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 2 WHEEL DRIVE, 182 CF HOPPER	145 HP	D-off	\$243,011	79.89	17.01	24.83	4.59	11.14	283
	A30BK023	PF-4410	ASPHALT PAVER, 8' WIDE SCREED, CRAWLER, 155 CF HOPPER	145 HP	D-off	\$274,396	88.36	19.76	29.15	5.18	11.14	269
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	A30CA013	AP-650B	ASPHALT PAVER, 8' WIDE SCREED, CRAWLER, 177 CF HOPPER	121 HP	D-off	\$256,407	81.31	18.46	27.24	4.84	9.30	402
	A30CA002	AP-800C	ASPHALT PAVER, 8' WIDE+2' EXT. PAVEMASTER SCREED, WHEEL, 195 CF HOPPER	107 HP	D-off	\$254,142	79.56	17.82	26.03	4.80	8.22	319
	A30CA014	AP-900B	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, 215 CF HOPPER	153 HP	D-off	\$267,361	87.62	18.75	27.39	5.05	11.76	378
	A30CA008	AP-1000B	ASPHALT PAVER, 10' - 12' WIDE PAVEMASTER SCREED, WHEEL, 215 CF HOPPER	174 HP	D-off	\$295,754	97.19	20.70	30.21	5.59	13.37	468
	A30CA015	AP-1050B	ASPHALT PAVER, 10' WIDE EXTEND-A-MAT SCREED, CRAWLER, 215 CF HOPPER	174 HP	D-off	\$430,812	134.09	31.03	45.77	8.14	13.37	415
	A30CA016	AP-1055B	ASPHALT PAVER, 10' WIDE SCREED, CRAWLER, 215 CF HOPPER	173 HP	D-off	\$333,529	107.12	24.02	35.44	6.30	13.29	413
	A30CA009	AP-1050B	ASPHALT PAVER, 10' - 24' WIDE PAVEMASTER SCREED, CRAWLER, 215 CF HOPPER	173 HP	D-off	\$364,034	115.54	26.21	38.68	6.87	13.29	418
	<b>CHAMPION ROAD MACHINERY - SUPERPAC CO.</b>											
	A30CH001	780WB	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 190 CF HOPPER	110 HP	D-off	\$236,559	74.96	16.55	24.16	4.47	8.45	265
	A30CH002	880WB	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 190 CF HOPPER	152 HP	D-off	\$257,938	84.60	18.08	26.41	4.87	11.68	315
	A30CH003	880RTB	ASPHALT PAVER, 8' WIDE SCREED, CRAWLER-RUBBER TRACK, 190 CF HOPPER	152 HP	D-off	\$259,833	84.95	18.72	27.61	4.91	11.68	282

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A30</b>	<b>CHAMPION ROAD MACHINERY - SUPERPAC CO. (continued)</b>											
	A30CH004	1010WB	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, 205 CF HOPPER	152 HP	D-off	\$271,930	88.40	19.02	27.76	5.14	11.68	305
	A30CH005	1110WB	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, 225 CF HOPPER	173 HP	D-off	\$296,720	97.35	20.76	30.31	5.60	13.29	343
	A30CH006	1110RTB SWIFTRACK	ASPHALT PAVER, 10' WIDE SCREED, CRAWLER- RUBBER TRACK, 225 CF HOPPER	200 HP	D-off	\$346,385	113.01	24.94	36.80	6.54	15.37	402
	<b>CEDARAPIDS INC., A TEREX COMPANY</b>											
	A30EJ001	CR351	ASPHALT PAVER, 8' WIDE FASTACH SCREED, WHEEL, 145 CF HOPPER	130 HP	D-off	\$199,247	66.23	13.91	20.29	3.76	9.99	263
	A30EJ002	CR361	ASPHALT PAVER, 8' WIDE FASTACH SCREED, CRAWLER, 145 CF HOPPER	130 HP	D-off	\$222,073	72.61	15.99	23.60	4.19	9.99	253
	A30EJ003	CR451	ASPHALT PAVER, 10' WIDE FASTACH SCREED, WHEEL, 229 CF HOPPER	172 HP	D-off	\$232,312	79.45	16.21	23.63	4.39	13.22	315
	A30EJ004	CR461	ASPHALT PAVER, 10' WIDE FASTACH SCREED, CRAWLER, 219 CF HOPPER	172 HP	D-off	\$256,317	85.71	18.46	27.23	4.84	13.22	356
	A30EJ005	CR551	ASPHALT PAVER, 10' WIDE FASTACH SCREED, WHEEL, 267 CF HOPPER	172 HP	D-off	\$260,253	86.89	17.73	25.61	4.92	13.22	341
	A30EJ006	CR561	ASPHALT PAVER, 10' WIDE FASTACH SCREED, CRAWLER, 267 CF HOPPER	172 HP	D-off	\$284,307	93.45	20.48	30.21	5.37	13.22	389
	<b>GEHL COMPANY</b>											
	A30GC002	1448	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 80 CF HOPPER	25 HP	D-off	\$33,830	11.53	2.40	3.51	0.64	1.92	67
	A30GC004	1648	ASPHALT PAVER, 9' WIDE SCREED, CRAWLER, 120 CF HOPPER	41 HP	D-off	\$48,753	17.02	3.51	5.18	0.92	3.15	85
	<b>SUBCATEGORY 0.20 TOWED</b>											
	<b>MIDLAND MACHINERY CO</b>											
	A30MP001	SP-8	ASPHALT PAVER, SHOULDER PAVING MACHINE, 1'-8' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 80 CF HOPPER	80 HP	D-off	\$117,830	29.38	6.97	9.43	2.25	5.60	185
	A30MP002	SP-10	ASPHALT PAVER, SHOULDER PAVING MACHINE, 1'-10' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 80 CF HOPPER	100 HP	D-off	\$153,142	37.88	9.05	12.25	2.92	7.01	275

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>SUBCATEGORY 0.30 SLURRY SEAL PAVERS (Cold mix)</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	A30XX001	MINIMAC	ASPHALT PAVER, SLURRY SEAL PAVER 8' WIDE, SELF PROPELLED, WHEEL, 80 CF HOPPER	110 HP	D-off	\$129,543	26.80	6.66	8.46	2.43	7.21	130
	A30XX002	MACROPAVER 12B	ASPHALT PAVER, SLURRY SEAL PAVER 8' WIDE, TRUCK MTD, 12 CF HOPPER (ADD 40,000 GVW TRUCK)	110 HP	D-off	\$158,331	30.28	8.25	10.56	2.97	7.21	175
	<b>SUBCATEGORY 0.40 MISCELLANEOUS ROAD EQUIPMENT</b>											
	<b>BLAW KNOX CONSTRUCTION EQUIPMENT CORP.</b>											
	A30BK024	MC-330	ASPHALT PAVER, MOBILE CONVEYOR, 60" WIDE BELT, WHEEL (ADD ASPHALT PAVER UNIT)	184 HP	D-off	\$310,598	75.79	18.01	24.17	5.92	12.89	430
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	A30CA007	BG-650	ASPHALT PAVER, ASPHALT WINDROW ELEVATOR, WHEEL (ADD ASPHALT PAVER UNIT)	107 HP	D-off	\$107,324	29.53	6.24	8.37	2.05	7.50	171
	<b>LEE-BOY</b>											
	A30LD001	3000	ASPHALT PAVER, ASPHALT FORCE FEED LOADER, 30" WIDE BELT, WINDROW OR LOOSE, WHEEL (ADD ASPHALT PAVER UNIT)	110 HP	D-off	\$123,153	33.14	7.07	9.43	2.35	7.71	198
	<b>ROADTEC</b>											
	A30RT001	SB-1500	ASPHALT PAVER, ASPHALT MATERIAL TRANSFER VEHICLE, 15 TON HOPPER, 600 TPH, 65" WIDE CONVEYOR, WHEEL	275 HP	D-off	\$449,088	109.64	26.51	35.90	8.56	19.27	600
	A30RT002	SB-2500B	ASPHALT PAVER, ASPHALT MATERIAL TRANSFER VEHICLE, 25 TON HOPPER, 1000 TPH, 69" WIDE CONVEYOR, WHEEL	275 HP	D-off	\$471,049	113.99	27.79	37.61	8.98	19.27	790

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A35 ASPHALT PAVING KETTLES</b>												
	<b>SUBCATEGORY 0.00 ASPHALT PAVING KETTLES</b>											
	<b>AEROIL PRODUCTS COMPANY, INC.</b>											
A35AE001	KEB-80KE		ASPHALT/PAVEMENT KETTLE, 80 GAL, TRAILER W/PUMP & HOSE	5 HP	G	\$9,063	5.76	0.75	1.14	0.18	0.89	9
A35AE002	KEB-115KE		ASPHALT/PAVEMENT KETTLE, 115 GAL, TRAILER W/PUMP & HOSE	5 HP	G	\$9,375	6.56	0.78	1.18	0.19	0.89	11
A35AE003	KEB-170KE		ASPHALT/PAVEMENT KETTLE, 170 GAL, TRAILER W/PUMP & HOSE	5 HP	G	\$10,023	7.13	0.85	1.29	0.20	0.89	15
A35AE004	KEB-260KE		ASPHALT/PAVEMENT KETTLE, 260 GAL, TRAILER W/PUMP & HOSE	5 HP	G	\$10,952	8.32	0.93	1.41	0.22	0.89	19
A35AE005	KEB-360KE		ASPHALT/PAVEMENT KETTLE, 360 GAL, TRAILER W/PUMP & HOSE	5 HP	G	\$12,046	10.83	1.00	1.52	0.24	0.89	20
<b>A40 ASPHALT &amp; CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS</b>												
	<b>SUBCATEGORY 0.00 ASPHALT &amp; CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
A40CA008	PM-465		ASPHALT COLD PLANER, 75" W X 10" D, CRAWLER (ADD CUTTING TEETH COSTS)	500 HP	D-off	\$431,317	210.44	37.47	57.51	8.71	50.85	505
A40CA009	PM-565B		ASPHALT COLD PLANER, 83" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	625 HP	D-off	\$606,807	287.07	52.71	80.91	12.25	63.56	735
	<b>CMI CORPORATION - BID-WELL DIVISION</b>											
A40CW001	PR-1050		ASPHALT PROFILER, MAX 12.5' W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP	D-off	\$766,815	363.93	66.60	102.24	15.48	81.36	1,205
	<b>ROADTEC</b>											
A40RT001	RX-20B		ASPHALT COLD PLANER, 40" W X 10" D, WHEEL (ADD CUTTING TEETH COSTS)	230 HP	D-off	\$292,748	129.14	24.68	37.54	5.91	23.39	324
A40RT002	RX-25		ASPHALT COLD PLANER, 52" W X 8" D, CRAWLER (ADD CUTTING TEETH COSTS)	250 HP	D-off	\$383,189	164.70	33.29	51.09	7.74	25.43	420

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A40</b>	<b>ROADTEC (continued)</b>											
	A40RT003	RX-45B	ASPHALT COLD PLANER, 78" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	460 HP	D-off	\$472,855	220.61	41.08	63.05	9.55	46.78	617
	A40RT004	RX-60B	ASPHALT COLD PLANER, 86" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP	D-off	\$608,535	307.75	52.86	81.14	12.29	81.36	918
	A40RT005	RX-68B	ASPHALT COLD PLANER, 98" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP	D-off	\$647,744	321.67	56.27	86.37	13.08	81.36	830
	A40RT006	RX-70B	ASPHALT COLD PLANER, 150" W X 8" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP	D-off	\$717,397	346.39	62.31	95.65	14.48	81.36	920
<b>A45</b>	<b>ASPHALT RECYCLERS &amp; SEALERS</b>											
	<b>SUBCATEGORY 0.00 ASPHALT RECYCLERS &amp; SEALERS</b>											
	<b>AEROIL PRODUCTS COMPANY, INC.</b>											
	A45AE001	HEPR-52V	ASPHALT RESURFACER-PATCHER, 4' WIDE, 17.3 SF, 600,000 BTU INFRA-RED HEATER, TRAILER MTD			\$8,050	10.26	0.80	1.25	0.17	0.00	11
	A45AE002	HEPR-96V	ASPHALT RESURFACER-PATCHER, 8' WIDE, 32.0 SF, 1,200,000 BTU INFRA-RED HEATER, TRAILER MTD			\$15,722	20.46	1.57	2.47	0.33	0.00	16
	A45AE003	HEPR-120V	ASPHALT RESURFACER-PATCHER, 10' WIDE, 40.0 SF, 1,420,000 BTU INFRA-RED HEATER, TRAILER MTD			\$18,529	24.19	1.84	2.92	0.38	0.00	17
	<b>ROSCO, A LeeBoy COMPANY</b>											
	A45RS001	RA-2000	ASPHALT SPRAY PATCHER, 300 GAL, ARTICULATED BOOM - 17' R, TRAILER MTD	80 HP	D-off	\$42,025	23.43	4.18	6.62	0.87	5.60	60
	A45RS002	RA-300	ASPHALT SPRAY PATCHER, 400 GAL, TELESCOPIC BOOM - 22' EXT, TRUCK MTD	210 HP	D-on	\$134,948	74.50	13.60	21.59	2.80	17.97	179
	<b>SEALMASTER, INC.</b>											
	A45SE003	SP300 DUAL	ASPHALT SEALCOATER, 320 GAL, 75 GPM, 108" WIDE DUAL SPRAY, SQUEEGEE, SELF PROPELLED	30 HP	D-off	\$34,191	17.92	3.41	5.39	0.71	2.10	43

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>A45</b>	<b>SEALMASTER, INC. (continued)</b>											
	A45SE004	TR-1000	ASPHALT SEALCOATER, 1000 GAL, 50 GPM, 88" WIDE SPRAY BAR, TRAILER MTD	13 HP	G	\$22,343	11.86	2.17	3.41	0.46	2.32	52
<b>B10</b>	<b>BATCH PLANTS, ASPHALT &amp; CONCRETE</b>											
	<b>SUBCATEGORY 0.20 CONCRETE</b>											
	<b>CEMEN TECH</b>											
	B10CC007	MCD2-50HT	BATCH PLANT, CONCRETE DISPENSER, 15 CY/HR MAX, W/TWO AGGREGATE BINS, 2 CY/ 1 CY CEMENT BIN/ 7' LONG SLOPING 8" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 2 CY LOAD, TRAILER MTD	18 HP	G	\$41,510	17.85	2.83	4.03	0.81	3.22	80
	B10CC008	MCD5-100H	BATCH PLANT, CONCRETE DISPENSER, 30 CY/HR MAX, W/TWO AGGREGATE BINS, 5.5 CY/ 1.9 CY CEMENT BIN/ 9' LONG SLOPING 9" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 5 CY LOAD, TRUCK MTD	163 HP	G	\$114,146	67.78	7.73	10.99	2.23	29.14	132
	B10CC009	MCD8-100H	BATCH PLANT, CONCRETE DISPENSER, 30 CY/HR MAX, W/TWO AGGREGATE BINS, 9.3 CY/ 3.1 CY CEMENT BIN/ 9' LONG SLOPING 12" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 8 CY LOAD, TRUCK MTD	200 HP	G	\$128,189	79.49	8.56	12.11	2.50	35.75	194
	B10CC010	MCD8-150H	BATCH PLANT, CONCRETE DISPENSER, 60 CY/HR MAX, W/TWO AGGREGATE BINS, 9.6 CY/ 3.1 CY CEMENT BIN/ 9' LONG SLOPING 12" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 8 CY LOAD, TRUCK MTD	200 HP	G	\$138,195	82.44	9.25	13.11	2.69	35.75	204
	B10CC012	210 BBL	BATCH PLANT, SILO, CEMENT, 830 CF, 210 BARREL (BATCH PLANT ATTACHMENT)	18 HP	G	\$18,941	9.56	1.32	1.89	0.37	3.22	35
	B10CC011	HS-240	BATCH PLANT, SILO, CEMENT, 38 TON HORIZONTAL 240 BARREL (BATCH PLANT ATTACHMENT)	20 HP	E	\$19,173	7.94	1.33	1.92	0.37	1.16	45
	B10CC013	300 BBL	BATCH PLANT, SILO, CEMENT, 1,200 CF, 300 BARRL (BATCH PLANT ATTACHMENT)	18 HP	G	\$22,843	10.67	1.59	2.28	0.45	3.22	48

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B10</b>	<b>CEMEN TECH (continued)</b>											
	B10CC014		BATCH PLANT, CEMENT LOADING AUGER, 6" DIA, 19' LONG (BATCH PLANT ATTACHMENT)	5 HP	E	\$5,940	2.55	0.42	0.59	0.12	0.29	10
	<b>CON-E-CO</b>											
	B10CL025	MTM 12	BATCH PLANT, CONCRETE MIXER, 12 CY, TILT DRUM, 11.67' DIA, REMOVABLE AXLES, TRAILER MTD (ADD DRY BATCH PLANT)	200 HP	E	\$246,689	84.10	17.05	24.47	4.81	11.57	130
	B10CL021	VERSA-PLANT 10	BATCH PLANT, CONCRETE AGGREGATE DRY, 40CY/HR, 10 CY AGGREGATE BATCHER, W/30" X 40' LOADING CONVEYOR, SCALES & WATER METER INCLUDED, TRAILER MTD (ADD 5 KW GENERATOR, WATER TANK & WET BATCHER)	35 HP	E	\$75,103	23.15	5.05	7.18	1.46	2.02	190
	B10CL015	PLP MODEL 12	BATCH PLANT, CONCRETE AGGREGATE DRY, 200 CY/HR, W/TWO AGGREGATE BINS, 81 TON, 60 CY/ 36"X20' CONVEYOR/ 3 BIN 12 CY AGGREGATE BATCHER/ 30"X33.5' LOADING CONVEYOR/ & 475 BARREL, 88 TON CEMENT SILO, TRAILER MTD (ADD 110 KW GENERATOR)	30 HP	E	\$140,920	42.90	9.51	13.51	2.75	1.74	380
	B10CL005	LO-PRO 10	BATCH PLANT, CONCRETE AGGREGATE DRY, 275 CY/HR, W/TWO AGGREGATE BINS, 65 TON, 50 CY/ 36"X20' CONVEYOR/ 10 CY AGGREGATE BATCHER/ 36"X36' LOADING CONVEYOR/ & 215 BARREL, 35 TON CEMENT SILO, TRAILER MTD (ADD 140 KW GENERATOR)	120 HP	E	\$266,485	84.19	18.21	26.03	5.19	6.94	410
	B10CL006	LO-PRO 12	BATCH PLANT, CONCRETE AGGREGATE DRY, 275 CY/HR, W/TWO AGGREGATE BINS, 65 TON, 50 CY/ 36"X20' CONVEYOR/ 12 CY AGGREGATE BATCHER/ 36"X36' LOADING CONVEYOR/ & 215 BARREL, 35 TON CEMENT SILO, TRAILER MTD (ADD 140 KW GENERATOR)	120 HP	E	\$270,868	85.38	18.52	26.47	5.28	6.94	426
	B10CL027		BATCH PLANT, CEMENT SILO, 1,910 CF, 475 BARREL (BATCH PLANT ATTACHMENT)			\$18,010	4.87	1.25	1.80	0.35	0.00	144
	B10CL042		BATCH PLANT, SCREW CONVEYOR, 6" DIA, 10' LONG (CEMENT SILO ATTACHMENT)	5 HP	E	\$2,846	1.21	0.20	0.28	0.06	0.29	5
	B10CL045		BATCH PLANT, SCREW CONVEYOR, 6" DIA, 20' LONG (CEMENT SILO ATTACHMENT)	10 HP	E	\$3,617	1.86	0.25	0.36	0.07	0.58	11

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B10</b>	<b>CON-E-CO (continued)</b>											
	B10CL036		BATCH PLANT, SCREW CONVEYOR, 9" DIA, 10' LONG (CEMENT SILO ATTACHMENT)	8 HP	E	\$3,093	1.53	0.22	0.31	0.06	0.46	9
	B10CL040		BATCH PLANT, SCREW CONVEYOR, 9" DIA, 20' LONG (CEMENT SILO ATTACHMENT)	20 HP	E	\$4,259	2.90	0.30	0.43	0.08	1.16	16
	B10CL032		BATCH PLANT, SCREW CONVEYOR, 12" DIA, 10' LONG (CEMENT SILO ATTACHMENT)	10 HP	E	\$3,706	1.88	0.26	0.37	0.07	0.58	10
	B10CL034		BATCH PLANT, SCREW CONVEYOR, 12" DIA, 20' LONG (CEMENT SILO ATTACHMENT)	20 HP	E	\$7,413	3.75	0.51	0.74	0.14	1.16	20
	<b>EXCEL MACHINERY LTD.</b>											
	B10EM001	EXCEL PORT-A-PUG	BATCH PLANT, CONCRETE CONTINUOUS PUGG MILL MIXER, 400 CY/HR MAX, W/12 CY AGGREGATE STORAGE BIN/ 48"X18' METERING CONVEYOR/ CEMENT SILO, 44 TON, 34.8 CY/ 30" X 37' CONVEYOR, TRAILER MTD (ADD 200 KW GENERATOR)	25 HP	G	\$360,719	104.59	24.56	35.06	7.03	4.47	590
	B10EM002		BATCH PLANT, CEMENT SILO, 45 TON HORIZONTAL 300 BARREL (BATCH PLANT ATTACHMENT)	10 HP	E	\$22,419	7.73	1.40	1.92	0.44	0.58	45
	B10EM003		BATCH PLANT, CEMENT SILO, 2,200 CF (BARREL CAP 550 MAX / 450 MIN) W/DRIVE-THRU TYPE UNDERSTRUCTURE (BATCH PLANT ATTACHMENT)			\$23,187	6.27	1.61	2.32	0.45	0.00	222
	<b>ROSS COMPANY</b>											
	B10RC007	BANDIT 5	BATCH PLANT, CONCRETE AGGREGATE DRY, 100 CY/HR, W/TWO AGGREGATE BINS, 65 TON, 48 CY/ 36" X 20' CONVEYOR/ 2 BIN 5 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 257 BARREL, 48 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	15 HP	E	\$124,393	37.20	8.43	12.02	2.42	0.87	3,000
	B10RC032	RUSTLER III	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/TWO AGGREGATE BINS, 28 TON, 21 CY/ 2 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 400 BARREL, 75 TON CEMENT SILO, TRAILER MTD (ADD 130 KW GENERATOR)	50 HP	E	\$186,815	58.93	12.62	17.96	3.64	2.89	536



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B10</b>	<b>ROSS COMPANY (continued)</b>											
	B10RC006	RUSTLER II	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE BINS, 71 TON, 52 CY/ 36" X 20' CONVEYOR/ 3 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ 375 BARREL, 70 TON CEMENT SILO, TRAILER MTD (ADD 130KW GENERATOR)	46 HP	E	\$171,410	54.36	11.55	16.42	3.34	2.63	489
	B10RC008	BANDIT 12 BTR	BATCH PLANT, CONCRETE AGGREGATE DRY, 200 CY/HR, W/THREE AGGREGATE BINS, 65 TON, 48 CY/ 36" X 20' CONVEYOR/ 3 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 720 BARREL, 134 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	30 HP	E	\$143,935	43.82	9.80	13.98	2.81	1.74	250
	B10RC027		BATCH PLANT, CONCRETE MIXER, 4.5 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	40 HP	E	\$131,739	41.14	9.16	13.17	2.57	2.31	34
	B10RC028		BATCH PLANT, CONCRETE MIXER, 6.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	60 HP	E	\$147,936	47.52	10.28	14.79	2.88	3.47	45
	B10RC029		BATCH PLANT, CONCRETE MIXER, 8.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	80 HP	E	\$167,133	54.72	11.62	16.71	3.26	4.63	60
	B10RC030		BATCH PLANT, CONCRETE MIXER, 10.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	100 HP	E	\$182,031	61.76	12.65	18.20	3.55	5.79	75
	B10RC031		BATCH PLANT, CONCRETE MIXER, 12.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	120 HP	E	\$192,106	66.46	13.35	19.21	3.74	6.94	90
	B10RC016	MOBILE MIXER	BATCH PLANT, CONCRETE MIXER, 4.5CY, TILT DRUM TYPE, REVOLVING LIFT STAND, TRAILER MTD (ADD DRY BATCH PLANT & POWER)	75 HP	E	\$211,505	68.80	14.34	20.43	4.12	4.34	420
	<b>STEPHENS MANUFACTURING CO., INC.</b>											
	B10SN031	DC-12	BATCH PLANT, CONCRETE AGGREGATE DRY, 100 CY/HR, W/2 BIN 12 CY BATCHER/ 24" X 41' LOADING CONVEYOR/ & 311 BARREL, 58 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	15 HP	E	\$43,234	13.85	2.63	3.57	0.84	0.87	340

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B10</b>	<b>STEPHENS MANUFACTURING CO., INC.</b> <i>(continued)</i>											
	B10SN033	DC COLT	BATCH PLANT, CONCRETE AGGREGATE DRY, 100 CY/HR, W/2 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 311 BARREL, 58 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	30 HP	E	\$85,870	26.86	5.59	7.84	1.67	1.74	340
	B10SN032	MUSTANG 5	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE STORAGE BINS, 29.6 TON, 40 CY/ 3 BIN 5 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 251 BARREL, 47 TON CEMENT SILO, TRAILER MTD (ADD 115 KW GENERATOR)	30 HP	E	\$102,314	31.54	6.73	9.47	1.99	1.74	420
	B10SN034	STALLION	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE BIN STORAGE, 65 TON, 48 CY/ 2 BIN 10 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 374 BARREL, 70 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	20 HP	E	\$99,136	29.55	6.51	9.15	1.93	1.16	360
	B10SN036	MUSTANG 10	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE BIN STORAGE, 75 TON, 55 CY/ 2 BIN 10 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 351 BARREL, 65 TON CEMENT SILO, TRAILER MTD (ADD 115 KW GENERATOR)	45 HP	E	\$133,800	41.37	8.92	12.62	2.61	2.60	500
	B10SN035	THOROUGH-BRED	BATCH PLANT, CONCRETE AGGREGATE DRY, 180 CY/HR, W/4 AGGREGATE BIN STORAGE, 65 TON, 48 CY/ 2 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 374 BARREL, 70 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	20 HP	E	\$109,435	32.49	7.22	10.18	2.13	1.16	300
	<b>SUBCATEGORY 0.30 PUGMILL</b>											
	<b>KOLBERG - PIONEER, INC</b>											
	B10KB001	52 PORTABLE PUGMILL	BATCH PLANT, PUGMILL, CONTINUOUS MIXER, 48" DIA TWIN SHAFT X 6' LONG, W/9 CY FEEDER HOPPER/ 36" X 11.5' BELT FEEDER/ 30" X 27' CONVEYOR/ WATER OR ASPHALT PUMP & METER (ADD 95 KW GENERATOR & ANY MATERIAL FEEDS)	95 HP	E	\$128,710	36.55	7.46	10.01	2.45	5.50	190

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT	
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL		
<b>B10</b>	<b>KOLBERG - PIONEER, INC (continued)</b>												
	B10KB002	52S PORTABLE PUGMILL	BATCH PLANT, PUGMILL, CONTINUOUS MIXER, 48" DIA TWIN SHAFT X 8' LONG, W/13 CY FEEDER HOPPER/ TWO - 36" X 11.5' BELT FEEDERS/ 2ND 11 CY FEEDER HOPPER/ 30" X 27' CONVEYOR/ WATER OR ASPHALT PUMP & METER (ADD 220 KW GENERATOR & ANY MATERIAL FEEDS)	220 HP	E	\$229,735	69.69	13.41	18.06	4.38	12.73	230	
<b>B15</b>	<b>BROOMS, STREET SWEEPERS &amp; FLUSHERS</b>												
	<b>SUBCATEGORY 0.00 BROOMS, STREET SWEEPERS &amp; FLUSHERS</b>												
	<b>BROCE MANUFACTURING COMPANY</b>												
	B15BM001	RJ-350	BROOM, 8' BROOM PATH, PAVEMENT, SELF PROPELLED	80 HP	D-off	\$27,257	13.18	2.04	3.07	0.50	5.60	45	
	<b>ELGIN SWEEPER COMPANY</b>												
	B15EC002	PELICAN P	STREET SWEEPER, 10' BROOM PATH, 3.5 CY HOPPER, 180 GAL WATER TANK, SELF PROPELLED	100 HP	D-off	\$109,346	35.51	8.06	12.11	2.00	7.01	128	
	B15EC001	EAGLE F	STREET SWEEPER, 10' BROOM PATH, 4.5 CY HOPPER, 280 GAL WATER TANK, DUAL ENGINE, SELF PROPELLED	49 HP	D-off	170 HP D-on	\$165,600	48.98	12.18	18.29	3.03	6.25	150
	<b>FIVE STAR MANUFACTURING CO/ELGIN SWEEPER</b>												
	B15FS001	BROOM BEAR FL42H	STREET SWEEPER, 12' BROOM PATH, 4.5 CY HOPPER, 350 GAL WATER TANK, SELF PROPELLED	230 HP	D-off	\$154,920	57.21	11.53	17.38	2.84	16.11	213	
	<b>M-B COMPANIES, INC.</b>												
	B15MB001	MT	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, PTO DRIVE (ADD 45-100 HP TRACTOR)			\$6,679	1.78	0.50	0.75	0.12	0.00	10	
	B15MB002	HT	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, PTO DRIVE (ADD 45-100 HP TRACTOR)			\$8,570	2.30	0.64	0.96	0.16	0.00	12	

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B15</b>	<b>M-B COMPANIES, INC. (continued)</b>											
	B15MB003	53T	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, TOWED, HYDRAULIC (ADD TOWING UNIT)			\$12,297	3.32	0.90	1.33	0.23	0.00	18
	B15MB004	53MH	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, TOWED (ADD TOWING UNIT)	18 HP	G	\$14,210	7.13	1.04	1.55	0.26	3.22	17
	<b>ROSCO, A LeeBoy COMPANY</b>											
	B15RS005	CHALLENGER II	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 125 GAL WATER TANK, SELF PROPELLED	80 HP	D-off	\$45,255	17.74	3.33	5.00	0.83	5.60	75
	B15RS001	RB-48	STREET SWEEPER, 8' BROOM PATH, W/SPRINKLER AND 150 GAL WATER TANK, SELF PROPELLED	80 HP	D-off	\$34,842	15.12	2.57	3.86	0.64	5.60	52
	<b>TERRAMITE CONSTRUCTION EQUIPMENT</b>											
	B15TB001	TSS36	STREET SWEEPER, 6' BROOM PATH, W/SPRINKLER AND 2 - 50 GAL WATER TANKS, SELF PROPELLED	37 HP	D-off	\$21,527	8.35	1.58	2.38	0.39	2.59	34
	B15TB002	TSS38	STREET SWEEPER, 8' BROOM PATH, W/SPRINKLER AND 180 GAL WATER TANK, SELF PROPELLED	37 HP	D-off	\$21,663	8.39	1.60	2.39	0.40	2.59	34
	<b>WALDON, INC.</b>											
	B15WD001	SWEEPMASTER 250	BROOM, 7.5' BROOM PATH, PAVEMENT, SELF PROPELLED	80 HP	D-off	\$26,247	12.95	1.93	2.89	0.48	5.60	48
	B15WD002	SWEEPMASTER 250	BROOM, 90" BROOM PATH, PAVEMENT, W/SPRINKLER AND 180 GAL WATER TANK, SELF PROPELLED	80 HP	D-off	\$27,605	13.29	2.03	3.04	0.51	5.60	48
<b>B20</b>	<b>BRUSH CHIPPERS</b>											
	<b>SUBCATEGORY 0.00 BRUSH CHIPPERS</b>											
	<b>BANDIT INDUSTRIES, INC.</b>											
	B20BN001	65	BRUSH CHIPPER, 6" CAPACITY, DISC TYPE, TRAILER MTD	25 HP	G	\$9,793	7.74	0.73	1.09	0.18	4.47	20

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>B20</b>	<b>BANDIT INDUSTRIES, INC. (continued)</b>										
	B20BN002	90W-XP	BRUSH CHIPPER, 9" CAPACITY, DISC TYPE, TRAILER MTD	37 HP	G	\$15,586	11.74	1.15	1.72	0.29	6.61	32
	B20BN003	200XP	BRUSH CHIPPER, 12" CAPACITY, DISC TYPE, TRAILER MTD	71 HP	G	\$19,606	19.77	1.45	2.17	0.36	12.69	58
	B20BN004	254	BRUSH CHIPPER, 14" CAPACITY, DISC TYPE, TRAILER MTD	125 HP	D-off	\$29,803	17.83	2.21	3.31	0.55	8.76	78
	B20BN005	1290	BRUSH CHIPPER, 12" CAPACITY, DRUM TYPE, TRAILER MTD	70 HP	G	\$16,923	18.84	1.24	1.86	0.31	12.51	44
	B20BN006	1690	BRUSH CHIPPER, 16" CAPACITY, DRUM TYPE, TRAILER MTD	119 HP	G	\$18,793	29.37	1.38	2.07	0.34	21.27	44
	B20BN007	1890	BRUSH CHIPPER, 18" CAPACITY, DRUM TYPE, TRAILER MTD	125 HP	D-off	\$34,298	19.00	2.48	3.70	0.63	8.76	78
	<b>MORBARK, INC.</b>											
	B20MQ001	2070XL	BRUSH CHIPPER, 10" CAPACITY, DRUM TYPE, TRAILER MTD	86 HP	D-off	\$19,209	11.93	1.42	2.14	0.35	6.03	40
	B20MQ003	13	BRUSH CHIPPER, 13" CAPACITY, DRUM TYPE, TRAILER MTD	125 HP	D-off	\$26,671	16.99	1.97	2.96	0.49	8.76	68
	B20MQ004	2400XL	BRUSH CHIPPER, 18" CAPACITY, DRUM TYPE, TRAILER MTD	125 HP	D-off	\$31,101	18.17	2.27	3.40	0.57	8.76	94
	B20MQ005	22 RXL	BRUSH CHIPPER, LOG CHIPPER, 22" CAPACITY, DISC TYPE, TRAILER MTD	650 HP	D-off	\$340,370	143.68	25.18	37.89	6.23	45.54	700
<b>B25</b>	<b>BUCKETS, CLAMSHELL</b>											
	<b>SUBCATEGORY 0.00 BUCKETS, CLAMSHELL</b>											
	<b>HAWCO MANUFACTURING COMPANY, LLC</b>											
	B25HB001	HD-050	BUCKET, CLAMSHELL, 0.5 CY, HEAVY DUTY/DIGGING			\$16,247	3.86	1.22	1.83	0.30	0.00	30
	B25HB003	HD-100	BUCKET, CLAMSHELL, 1.0 CY, HEAVY DUTY/DIGGING			\$26,103	6.19	1.95	2.94	0.48	0.00	48
	B25HB005	HD-150	BUCKET, CLAMSHELL, 1.5 CY, HEAVY DUTY/DIGGING			\$33,880	8.03	2.53	3.81	0.62	0.00	66
	B25HB007	HD-200	BUCKET, CLAMSHELL, 2.0 CY, HEAVY DUTY/DIGGING			\$39,994	9.48	2.98	4.50	0.73	0.00	78

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B25</b>	<b>HAWCO MANUFACTURING COMPANY, LLC</b> <i>(continued)</i>											
	B25HB008	HD-250	BUCKET, CLAMSHELL, 2.5 CY, HEAVY DUTY/DIGGING			\$46,618	11.04	3.47	5.24	0.85	0.00	91
	B25HB009	HD-300	BUCKET, CLAMSHELL, 3.0 CY, HEAVY DUTY/DIGGING			\$51,338	12.17	3.83	5.78	0.94	0.00	103
	B25HB010	HD-350	BUCKET, CLAMSHELL, 3.5 CY, HEAVY DUTY/DIGGING			\$53,904	12.78	4.02	6.06	0.99	0.00	131
	B25HB011	HD-400	BUCKET, CLAMSHELL, 4.0 CY, HEAVY DUTY/DIGGING			\$55,289	13.10	4.12	6.22	1.01	0.00	145
	B25HB012	HD-450	BUCKET, CLAMSHELL, 4.5 CY, HEAVY DUTY/DIGGING			\$58,403	13.85	4.36	6.57	1.07	0.00	165
	B25HB013	HD-500	BUCKET, CLAMSHELL, 5.0 CY, HEAVY DUTY/DIGGING			\$60,298	14.29	4.49	6.78	1.10	0.00	173
	B25HB014	HD-550	BUCKET, CLAMSHELL, 5.5 CY, HEAVY DUTY/DIGGING			\$63,012	14.94	4.70	7.09	1.15	0.00	178
	B25HB015	HD-600	BUCKET, CLAMSHELL, 6.0 CY, HEAVY DUTY/DIGGING			\$65,183	15.45	4.86	7.33	1.19	0.00	199
	<b>NO SPECIFIC MANUFACTURER</b>											
	B25XX001	1/4SSN	BUCKET, CLAMSHELL, 0.2 CY, SQUARE NOSE, STANDARD			\$7,339	1.74	0.55	0.83	0.13	0.00	14
	B25XX002	1/2SSN	BUCKET, CLAMSHELL, 0.5 CY, SQUARE NOSE, STANDARD			\$10,830	2.57	0.81	1.22	0.20	0.00	27
	B25XX003	3/4SSN	BUCKET, CLAMSHELL, 0.7 CY, SQUARE NOSE, STANDARD			\$13,342	3.16	0.99	1.50	0.24	0.00	35
	B25XX004	1SSN	BUCKET, CLAMSHELL, 1.0 CY, SQUARE NOSE, STANDARD			\$14,580	3.46	1.09	1.64	0.27	0.00	43
	B25XX005	1-1/4SSN	BUCKET, CLAMSHELL, 1.2 CY, SQUARE NOSE, STANDARD			\$16,993	4.03	1.27	1.91	0.31	0.00	49
	B25XX006	1-1/2SSN	BUCKET, CLAMSHELL, 1.5 CY, SQUARE NOSE, STANDARD			\$19,063	4.52	1.42	2.14	0.35	0.00	64
	B25XX007	1-3/4SSN	BUCKET, CLAMSHELL, 1.7 CY, SQUARE NOSE, STANDARD			\$20,367	4.82	1.52	2.29	0.37	0.00	67
	B25XX008	2SSN	BUCKET, CLAMSHELL, 2.0 CY, SQUARE NOSE, STANDARD			\$23,817	5.65	1.78	2.68	0.44	0.00	76
	B25XX009	2-1/2SSN	BUCKET, CLAMSHELL, 2.5 CY, SQUARE NOSE, STANDARD			\$24,929	5.91	1.86	2.80	0.46	0.00	92
	B25XX010	3SSN	BUCKET, CLAMSHELL, 3.0 CY, SQUARE NOSE, STANDARD			\$26,549	6.30	1.99	2.99	0.49	0.00	98

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>B25</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>										
	B25XX011	3-1/2SSN	BUCKET, CLAMSHELL, 3.5 CY, SQUARE NOSE, STANDARD			\$27,788	6.59	2.08	3.13	0.51	0.00	108
	B25XX012	4SSN	BUCKET, CLAMSHELL, 4.0 CY, SQUARE NOSE, STANDARD			\$31,051	7.36	2.32	3.49	0.57	0.00	119
	B25XX013	4-1/2SSN	BUCKET, CLAMSHELL, 4.5 CY, SQUARE NOSE, STANDARD			\$41,897	9.93	3.13	4.71	0.77	0.00	145
	B25XX014	5SSN	BUCKET, CLAMSHELL, 5.0 CY, SQUARE NOSE, STANDARD			\$44,717	10.60	3.34	5.03	0.82	0.00	154
	B25XX015	5-1/2SSN	BUCKET, CLAMSHELL, 5.5 CY, SQUARE NOSE, STANDARD			\$54,231	12.85	4.04	6.10	0.99	0.00	158
	B25XX016	6SSN	BUCKET, CLAMSHELL, 6.0 CY, SQUARE NOSE, STANDARD			\$54,636	12.96	4.08	6.15	1.00	0.00	166
	B25XX017	6-1/2SSN	BUCKET, CLAMSHELL, 6.5 CY, SQUARE NOSE, STANDARD			\$59,013	13.99	4.40	6.64	1.08	0.00	177
	B25XX018	7SSN	BUCKET, CLAMSHELL, 7.0 CY, SQUARE NOSE, STANDARD			\$55,877	13.25	4.17	6.29	1.02	0.00	185
	B25XX019	7-1/2SSN	BUCKET, CLAMSHELL, 7.5 CY, SQUARE NOSE, STANDARD			\$62,632	14.85	4.68	7.05	1.15	0.00	192
<b>B30</b>	<b>BUCKETS, CONCRETE</b>											
	<b>SUBCATEGORY 0.10 GENERAL PURPOSE, MANUAL TRIP</b>											
	<b>GAR-BRO MANUFACTURING COMPANY</b>											
	B30GB018	413-G	BUCKET, CONCRETE, GENERAL PURPOSE, 0.5 CY			\$2,934	0.71	0.23	0.35	0.05	0.00	4
	B30GB001	433-G	BUCKET, CONCRETE, GENERAL PURPOSE, 1.0 CY			\$3,690	0.90	0.29	0.44	0.07	0.00	6
	B30GB002	442-G	BUCKET, CONCRETE, GENERAL PURPOSE, 1.5 CY			\$4,821	1.17	0.38	0.57	0.09	0.00	8
	B30GB003	462-G	BUCKET, CONCRETE, GENERAL PURPOSE, 2.0 CY			\$5,942	1.45	0.47	0.71	0.11	0.00	10
	B30GB004	493-G	BUCKET, CONCRETE, GENERAL PURPOSE, 3.0 CY			\$8,599	2.08	0.66	1.02	0.15	0.00	14
	B30GB005	4123-G	BUCKET, CONCRETE, GENERAL PURPOSE, 4.0 CY			\$10,251	2.49	0.79	1.22	0.18	0.00	18

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>SUBCATEGORY 0.20 LAYDOWN</b>											
	<b>GAR-BRO MANUFACTURING COMPANY</b>											
	B30GB006	425-A	BUCKET, CONCRETE, LAYDOWN, 1.0 CY, HEAVY DUTY AIR GATE			\$18,991	4.76	1.47	2.26	0.34	0.00	26
	B30GB007	465-A	BUCKET, CONCRETE, LAYDOWN, 2.0 CY, HEAVY DUTY AIR GATE			\$20,444	5.12	1.58	2.43	0.36	0.00	32
	B30GB008	495-A	BUCKET, CONCRETE, LAYDOWN, 3.0 CY, HEAVY DUTY AIR GATE			\$22,735	5.69	1.75	2.70	0.40	0.00	40
	B30GB009	4125-A	BUCKET, CONCRETE, LAYDOWN, 4.0 CY, HEAVY DUTY AIR GATE			\$25,892	6.48	2.00	3.07	0.46	0.00	51
	B30GB010	4155-A	BUCKET, CONCRETE, LAYDOWN, 5.0 CY, HEAVY DUTY AIR GATE			\$31,927	8.00	2.47	3.79	0.57	0.00	73
	<b>SUBCATEGORY 0.30 LOWBOY</b>											
	<b>CAMLEVER</b>											
	B30CR001	LB-375	BUCKET, CONCRETE, LOWBOY, 0.38 CY, AIR GATE			\$4,194	1.08	0.32	0.50	0.07	0.00	2
	B30CR002	LB-050	BUCKET, CONCRETE, LOWBOY, 0.5 CY, AIR GATE			\$4,498	1.16	0.35	0.53	0.08	0.00	2
	B30CR003	LB-075	BUCKET, CONCRETE, LOWBOY, 0.75 CY, AIR GATE			\$4,848	1.26	0.38	0.58	0.09	0.00	3
	B30CR004	LB-100	BUCKET, CONCRETE, LOWBOY, 1.0 CY, AIR GATE			\$4,996	1.29	0.39	0.59	0.09	0.00	5
	B30CR005	LB-150	BUCKET, CONCRETE, LOWBOY, 1.5 CY, AIR GATE			\$5,882	1.51	0.45	0.70	0.10	0.00	6
	B30CR009	LXB-150	BUCKET, CONCRETE, LOWBOY, 1.5 CY, AIR GATE			\$6,191	1.60	0.48	0.74	0.11	0.00	6
	B30CR006	LB-200	BUCKET, CONCRETE, LOWBOY, 2.0 CY, AIR GATE			\$6,908	1.78	0.53	0.82	0.12	0.00	8
	B30CR010	LXB-200	BUCKET, CONCRETE, LOWBOY, 2.0 CY, AIR GATE			\$7,230	1.87	0.56	0.86	0.13	0.00	6
	B30CR011	LXB-300	BUCKET, CONCRETE, LOWBOY, 3.0 CY, AIR GATE			\$8,579	2.21	0.66	1.02	0.15	0.00	6
	B30CR012	LXB-400	BUCKET, CONCRETE, LOWBOY, 4.0 CY, AIR GATE			\$9,917	2.56	0.77	1.18	0.18	0.00	6



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>SUBCATEGORY 0.40 LOW SLUMP</b>											
	<b>GAR-BRO MANUFACTURING COMPANY</b>											
	B30GB011	440-A	BUCKET, CONCRETE, LOW SLUMP, 1.0 CY, AIR GATE			\$15,033	3.89	1.17	1.79	0.27	0.00	20
	B30GB012	450-A	BUCKET, CONCRETE, LOW SLUMP, 1.5 CY, AIR GATE			\$15,586	4.02	1.21	1.85	0.28	0.00	21
	B30GB013	460-A	BUCKET, CONCRETE, LOW SLUMP, 2.0 CY, AIR GATE			\$16,145	4.17	1.25	1.92	0.29	0.00	24
	B30GB014	493-A	BUCKET, CONCRETE, LOW SLUMP, 3.0 CY, AIR GATE			\$21,071	5.43	1.62	2.50	0.37	0.00	49
	B30GB015	4139-A	BUCKET, CONCRETE, LOW SLUMP, 4.0 CY, AIR GATE			\$21,819	5.63	1.69	2.59	0.39	0.00	52
	B30GB016	4200-A	BUCKET, CONCRETE, LOW SLUMP, 6.0 CY, AIR GATE			\$31,329	8.08	2.41	3.72	0.55	0.00	78
	B30GB017	4250-A	BUCKET, CONCRETE, LOW SLUMP, 8.0 CY, AIR GATE			\$37,725	9.73	2.91	4.48	0.67	0.00	90
<b>B35</b>	<b>BUCKETS, DRAGLINE</b>											
	<b>SUBCATEGORY 0.10 LIGHT WEIGHT</b>											
	<b>HENDRIX MANUFACTURING COMPANY, INC.</b>											
	B35HE001	LS	BUCKET, DRAGLINE, 0.75 CY, LIGHT WEIGHT/PERFORATED			\$7,519	1.79	0.57	0.85	0.14	0.00	15
	B35HE002	LS	BUCKET, DRAGLINE, 1.0 CY, LIGHT WEIGHT/PERFORATED			\$8,808	2.09	0.66	0.99	0.16	0.00	18
	B35HE003	LS	BUCKET, DRAGLINE, 1.5 CY, LIGHT WEIGHT/PERFORATED			\$12,474	2.96	0.93	1.40	0.23	0.00	26
	B35HE004	LS	BUCKET, DRAGLINE, 2.0 CY, LIGHT WEIGHT/PERFORATED			\$15,053	3.57	1.13	1.69	0.28	0.00	32
	B35HE005	LS	BUCKET, DRAGLINE, 2.5 CY, LIGHT WEIGHT/PERFORATED			\$17,234	4.09	1.29	1.94	0.32	0.00	37
	B35HE006	LS	BUCKET, DRAGLINE, 3.0 CY, LIGHT WEIGHT/PERFORATED			\$21,492	5.09	1.60	2.42	0.39	0.00	46
	B35HE007	LS	BUCKET, DRAGLINE, 3.5 CY, LIGHT WEIGHT/PERFORATED			\$23,374	5.54	1.75	2.63	0.43	0.00	50

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B35</b>	<b>HENDRIX MANUFACTURING COMPANY, INC. (continued)</b>											
	B35HE008	LS	BUCKET, DRAGLINE, 4.0 CY, LIGHT WEIGHT/PERFORATED			\$30,698	7.27	2.29	3.45	0.56	0.00	65
	B35HE009	LS	BUCKET, DRAGLINE, 4.5 CY, LIGHT WEIGHT/PERFORATED			\$32,190	7.63	2.40	3.62	0.59	0.00	69
	B35HE010	LS	BUCKET, DRAGLINE, 5.0 CY, LIGHT WEIGHT/PERFORATED			\$37,181	8.81	2.77	4.18	0.68	0.00	85
	B35HE011	LS	BUCKET, DRAGLINE, 6.0 CY, LIGHT WEIGHT/PERFORATED			\$40,255	9.55	3.01	4.53	0.74	0.00	92
	B35HE012	LS	BUCKET, DRAGLINE, 7.0 CY, LIGHT WEIGHT/PERFORATED			\$44,026	10.44	3.29	4.95	0.81	0.00	101
	B35HE013	LS	BUCKET, DRAGLINE, 8.0 CY, LIGHT WEIGHT/PERFORATED			\$48,786	11.56	3.64	5.49	0.89	0.00	112
	B35HE014	LS	BUCKET, DRAGLINE, 9.0 CY, LIGHT WEIGHT/PERFORATED			\$55,825	13.23	4.16	6.28	1.02	0.00	128
	B35HE015	LS	BUCKET, DRAGLINE, 10.0 CY, LIGHT WEIGHT/PERFORATED			\$60,683	14.39	4.53	6.83	1.11	0.00	139
	B35HE016	LS	BUCKET, DRAGLINE, 12.0 CY, LIGHT WEIGHT/PERFORATED			\$72,482	17.18	5.41	8.15	1.33	0.00	166
	B35HE017	LS	BUCKET, DRAGLINE, 14.0 CY, LIGHT WEIGHT/PERFORATED			\$83,389	19.77	6.22	9.38	1.53	0.00	191
	<b>SAUERMAN</b>											
	B35SA001	SC-1050-K	BUCKET, DRAGLINE, 1.0 CY, CRESCENT			\$16,886	4.00	1.26	1.90	0.31	0.00	15
	B35SA003	SC-1070-K	BUCKET, DRAGLINE, 2.0 CY, CRESCENT			\$25,294	6.00	1.89	2.85	0.46	0.00	25
	B35SA004	SC-1090-K	BUCKET, DRAGLINE, 3.0 CY, CRESCENT			\$34,670	8.21	2.58	3.90	0.63	0.00	36
	B35SA005	SC-1100-K	BUCKET, DRAGLINE, 4.0 CY, CRESCENT			\$43,421	10.28	3.23	4.88	0.79	0.00	49
	B35SA006	SC-1110-K	BUCKET, DRAGLINE, 5.0 CY, CRESCENT			\$51,180	12.14	3.82	5.76	0.94	0.00	58
	B35SA007	SC-1120-K	BUCKET, DRAGLINE, 6.0 CY, CRESCENT			\$57,558	13.65	4.29	6.48	1.05	0.00	68
	B35SA008	SC-1130-K	BUCKET, DRAGLINE, 8.0 CY, CRESCENT			\$67,855	16.08	5.06	7.63	1.24	0.00	88
	B35SA009	SC-1140-K	BUCKET, DRAGLINE, 10.0 CY, CRESCENT			\$86,153	20.42	6.43	9.69	1.58	0.00	106
	B35SA010	SC-1150-K	BUCKET, DRAGLINE, 12.0 CY, CRESCENT			\$105,149	24.92	7.84	11.83	1.92	0.00	132
	<b>NO SPECIFIC MANUFACTURER</b>											
	B35XX001	6-1/2L	BUCKET, DRAGLINE, 6.5 CY, LIGHT WEIGHT			\$26,224	6.22	1.96	2.95	0.48	0.00	94

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B35</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>											
	B35XX002	7-1/2L	BUCKET, DRAGLINE, 7.5 CY, LIGHT WEIGHT			\$29,488	6.99	2.20	3.32	0.54	0.00	106
	B35XX003	8-1/2L	BUCKET, DRAGLINE, 8.5 CY, LIGHT WEIGHT			\$32,614	7.74	2.44	3.67	0.60	0.00	116
	B35XX004	9-1/2L	BUCKET, DRAGLINE, 9.5 CY, LIGHT WEIGHT			\$37,197	8.81	2.77	4.18	0.68	0.00	132
	B35XX005	11L	BUCKET, DRAGLINE, 11.0 CY, LIGHT WEIGHT			\$41,766	9.90	3.11	4.70	0.76	0.00	148
	B35XX006	13L	BUCKET, DRAGLINE, 13.0 CY, LIGHT WEIGHT			\$51,410	12.18	3.83	5.78	0.94	0.00	178
	<b>SUBCATEGORY 0.20</b>		<b>MEDIUM WEIGHT</b>									
	<b>HENDRIX MANUFACTURING COMPANY, INC.</b>											
	B35HE018	TS	BUCKET, DRAGLINE, 0.75 CY, MEDIUM WEIGHT			\$8,118	1.73	0.56	0.81	0.15	0.00	17
	B35HE019	TS	BUCKET, DRAGLINE, 1.0 CY, MEDIUM WEIGHT			\$9,303	1.98	0.64	0.93	0.17	0.00	19
	B35HE020	TS	BUCKET, DRAGLINE, 1.5 CY, MEDIUM WEIGHT			\$13,269	2.82	0.91	1.33	0.24	0.00	28
	B35HE021	TS	BUCKET, DRAGLINE, 2.0 CY, MEDIUM WEIGHT			\$16,739	3.55	1.14	1.67	0.30	0.00	36
	B35HE022	TS	BUCKET, DRAGLINE, 2.5 CY, MEDIUM WEIGHT			\$19,311	4.10	1.32	1.93	0.35	0.00	41
	B35HE023	TS	BUCKET, DRAGLINE, 3.0 CY, MEDIUM WEIGHT			\$23,074	4.91	1.58	2.31	0.42	0.00	49
	B35HE024	TS	BUCKET, DRAGLINE, 3.5 CY, MEDIUM WEIGHT			\$25,450	5.41	1.74	2.55	0.46	0.00	54
	B35HE025	TS	BUCKET, DRAGLINE, 4.0 CY, MEDIUM WEIGHT			\$32,977	7.01	2.25	3.30	0.60	0.00	70
	B35HE026	TS	BUCKET, DRAGLINE, 4.5 CY, MEDIUM WEIGHT			\$33,674	7.16	2.30	3.37	0.61	0.00	72
	B35HE027	TS	BUCKET, DRAGLINE, 5.0 CY, MEDIUM WEIGHT			\$40,750	8.67	2.78	4.08	0.74	0.00	93
	B35HE028	TS	BUCKET, DRAGLINE, 6.0 CY, MEDIUM WEIGHT			\$42,137	8.95	2.87	4.21	0.76	0.00	96
	B35HE029	TS	BUCKET, DRAGLINE, 7.0 CY, MEDIUM WEIGHT			\$48,583	10.33	3.31	4.86	0.88	0.00	111

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>B35</b>	<b>HENDRIX MANUFACTURING COMPANY, INC. (continued)</b>											
	B35HE030	TS	BUCKET, DRAGLINE, 8.0 CY, MEDIUM WEIGHT			\$53,539	11.38	3.65	5.35	0.97	0.00	122
	B35HE031	TS	BUCKET, DRAGLINE, 9.0 CY, MEDIUM WEIGHT			\$65,143	13.84	4.44	6.51	1.18	0.00	149
	B35HE032	TS	BUCKET, DRAGLINE, 10.0 CY, MEDIUM WEIGHT			\$69,408	14.75	4.72	6.94	1.25	0.00	159
	B35HE033	TS	BUCKET, DRAGLINE, 12.0 CY, MEDIUM WEIGHT			\$88,442	18.79	6.02	8.84	1.60	0.00	202
	B35HE034	TS	BUCKET, DRAGLINE, 14.0 CY, MEDIUM WEIGHT			\$98,554	20.95	6.71	9.86	1.78	0.00	225
	<b>NO SPECIFIC MANUFACTURER</b>											
	B35XX007	6-1/2M	BUCKET, DRAGLINE, 6.5 CY, MEDIUM WEIGHT			\$29,680	6.31	2.03	2.97	0.54	0.00	101
	B35XX008	7-1/2M	BUCKET, DRAGLINE, 7.5 CY, MEDIUM WEIGHT			\$33,923	7.20	2.31	3.39	0.61	0.00	117
	B35XX009	8-1/2M	BUCKET, DRAGLINE, 8.5 CY, MEDIUM WEIGHT			\$36,527	7.76	2.49	3.65	0.66	0.00	126
	B35XX010	9-1/2M	BUCKET, DRAGLINE, 9.5 CY, MEDIUM WEIGHT			\$43,440	9.22	2.95	4.34	0.78	0.00	152
	B35XX011	11M	BUCKET, DRAGLINE, 11.0 CY, MEDIUM WEIGHT			\$48,030	10.21	3.27	4.80	0.87	0.00	169
	B35XX012	13M	BUCKET, DRAGLINE, 13.0 CY, MEDIUM WEIGHT			\$60,891	12.94	4.15	6.09	1.10	0.00	211
	<b>SUBCATEGORY 0.30 HEAVY WEIGHT</b>											
	<b>HENDRIX MANUFACTURING COMPANY, INC.</b>											
	B35HE035	MH-S	BUCKET, DRAGLINE, 2.75 CY, HEAVY WEIGHT			\$30,240	5.83	1.90	2.72	0.54	0.00	69
	B35HE036	MH-S	BUCKET, DRAGLINE, 3.0 CY, HEAVY WEIGHT			\$31,554	6.08	1.98	2.84	0.56	0.00	72
	B35HE037	MH-S	BUCKET, DRAGLINE, 3.5 CY, HEAVY WEIGHT			\$35,495	6.84	2.23	3.19	0.63	0.00	81
	B35HE038	MH-S	BUCKET, DRAGLINE, 4.0 CY, HEAVY WEIGHT			\$48,206	9.30	3.03	4.34	0.86	0.00	110

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>B35</b>	<b>HENDRIX MANUFACTURING COMPANY, INC. (continued)</b>											
	B35HE039	MH-S	BUCKET, DRAGLINE, 4.5 CY, HEAVY WEIGHT			\$53,907	10.39	3.39	4.85	0.96	0.00	123
	B35HE040	MH-S	BUCKET, DRAGLINE, 5.0 CY, HEAVY WEIGHT			\$55,652	10.73	3.50	5.01	0.99	0.00	127
	B35HE041	MH-S	BUCKET, DRAGLINE, 6.0 CY, HEAVY WEIGHT			\$59,598	11.49	3.74	5.36	1.06	0.00	136
	B35HE042	MH-S	BUCKET, DRAGLINE, 7.0 CY, HEAVY WEIGHT			\$76,691	14.79	4.82	6.90	1.37	0.00	175
	B35HE043	MH-S	BUCKET, DRAGLINE, 8.0 CY, HEAVY WEIGHT			\$78,882	15.21	4.96	7.10	1.41	0.00	180
	B35HE044	MH-S	BUCKET, DRAGLINE, 9.0 CY, HEAVY WEIGHT			\$102,549	19.78	6.45	9.23	1.83	0.00	234
	B35HE045	MH-S	BUCKET, DRAGLINE, 10.0 CY, HEAVY WEIGHT			\$106,498	20.53	6.69	9.58	1.90	0.00	243
	B35HE046	MH-S	BUCKET, DRAGLINE, 12.0 CY, HEAVY WEIGHT			\$126,655	24.43	7.96	11.40	2.26	0.00	289
	B35HE047	MH-S	BUCKET, DRAGLINE, 14.0 CY, HEAVY WEIGHT			\$135,111	26.05	8.49	12.16	2.41	0.00	309
	<b>NO SPECIFIC MANUFACTURER</b>											
	B35XX013	3/4H	BUCKET, DRAGLINE, 0.75 CY, HEAVY WEIGHT			\$7,523	1.45	0.47	0.68	0.13	0.00	20
	B35XX014	1H	BUCKET, DRAGLINE, 1.0 CY, HEAVY WEIGHT			\$8,447	1.63	0.53	0.76	0.15	0.00	23
	B35XX015	1-1/2H	BUCKET, DRAGLINE, 1.5 CY, HEAVY WEIGHT			\$12,555	2.42	0.79	1.13	0.22	0.00	35
	B35XX016	2H	BUCKET, DRAGLINE, 2.0 CY, HEAVY WEIGHT			\$14,318	2.77	0.91	1.29	0.26	0.00	42
	B35XX017	2-1/2H	BUCKET, DRAGLINE, 2.5 CY, HEAVY WEIGHT			\$15,624	3.02	0.99	1.41	0.28	0.00	48
	B35XX018	5-1/2H	BUCKET, DRAGLINE, 5.5 CY, HEAVY WEIGHT			\$33,331	6.42	2.09	3.00	0.59	0.00	113
	B35XX019	6-1/2H	BUCKET, DRAGLINE, 6.5 CY, HEAVY WEIGHT			\$35,553	6.85	2.23	3.20	0.63	0.00	125
	B35XX020	7-1/2H	BUCKET, DRAGLINE, 7.5 CY, HEAVY WEIGHT			\$40,161	7.74	2.53	3.61	0.72	0.00	135
	B35XX021	8-1/2H	BUCKET, DRAGLINE, 8.5 CY, HEAVY WEIGHT			\$43,640	8.42	2.75	3.93	0.78	0.00	159

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>B35</b>	<i>NO SPECIFIC MANUFACTURER (continued)</i>										
	B35XX022	9-1/2H	BUCKET, DRAGLINE, 9.5 CY, HEAVY WEIGHT			\$55,207	10.64	3.47	4.97	0.98	0.00	181
	B35XX023	11H	BUCKET, DRAGLINE, 11.0 CY, HEAVY WEIGHT			\$59,123	11.40	3.71	5.32	1.05	0.00	198
<b>C05 CHAIN SAWS</b>												
	<b>SUBCATEGORY 0.00 CHAIN SAWS</b>											
	<b>OLYMPYK CHAIN SAWS</b>											
	C05OL001	941	CHAIN SAW, 16"-18" BAR	2 HP	G	\$297	1.23	0.08	0.13	0.01	0.56	1
	C05OL002	962	CHAIN SAW, 16"-24" BAR	5 HP	G	\$473	2.26	0.12	0.21	0.01	1.15	1
	C05OL003	970	CHAIN SAW, 16"-36" BAR	5 HP	G	\$577	2.61	0.14	0.26	0.01	1.28	1
	C05OL004	980	CHAIN SAW, 16"-42" BAR	6 HP	G	\$629	2.85	0.16	0.28	0.02	1.40	1
<b>C10 COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER</b>												
	<b>SUBCATEGORY 0.10 COMPACTORS, RAMMERS / TAMPERS &amp; VIBRATORY PLATES</b>											
	<b>COMPACTION AMERICA</b>											
	C10BO001	BT 60/4	COMPACTOR, RAMMER, TAMPER, 11" X 13.2" SHOE, 2,630 LBS IMPACT	3 HP	G	\$4,083	3.35	0.57	0.97	0.08	0.74	2
	C10BO003	BP 10/36-2	COMPACTOR, VIBROPLATE, 14.2" X 22" PLATE, 2,250 LBS IMPACT	4 HP	G	\$2,222	2.47	0.31	0.53	0.04	0.98	2
	C10BO004	BP 18/45-2	COMPACTOR, VIBROPLATE, 17.7" X 22" PLATE, 4,050 LBS IMPACT	6 HP	G	\$2,470	3.17	0.35	0.59	0.05	1.47	2
	C10BO007	BPR 30/38D-3	COMPACTOR, VIBROPLATE, 22.8" X 31.1" PLATE, REVERSIBLE, 7,200 LBS IMPACT	4 HP	D-off	\$10,107	6.70	1.40	2.40	0.20	0.39	5
	C10BO008	BPR 55/65D	COMPACTOR, VIBROPLATE, 25.6" X 35.4" PLATE, REVERSIBLE, 11,250 LBS IMPACT	9 HP	D-off	\$13,734	9.49	1.91	3.26	0.28	0.87	10
	<b>WACKER CORPORATION</b>											
	C10WC003	DS 70	COMPACTOR, RAMMER, 13" X 13" SHOE, 3,550 LBS IMPACT	4 HP	D-off	\$4,797	3.41	0.67	1.14	0.10	0.39	2
	C10WC006	BPU 2540 A	COMPACTOR, VIBROPLATE, 19.5" X 25.5" PLATE, REVERSIBLE, 5,600 LBS IMPACT	8 HP	G	\$4,480	4.95	0.62	1.06	0.09	1.96	3

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C10</b>	<b>WACKER CORPORATION (continued)</b>											
	C10WC007	BPU 3545A	COMPACTOR, VIBROPLATE, 23.5" X 35.5" PLATE, REVERSIBLE, 7,550 LBS IMPACT	9 HP	G	\$8,933	7.99	1.24	2.12	0.18	2.21	7
	C10WC008	DPU 4045H	COMPACTOR, VIBROPLATE, 24" X 35.5" PLATE, REVERSIBLE, 9,000 LBS IMPACT	9 HP	D-off	\$12,757	8.88	1.78	3.03	0.26	0.87	7
	C10WC015	DPU 7060	COMPACTOR, VIBROPLATE, 25.5" X 42" PLATE, REVERSIBLE, 15,600 LBS IMPACT	14 HP	D-off	\$22,760	15.65	3.17	5.41	0.46	1.36	15
	<b>SUBCATEGORY 0.20 ROLLERS, VIBRATORY</b>											
	<b>COMPACTION AMERICA</b>											
	C10BO009	BW 55E	COMPACTOR, ROLLER, VIBRATORY, 22"W X 15.7"DIA, SINGLE SMOOTH DRUM, WALK BEHIND, 2,273 LBS IMPACT	4 HP	G	\$5,766	4.53	0.74	1.23	0.12	0.98	3
	C10BO015	BW65S-2	COMPACTOR, ROLLER, VIBRATORY, 25.6"W X 15.7"DIA, DOUBLE SMOOTH DRUMS, WALK BEHIND, 2,655 LBS IMPACT	5 HP	D-off	\$13,215	8.43	1.69	2.81	0.28	0.49	13
	C10BO011	BW 65H	COMPACTOR, ROLLER, VIBRATORY, 25.6"W X 15.7"DIA, DOUBLE SMOOTH DRUMS, WALK BEHIND, 1,980 LBS IMPACT	8 HP	D-off	\$15,374	10.03	1.96	3.27	0.32	0.78	16
	C10BO016	BW75S-2	COMPACTOR, ROLLER, VIBRATORY, 29.5"W X 18.9"DIA, DOUBLE SMOOTH DRUMS, WALK BEHIND, 4,455 LBS IMPACT	9 HP	D-off	\$19,286	12.48	2.46	4.10	0.41	0.87	20
	C10BO013	BMP851	COMPACTOR, TRENCH ROLLER, VIBRATORY, 33.5"W X 19.7"DIA, DOUBLE TAMPING FOOT DRUMS, WALK BEHIND, 18,000 LBS IMPACT	19 HP	D-off	\$40,586	26.27	5.17	8.62	0.86	1.85	45
	<b>RAMMAX MACHINERY CO.</b>											
	C10RX001	P23/16FM	COMPACTOR, TRENCH ROLLER, VIBRATORY, 23"W X 14.6"DIA, QUAD PADFOOT DRUMS, WALK BEHIND, 7,875 LBS IMPACT	8 HP	D-off	\$26,792	16.85	3.42	5.69	0.57	0.78	16
	C10RX002	P33/24FMR	COMPACTOR, TRENCH ROLLER, VIBRATORY, 33"W X 21.7"DIA, QUAD PADFOOT DRUMS, WALK BEHIND, 15,652 LBS IMPACT	14 HP	D-off	\$36,949	23.56	4.71	7.85	0.78	1.36	30
	C10RX003	P47/40KM	COMPACTOR, TRENCH ROLLER, VIBRATORY, 47"W X 22"DIA, QUAD PADFOOT DRUMS, RIDE ON, 21,600 LBS IMPACT	33 HP	D-off	\$61,722	40.40	7.86	13.12	1.30	3.21	66

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>WACKER CORPORATION</b>												
	C10WC010	RSS800A	COMPACTOR, ROLLER, VIBRATORY, 28"W X 22"DIA, SINGLE SMOOTH DRUM, WALK BEHIND, 3,400 LBS IMPACT	11 HP	G	\$12,072	10.20	1.54	2.57	0.25	2.70	11
	C10WC017	RD7H	COMPACTOR, ROLLER, VIBRATORY, 25.5"W X 16.5"DIA, DOUBLE SMOOTH DRUM, WALK BEHIND, 2,925 LBS IMPACT	9 HP	D-off	\$16,025	10.53	2.05	3.41	0.34	0.87	16
	C10WC019	RT 56-SC	COMPACTOR, ROLLER, VIBRATORY, 22"W X 20"DIA, DOUBLE SMOOTH DRUM, WALK BEHIND, 7,000/14,000 LBS IMPACT	20 HP	D-off	\$37,382	24.46	4.76	7.94	0.79	1.94	31
	C10WC016	RT 82-SC	COMPACTOR, TRENCH ROLLER, VIBRATORY, 32"W X 20"DIA, DOUBLE TAMPING FOOT DRUMS, WALK BEHIND, 7,000/14,000 LBS IMPACT	20 HP	D-off	\$37,883	24.76	4.83	8.05	0.80	1.94	33
<b>C15 CONCRETE CLEANERS / ABRASIVE BLASTERS</b>												
	<b>SUBCATEGORY 0.10 WALK BEHIND</b>											
<b>US FILTER/BLASTRAC</b>												
	C15BL001	1-8 & TURBO VAC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 8" PATH (ADD 4 KVA GENERATOR & BLAST MEDIA COST)	2 HP	E	\$8,901	5.09	1.08	1.78	0.19	0.12	2
	C15BL003	1-10D & 6-54 DC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 10" PATH (ADD 30 KVA GENERATOR & BLAST MEDIA COST)	10 HP	E	\$42,668	23.55	5.19	8.53	0.92	0.62	7
	C15BL004	1-15D & 6-54-DC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 15" PATH (ADD 30 KVA GENERATOR & BLAST MEDIA COST)	15 HP	E	\$49,934	27.89	6.08	9.99	1.08	0.93	8
	C15BL005	2-20D & 8-54-DC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 20" PATH (ADD 75 KVA GENERATOR & BLAST MEDIA COST)	30 HP	E	\$73,191	41.09	8.90	14.64	1.58	1.87	12
<b>EQUIPMENT DEVELOPMENT CO., INC. (EDCO)</b>												
	C15ED002	CPM-8	CONCRETE GRINDER, WALK BEHIND, TRAFFIC LINE REMOVER, 8" CUTTING PATH	9 HP	G	\$4,313	4.10	0.52	0.86	0.09	1.72	2
	C15ED001	TLR-7	CONCRETE GRINDER, WALK BEHIND, TRAFFIC LINE REMOVER, 7" CUTTING WIDTH	11 HP	G	\$6,282	5.51	0.77	1.26	0.14	2.10	5



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT		
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL			
	<b>SUBCATEGORY 0.20 TRUCK/TRAILER MOUNTED</b>													
	<b>US FILTER/BLASTRAC</b>													
	C15BL006	4800	CONCRETE BLASTER, SELF PROPELLED, 48" PATH	350 HP	D-off	\$1,867	40.61	0.14	0.19	0.04	35.60	255		
	<b>NO SPECIFIC MANUFACTURER</b>													
	C15XX001		CONCRETE CLEANER/ABRASIVE BLASTER, TRUCK MOUNTED, GINDER/BLASTER, 4" - 16" CLEANING PATH WIDTH	86 HP	D-on	180 HP	D-off	\$117,863	53.29	8.09	11.58	2.30	20.44	138
<b>C20</b>	<b>CONCRETE BUGGIES</b>													
	<b>SUBCATEGORY 0.00 CONCRETE BUGGIES</b>													
	<b>WACKER CORPORATION</b>													
	C20WC002	WB 16A	CONCRETE BUGGY, 16 CF BUCKET, 2,500 LBS, WALK & RIDE, 4X2	13 HP	G	\$10,176	7.11	1.14	1.84	0.22	2.48	13		
	<b>NO SPECIFIC MANUFACTURER</b>													
	C20XX001	10G	CONCRETE BUGGY, 10 CF BUCKET, 1,500 LBS	8 HP	G	\$7,131	4.74	0.80	1.29	0.15	1.53	10		
<b>C25</b>	<b>CONCRETE FINISHERS/SCREEDS/SPREADERS</b>													
	<b>SUBCATEGORY 0.10 FINISHERS/TROWELS</b>													
	<b>ALLEN ENGINEERING CORP.</b>													
	C25AJ015	PRO 900	CONCRETE TROWEL, RIDING, 2 - 36" DIA ROTORS, 8 BLADES	20 HP	G	\$10,932	8.47	1.11	1.75	0.23	3.82	7		
	C25AJ016	PRO 1050	CONCRETE TROWEL, RIDING, 2 - 42" DIA ROTORS, 8 BLADES	20 HP	G	\$11,458	8.66	1.16	1.83	0.24	3.82	8		
	C25AJ018	PRO 1200	CONCRETE TROWEL, RIDING, 2 - 46" DIA ROTORS, 8 BLADES	25 HP	G	\$13,286	10.44	1.35	2.13	0.28	4.77	10		
	C25AJ019	SUPER PRO 400	CONCRETE TROWEL, RIDING, 2 - 46" DIA ROTORS, 8 BLADES	28 HP	G	\$19,267	13.32	1.94	3.08	0.40	5.34	13		

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>STOW MANUFACTURING, INC.</b>												
	C25ST001	SCT36H80	CONCRETE FINISHER, WALK BEHIND, ROTO TROWEL, 36" DIA ROTOR, 4 BLADES	8 HP	G	\$2,266	2.60	0.23	0.36	0.05	1.53	3
	C25ST002	SCT46H80	CONCRETE FINISHER, WALK BEHIND, ROTO TROWEL, 46" DIA ROTOR, 4 BLADES	9 HP	G	\$2,350	2.86	0.24	0.38	0.05	1.72	3
<b>WACKER CORPORATION</b>												
	C25WC002	CT48ADP	CONCRETE FINISHER, WALK BEHIND, POWER TROWEL, 48" DIA ROTOR, 4 BLADES	8 HP	G	\$2,737	2.78	0.28	0.44	0.06	1.53	3
<b>SUBCATEGORY 0.20 VIBRATORY SCREED</b>												
<b>ALLEN ENGINEERING CORP.</b>												
	C25AJ003	12HED	CONCRETE, VIBRATORY SCREED, 12.5' WIDE	6 HP	G	\$5,793	3.49	0.59	0.93	0.12	1.15	5
	C25AJ001	12 HD	CONCRETE, VIBRATORY SCREED, 20' WIDE	6 HP	G	\$4,096	2.85	0.41	0.66	0.08	1.15	4
	C25AJ004	12HED	CONCRETE, VIBRATORY SCREED, 30' WIDE	8 HP	G	\$8,276	4.84	0.83	1.32	0.17	1.53	8
	C25AJ005	12HED	CONCRETE, VIBRATORY SCREED, 40' WIDE	11 HP	G	\$9,716	6.03	0.98	1.55	0.20	2.10	10
	C25AJ006	12HED	CONCRETE, VIBRATORY SCREED, 50' WIDE	11 HP	G	\$11,539	6.73	1.17	1.85	0.24	2.10	12
	C25AJ007	12HED	CONCRETE, VIBRATORY SCREED, 55' WIDE	11 HP	G	\$12,271	6.99	1.23	1.96	0.25	2.10	13
<b>SUBCATEGORY 0.25 VIBRATORY LASER SCREED</b>												
<b>SOMERO ENTERPRISES, INC.</b>												
	C25SV003	S-100	CONCRETE, VIBRATORY LASER SCREED, 8' WIDE X 12' BOOM	30 HP	D-off	\$127,878	27.96	8.17	11.06	2.64	2.10	72
	C25SV002	SXP (VERSATILE)	CONCRETE, VIBRATORY LASER SCREED, 8' WIDE X 20' BOOM	65 HP	D-off	\$282,279	61.57	18.12	24.57	5.83	4.55	126
	C25SV001	SXP (PRODUCTIVE)	CONCRETE, VIBRATORY LASER SCREED, 12' WIDE X 20' BOOM	65 HP	D-off	\$693,283	143.38	44.56	60.48	14.32	4.55	151

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>SUBCATEGORY 0.30 MATERIAL/TOPPING SPREADERS</b>											
	<b>ALLEN ENGINEERING CORP.</b>											
	C25AJ008	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 12.5' WIDE	6 HP	G	\$13,972	3.95	0.90	1.22	0.29	0.98	11
	C25AJ009	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 20' WIDE	6 HP	G	\$14,834	4.13	0.96	1.30	0.31	0.98	12
	C25AJ010	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 30' WIDE	6 HP	G	\$15,852	4.33	1.03	1.39	0.33	0.98	13
	C25AJ011	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 40' WIDE	6 HP	G	\$16,978	4.55	1.10	1.49	0.35	0.98	14
	C25AJ012	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 50' WIDE	6 HP	G	\$18,022	4.76	1.16	1.58	0.37	0.98	15
	C25AJ013	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 60' WIDE	6 HP	G	\$19,073	4.96	1.23	1.67	0.39	0.98	17
<b>C35</b>	<b>CONCRETE GUNTERS / SHOTCRETERS</b>											
	<b>SUBCATEGORY 0.00 CONCRETE GUNTERS / SHOTCRETERS</b>											
	<b>AIRPLACO EQUIPMENT CO., INC.</b>											
	C35AF002	C-9A	CONCRETE GUNITER/SHOTCRETER, DRY/SEMI-WET, HOPPER/PUMP/SPRAY, 12 CY/HR, 2" HOSE & 1 GUN (ADD 600 CFM COMPRESSOR)	600 CFM	A	\$12,775	5.61	0.93	1.34	0.26	0.00	6
	C35AF001	1900 HD NUCRETOR	CONCRETE GUNITER/SHOTCRETER, DRY MIX, 2 - 15 CY/HR, W/2 PRESSURIZED TANKS/ 100' - 2" DIA HOSE (ADD 600 CFM COMPRESSOR)	600 CFM	A	\$23,781	7.02	1.74	2.52	0.48	0.00	11
	C35AF004	640 Mix Elevator	CONCRETE GUNITER/SHOTCRETER, DRY BATCH MIXER, 13 CY/HR, W/FEEDEDER, TRAILER MTD (ADD SHOTCRETE MACHINE)	30 HP	G	\$40,766	20.61	3.00	4.33	0.83	6.18	45
	C35AF005	734 Mix Elevator	CONCRETE GUNITER/SHOTCRETER, DRY BATCH MIXER, W/20 CY/HR ELEVATOR FEEDER/ 45 CF SAND HOPPER/ 4 CF CEMENT HOPPER/ & PREDAMPENING SPRAY BAR, TRAILER MTD (ADD SHOTCRETE MACHINE)	54 HP	D-off	\$58,777	23.55	4.31	6.21	1.20	4.39	81

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>ALLENTOWN EQUIPMENT</b>												
C35AL003	GRH-610	ROTARY GUN	CONCRETE GUNITER/SHOTCRETER, ROTARY PUMP, WET/DRY, 1 - 6 CY/HR, W/HOPPER/ 100' - 1.5" DIA HOSE/ & NOZZLE, CART MTD, (ADD 250 - 600 CFM COMPRESSOR)	5 HP	E	\$12,326	4.07	0.82	1.13	0.25	0.33	11
C35AL013	AG-15	AUTOMATIC GUN	CONCRETE GUNITER/SHOTCRETER, ROTARY PUMP, WET/DRY, 3 - 15 CY/HR, W/HOPPER/ 100' - 1.5" DIA HOSE/ & NOZZLE (ADD 300 - 900 CFM COMPRESSOR)	900 CFM	A	\$11,339	3.55	0.79	1.12	0.23	0.00	15
C35AL008	N-2 PNEUMATIC GUN		CONCRETE GUNITER/SHOTCRETER, DRY MIX, 2 - 8 CY/HR, W/2 PRESSURIZED TANKS/ 100' - 1.5" DIA HOSE/ & NOZZLE (ADD 200 - 900 CFM COMPRESSOR)	900 CFM	A	\$24,763	7.31	1.83	2.65	0.50	0.00	13
C35AL002	R-900 BATCH MIX RIG		CONCRETE GUNITER/SHOTCRETER, DRY BATCH MIXER, 10 TON/HR, W/ELEVATOR FEEDER/ 20 CF CEMENT HOPPER/ 8 CF MIXER/ & PREDAMPENING SPRAY BAR, TRAILER MTD (ADD SHOTCRETE MACHINE OR ROTARY PUMP)	26 HP	D-off	\$34,266	12.98	2.44	3.48	0.70	2.12	47
C35AL014	POWER CRETER 10		CONCRETE GUNITER/SHOTCRETER, GROUT/MUD JACK/ SHOTCRETE, 10 CY/HR, 400 PSI, W/30 GAL HOPPER/ 74 GAL MIXER, TRAILER MTD (ADD 3" HOSE LINE)	53 HP	D-off	\$56,405	21.31	4.15	6.00	1.15	4.31	30
<b>ALIVA LTD.</b>												
C35AV008	AL 246		CONCRETE GUNITER/SHOTCRETER, DRY/SEMI-WET, 1.4 - 2.3 CY/HR, W/1 GAL HOPPER/ ROTARY PUMP/ 100' - 1.5" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	7 HP	E	\$24,927	9.77	1.85	2.67	0.51	0.47	9
C35AV009	AL 252		CONCRETE GUNITER/SHOTCRETER, DRY/SEMI-WET, 5 - 10 CY/HR, W/4.2 GAL HOPPER/ ROTARY PUMP/ 100' - 2.36" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	16 HP	E	\$30,304	12.21	2.25	3.25	0.62	1.07	18
C35AV010	AL 262		CONCRETE GUNITER/SHOTCRETER, WET/DRY, 9 - 13 CY/HR, W/4.2 GAL HOPPER/ ROTARY PUMP/ 100' - 2.36" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	26 HP	E	\$54,685	20.12	4.04	5.86	1.11	1.74	27

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>C35</b>	<b>ALIVA LTD. (continued)</b>										
	C35AV006	AL 285	CONCRETE GUNITER/SHOTCRETER, WET/DRY, 11 - 27.5 CY/HR, W/6.6 GAL HOPPER/ ROTARY PUMP/ 100' - 2.55" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	20 HP	E	\$83,639	27.68	6.15	8.89	1.70	1.34	33
	C35AV011	AL 302	CONCRETE GUNITER/SHOTCRETER, SHOTCRETE HYDRAULIC SPRAYER ARM, 25.6' HIGH (ADD TRUCK OR SMALL TRAILER & SHOTCRETE UNIT)	12 HP	E	\$41,861	15.07	3.10	4.49	0.85	0.80	50
	C35AV012	AL 307	CONCRETE GUNITERS / SHOTCRETERS, SHOTCRETE HYDRAULIC SPRAYER ARM, 52.5' HIGH (ADD TRUCK OR SMALL TRAILER & SHOTCRETE UNIT)	20 HP	E	\$125,309	40.01	9.27	13.43	2.55	1.34	68
<b>C40</b>	<b>CONCRETE MIXING UNITS</b>											
	<b>SUBCATEGORY 0.00 CONCRETE MIXING UNITS</b>											
	<b>CEMEN TECH</b>											
	C40CC001	SCD2-50H	CONCRETE MIXERS, STATIONARY CONCRETE DISPENSER, 15 CY/HR, 2 - 4.5 CY MATERIAL CAPACITY	10 HP	E	\$23,120	9.63	2.33	3.70	0.48	0.62	23
	<b>MULTIQUIP, INC.</b>											
	C40MU001	WM 70SH8	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 7 CF, TRAILER MTD	8 HP	G	\$2,938	2.82	0.28	0.43	0.06	1.53	8
	C40MU002	WM 120SHH	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 12 CF, TRAILER MTD	13 HP	G	\$6,043	5.09	0.60	0.93	0.13	2.48	11
	C40MU003	MC 64SH8	CONCRETE MIXERS, MIXER, CONCRETE, 6 CF, TRAILER MTD	8 HP	G	\$3,020	2.86	0.29	0.45	0.06	1.53	7
	C40MU004	MC 94SH8	CONCRETE MIXERS, MIXER, CONCRETE, 9 CF, TRAILER MTD	8 HP	G	\$3,593	3.07	0.34	0.54	0.07	1.53	8
	<b>ROSS COMPANY</b>											
	C40RC005		CONCRETE MIXERS, STATIONARY MIXER, CONCRETE, 12 CY, TILT DRUM (ADD DRY BATCH PLANT)	120 HP	E	\$205,527	92.69	20.70	32.88	4.26	7.48	90

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>STOW MANUFACTURING, INC.</b>												
	C40ST001	CMS44E	CONCRETE MIXERS, MIXER, CONCRETE, 4 CF, TRAILER MTD	1 HP	E	\$1,799	0.90	0.17	0.25	0.04	0.03	5
	C40ST002	CMS44H	CONCRETE MIXERS, MIXER, CONCRETE, 4 CF, TRAILER MTD	6 HP	G	\$1,958	1.91	0.18	0.28	0.04	1.05	5
	C40ST003	CMS64E	CONCRETE MIXERS, MIXER, CONCRETE, 6 CF, TRAILER MTD	2 HP	E	\$2,370	1.30	0.22	0.34	0.05	0.12	7
	C40ST005	CMS94E	CONCRETE MIXERS, MIXER, CONCRETE, 9 CF, TRAILER MTD	2 HP	E	\$3,243	1.63	0.31	0.48	0.07	0.09	8
<b>NO SPECIFIC MANUFACTURER</b>												
	C40XX001	8E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 8 CF, ELECTRIC, PORTABLE	2 HP	E	\$3,041	1.53	0.31	0.49	0.06	0.12	7
	C40XX002	8G	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 8 CF, GAS, PORTABLE	7 HP	G	\$3,256	2.75	0.33	0.52	0.07	1.34	7
	C40XX003	10E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 10 CF, ELECTRIC, PORTABLE	3 HP	E	\$4,653	2.24	0.47	0.74	0.10	0.19	9
	C40XX004	10G	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 10 CF, GAS, PORTABLE	8 HP	G	\$4,682	3.51	0.48	0.75	0.10	1.53	10
	C40XX005	12E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 12 CF, ELECTRIC, PORTABLE	5 HP	E	\$6,131	3.04	0.62	0.98	0.13	0.31	11
	C40XX006	16E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 16 CF, ELECTRIC, PORTABLE	5 HP	E	\$8,544	3.95	0.87	1.37	0.18	0.31	12
	C40XX007	16G	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 16 CF, GAS, PORTABLE	9 HP	G	\$7,952	4.94	0.80	1.27	0.16	1.72	13

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C45</b>	<b>CONCRETE PAVING MACHINES</b>											
	<b>SUBCATEGORY 0.00 CONCRETE PAVING MACHINES</b>											
	<b>GOMACO CORPORATION</b>											
	C45G0026	C-450	CONCRETE PAVING MACHINES, CYLINDER FINISHER, SINGLE DRUM, FINISHING WIDTH 9'-137'	36 HP	G	\$48,773	25.81	4.23	6.50	0.98	7.42	64
	C45G0027	C-650-F	CONCRETE PAVING MACHINES, CYLINDER FINISHER, DOUBLE DRUM, FINISHING WIDTH 19'-51'	50 HP	D-off	\$61,920	26.58	5.38	8.26	1.25	4.07	91
	C45G0028	C-650-S	CONCRETE PAVING MACHINES, CYLINDER FINISHER, DOUBLE DRUM, FINISHING WIDTH 19'-51'	50 HP	D-off	\$98,664	39.62	8.57	13.16	1.99	4.07	126
	C45G0029	C-750	CONCRETE PAVING MACHINES, CYLINDER FINISHER, DOUBLE DRUM, FINISHING WIDTH 8'-156'	36 HP	G	\$65,537	31.77	5.69	8.74	1.32	7.42	91
	C45G0013	GT-3200	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 3-TRACK, 36" WIDE MOLD/FORM	92 HP	D-off	\$113,121	48.59	9.82	15.08	2.28	7.49	130
	C45G0010	COMMANDER II /GT6200	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 2-TRACK, 36" WIDE MOLD/FORM	92 HP	D-off	\$136,018	56.74	11.82	18.14	2.75	7.49	200
	C45G0014	GT-3600	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 3-TRACK, 24" WIDE MOLD/FORM	98 HP	D-off	\$155,731	64.26	13.52	20.76	3.14	7.97	210
	C45G0011	COMMANDER III/GT6300	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 3-TRACK, 36" WIDE MOLD/FORM	185 HP	D-off	\$209,922	91.49	18.24	27.99	4.24	15.05	300
	C45G0012	COMMANDER III	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 4-TRACK, 36" WIDE MOLD/FORM	169 HP	D-off	\$281,623	115.49	24.47	37.55	5.69	13.75	369
	C45G0016	GP-2600	CONCRETE PAVING MACHINES, SLIPFORM PAVER, CRAWLER, 2-TRACK, 24'-32' PAVING WIDTH	230 HP	D-off	\$308,692	130.68	26.81	41.16	6.23	18.71	750
	C45G0018	GHP-2800	CONCRETE PAVING MACHINES, SLIPFORM PAVER, CRAWLER, 2-TRACK, 24'-32' PAVING WIDTH	335 HP	D-off	\$385,211	167.49	33.46	51.36	7.78	27.26	700

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>C45</b>	<b>GOMACO CORPORATION (continued)</b>										
	C45GO020	GP-4000	CONCRETE PAVING MACHINES, SLIPFORM PAVER, CRAWLER, 2-TRACK, 12'-50' PAVING WIDTH	450 HP	D-off	\$459,416	204.37	39.91	61.26	9.28	36.61	880
	C45GO031	9500	CONCRETE PAVING MACHINES, TRIMMER/PLACER, W/16'-8" TRIMMER HEAD	385 HP	D-off	\$374,161	168.13	32.50	49.89	7.55	31.32	729
	<b>MILLER SPREADER CO.</b>											
	C45MJ001	MC 650	CONCRETE PAVING MACHINES, CURB BUILDER, SLIPFORM PAVER, 6.1 CF HOPPER 6" AUGER	15 HP	G	\$6,627	5.89	0.57	0.88	0.13	3.09	8
	<b>M-B-W, INC.</b>											
	C45MW002	C101	CONCRETE PAVING MACHINES, CURB ONLY SLIPFORM PAVER, RUBBER TIRE, 12"	26 HP	D-off	\$40,089	16.61	3.47	5.31	0.81	2.12	27
	C45MW003	CG200	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, RUBBER TIRE, 48"	26 HP	D-off	\$50,997	20.47	4.41	6.75	1.03	2.12	34
<b>C55</b>	<b>CONCRETE PUMPS</b>											
	<b>SUBCATEGORY 0.00 CONCRETE PUMPS</b>											
	<b>MAYCO PUMP - MULTIQUIP INC.</b>											
	C55M3001	C-30HD	CONCRETE PUMP, 25 CY/HR, SINGLE, TRAILER MTD	46 HP	G	\$20,754	15.90	1.54	2.31	0.38	8.78	27
	C55M3002	ST-45	CONCRETE PUMP, 45 CY/HR, SINGLE, TRAILER MTD	60 HP	D-off	\$49,260	19.10	3.67	5.54	0.90	4.61	42
	C55M3003	ST-70	CONCRETE PUMP, 70 CY/HR, SINGLE, TRAILER MTD	106 HP	D-off	\$62,300	26.77	4.65	7.01	1.14	8.15	47
	<b>OLIN ENGINEERING, INC.</b>											
	C55OE006	10 22	CONCRETE PUMP, 22 CY/HR, TRAILER MTD (OPEN LOOP HYDRAULIC SYSTEM)	74 HP	D-off	\$43,835	18.75	3.24	4.88	0.80	5.69	44
	C55OE009	20 80	CONCRETE PUMP, 76 CY/HR, TRAILER MTD TANDEM (CLOSED LOOP HYDRAULIC SYSTEM)	127 HP	D-off	\$82,870	34.33	6.13	9.22	1.52	9.76	72



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C55</b>	<b>OLIN ENGINEERING, INC. (continued)</b>											
	C55OE011	15 95	CONCRETE PUMP, 100 CY/HR, TRAILER MTD TANDEM (OPEN LOOP HYDRAULIC SYSTEM)	181 HP	D-off	\$76,661	37.25	5.66	8.52	1.40	13.91	70
	C55OE012	20 100	CONCRETE PUMP, 100 CY/HR, TRAILER MTD TANDEM (CLOSED LOOP HYDRAULIC SYSTEM)	181 HP	D-off	\$97,390	43.10	7.21	10.85	1.78	13.91	81
	C55OE001	4Z 26X	CONCRETE PUMP, PUMP & BOOM, 130 CY/HR, REACH: 72' HORIZONTAL / 85' VERTICAL (ADD 50,000 GVW TRUCK)			\$233,410	65.86	17.40	26.26	4.27	0.00	100
	C55OE002	4Z 36X	CONCRETE PUMP, PUMP & BOOM, 182 CY/HR, REACH: 104' HORIZONTAL / 118' VERTICAL (ADD 50,000 GVW TRUCK)			\$299,890	84.63	22.36	33.74	5.49	0.00	100
	C55OE003	5RZ 47I	CONCRETE PUMP, PUMP & BOOM, 182 CY/HR, REACH: 134' HORIZONTAL / 152' VERTICAL (ADD 50,000 GVW TRUCK)			\$457,024	128.97	34.08	51.42	8.37	0.00	100
	<b>SCHWING AMERICA INC.</b>											
	C55SC001	WP750 D-18X	CONCRETE PUMP, 70 CY/HR, 1,100 PSI, TRAILER MTD	80 HP	D-off	\$71,936	27.22	5.35	8.06	1.32	6.15	69
	C55SC002	BPA 2000HDD-20R	CONCRETE PUMP, 67 CY/HR, 1,565 PSI, TRAILER MTD	177 HP	D-off	\$154,343	58.81	11.43	17.20	2.83	13.60	115
	C55SC005	BPL 900/KVM 23	CONCRETE PUMP, 117 CY/HR, 75' BOOM, TRUCK MTD	210 HP	D-on	\$302,181	107.41	22.27	33.48	5.53	19.71	359
	C55SC006	BPL 900/KVM 28	CONCRETE PUMP, 117 CY/HR, 92' BOOM, TRUCK MTD	210 HP	D-on	\$381,750	129.87	28.21	42.43	6.99	19.71	470
<b>C60</b>	<b>CONCRETE SAWS (Add cost for sawblade wear)</b>											
	<b>SUBCATEGORY 0.00 CONCRETE SAWS (Add cost for sawblade wear)</b>											
	<b>CUSHION CUT, INC.</b>											
	C60CQ011	FS 6500/14	CONCRETE SAW, 4.625" DEPTH, SELF PROPELLED, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	65 HP	G	\$14,498	23.64	1.37	2.17	0.28	15.95	13
	C60CQ002	FS 9B	CONCRETE SAW, 5.625" DEPTH, MANUAL, 16" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	9 HP	G	\$2,545	3.47	0.24	0.38	0.05	2.21	2

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C60</b>	<b>CUSHION CUT, INC. (continued)</b>											
	C60CQ003	FS 13BUC	CONCRETE SAW, 5.625" DEPTH, MANUAL, 16" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	13 HP	G	\$2,741	4.66	0.26	0.41	0.05	3.19	2
	C60CQ001	FS 3500/18	CONCRETE SAW, 6.5" DEPTH, SELF-PROPELLED, 18" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	35 HP	G	\$11,681	14.17	1.10	1.75	0.22	8.59	10
	C60CQ014	FS 3000/26E	CONCRETE SAW, 10.625" DEPTH, SELF PROPELLED, 26" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	30 HP	E	\$14,555	9.02	1.37	2.18	0.28	2.40	13
	C60CQ012	FS 6500/26	CONCRETE SAW, 10.625" DEPTH, SELF PROPELLED, 26" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	65 HP	G	\$14,786	23.74	1.39	2.22	0.28	15.95	13
	C60CQ010	FS 3500/30	CONCRETE SAW, 12.125" DEPTH, SELF PROPELLED, 30" BLADE, W/TRANSAXLE (ADD COST FOR SAWBLADE WEAR & WATER)	35 HP	D-off	\$11,816	8.37	1.12	1.77	0.23	3.40	10
	C60CQ013	FS 6500/36	CONCRETE SAW, 14.875" DEPTH, SELF PROPELLED, 36" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	65 HP	G	\$15,013	23.83	1.42	2.25	0.29	15.95	13
	C60CQ016	FS 8400/36	CONCRETE SAW, 14.875" DEPTH, SELF PROPELLED, 36" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	84 HP	D-off	\$24,809	18.77	2.33	3.72	0.47	8.16	20
	<b>FELKER</b>											
	C60FE002	S80/14Z	CONCRETE SAW, 5.00" DEPTH, MANUAL, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	2 HP	G	\$1,313	1.06	0.13	0.20	0.03	0.49	1
	C60FE006	ES 1409	CONCRETE SAW, 4.625" DEPTH, WALK BEHIND, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	9 HP	G	\$2,744	3.54	0.26	0.41	0.05	2.21	2
	C60FE007	ES 1413	CONCRETE SAW, 4.625" DEPTH, WALK BEHIND, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	13 HP	G	\$2,873	4.71	0.27	0.43	0.05	3.19	2
	C60FE009	ECII20H	CONCRETE SAW, 7.50" DEPTH, SELF PROPELLED, 20" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	20 HP	G	\$9,179	9.03	0.87	1.38	0.18	4.91	6

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>BOART LONGYEAR COMPANY</b>											
	C60LY005	FS 13B	CONCRETE SAW, 7.00" DEPTH, WALK BEHIND(ADD COST FOR SAWBLADE WEAR & WATER)	13 HP	G	\$2,694	4.64	0.25	0.40	0.05	3.19	2
	C60LY001	360-10AP	CONCRETE SAW, RAIL SAW, 15.50" DEPTH, WALL (ADD COMPRESSOR & COST FOR SAWBLADE WEAR & WATER)	10 HP	G	\$23,579	11.56	2.22	3.54	0.45	2.45	2
	C60LY002	360-35HM	CONCRETE SAW, RAIL SAW, 24.50" DEPTH, WALL(ADD COST FOR SAWBLADE WEAR & WATER)	35 HP	G	\$34,877	22.78	3.29	5.23	0.67	8.59	2
	C60LY011	WR-400	CONCRETE SAW, WIRE SAW SYSTEM, HEAVY DUTY (ADD COST FOR SAW WIRE WEAR & WATER)	32 HP	D-off	\$67,329	28.63	6.34	10.10	1.29	3.11	15
<b>C65</b>	<b>CONCRETE VIBRATORS</b>											
	<b>SUBCATEGORY 0.00 CONCRETE VIBRATORS</b>											
	<b>STOW MANUFACTURING, INC.</b>											
	C65ST007	SV-1 115V	CONCRETE VIBRATOR, 1.375" HEAD, 21' SHAFT (ADD 2KV GENERATOR)	1 HP	E	\$918	1.00	0.13	0.21	0.02	0.06	1
	C65ST008	SV-2 115V	CONCRETE VIBRATOR, 2.175" HEAD, 21' SHAFT (ADD 2KV GENERATOR)	2 HP	E	\$959	1.13	0.13	0.22	0.02	0.12	1
	C65ST009	SV-3 115V	CONCRETE VIBRATOR, 2.625" HEAD, 21' SHAFT (ADD 2KV GENERATOR)	3 HP	E	\$1,140	1.38	0.15	0.26	0.02	0.17	1
	C65ST013	G550HC	CONCRETE VIBRATOR, 2.325" HEAD, 21' SHAFT, W/GAS MOTOR ON CART	6 HP	G	\$1,914	3.00	0.26	0.43	0.04	0.98	2
	<b>WACKER CORPORATION</b>											
	C65WC005	A 5000	CONCRETE VIBRATOR, 1.75" HEAD, 13' SHAFT, W/GAS MOTOR ON CART	5 HP	G	\$1,717	2.71	0.24	0.39	0.04	0.89	1
	C65WC004	M 3000	CONCRETE VIBRATOR, 1.75" HEAD, 13' SHAFT, HI-FREQ INTERNAL (ADD 2KV GENERATOR)	3 HP	E	\$1,191	1.57	0.16	0.27	0.02	0.17	1
	C65WC003	IREN 57	CONCRETE VIBRATOR, 2.50" HEAD, 16.5' SHAFT, HI-FREQ INTERNAL (ADD 2KV GENERATOR)	2 HP	E	\$1,405	1.70	0.19	0.32	0.03	0.12	1

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C75</b>	<b>CRANES, HYDRAULIC, SELF-PROPELLED</b>											
	<b>SUBCATEGORY 0.00 CRANES, HYDRAULIC, SELF-PROPELLED</b>											
	<b>BRODERSON MANUFACTURING CORPORATION</b>											
	C75BD007	IC-20-1F	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 2.5 TON, 15' BOOM, 4X2	38 HP	G	\$53,632	17.01	2.57	3.22	0.96	7.83	63
	C75BD008	IC-35-2C	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 4.0 TON, 19.2' BOOM, 4X2	42 HP	G	\$71,350	20.58	3.43	4.30	1.28	8.65	78
	C75BD004	IC-35-2C	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 4.0 TON, 19' BOOM, 4X2, NON-ROTATING OPERATOR'S CAB	42 HP	G	\$74,325	21.09	3.56	4.45	1.33	8.65	79
	C75BD009	IC-80-3G	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 8.5 TON, 30' BOOM, 4X2	69 HP	G	\$95,928	30.86	4.57	5.70	1.72	14.22	172
	C75BD005	IC-80-1G	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 9.0 TON, 20' BOOM, 4X2, NON-ROTATING OPERATOR'S CAB	69 HP	G	\$92,894	30.42	4.43	5.52	1.67	14.22	163
	C75BD006	IC-200-3F	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 15.0 TON, 50' BOOM, 4X2, NON- ROTATING OPERATOR'S CAB	110 HP	G	\$135,643	46.70	6.44	8.02	2.43	22.66	308
	C75BD010	IC-250-3A	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 18.0 TON, 50' BOOM, 4X4	85 HP	D-off	\$160,162	32.24	7.63	9.51	2.87	6.92	384
	C75BD011	RT-300-2B	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 15.0 TON, 60' BOOM, 4X4, 20'0" OFFSET	130 HP	D-off	\$213,474	45.32	10.18	12.70	3.83	10.58	473
	<b>GROVE CRANES</b>											
	C75GV021	YB4410	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 10 TON, 30' BOOM, 4X4, NON-ROTATING OPERATOR'S CAB	62 HP	G	\$107,254	30.91	5.12	6.39	1.92	12.77	173
	C75GV022	YB4415XT	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 15 TON, 52' BOOM, 4X4, NON-ROTATING OPERATOR'S CAB	110 HP	D-off	\$132,711	30.54	6.30	7.84	2.38	8.95	313
	C75GV028	RT525E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 25 TON, 75' BOOM, 4X4X4	152 HP	D-off	\$250,666	53.70	11.90	14.82	4.49	12.37	500
	C75GV023	RT530E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 30 TON, 95' BOOM, 4X4	152 HP	D-off	\$264,882	61.12	12.28	15.05	4.75	12.37	580

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C75</b>	<b>GROVE CRANES (continued)</b>											
	C75GV024	RT640E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 40 TON, 105' BOOM 4X4	173 HP	D-off	\$399,859	83.06	18.80	23.25	7.17	14.08	650
	C75GV019	RT750E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 50 TON, 110' BOOM, 4X4	240 HP	D-off	\$459,700	102.37	21.40	26.32	8.24	19.53	876
	C75GV014	RT760	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 60 TON, 110' BOOM, 4X4, W/HOOK BLOCK & BALL	240 HP	D-off	\$459,861	102.40	21.42	26.33	8.25	19.53	909
	C75GV025	RT875C	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 70 TON, 110' BOOM 4X4	250 HP	D-off	\$731,368	142.70	34.52	42.81	13.11	20.34	1,091
	C75GV020	RT875 BXL	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 90 TON, 138' BOOM, 4X4	250 HP	D-off	\$735,657	144.14	34.73	43.08	13.19	20.34	1,119
	C75GV016	RT9130E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 100 TON, 160' BOOM, 4X4, W/HOOK BLOCK & BALL	300 HP	D-off	\$1,048,662	195.10	49.84	62.08	18.80	24.41	1,364
	<b>PETTIBONE MICHIGAN LLC</b>											
	C75PB001	36MK	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 18 TON, 64.1' BOOM, 4X4X4	127 HP	D-off	\$332,985	62.91	15.81	19.67	5.97	10.33	492
	C75PB002	40RS	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 20 TON, 64.1' BOOM, 4X4X4	185 HP	D-off	\$421,198	81.33	20.06	25.02	7.55	15.05	496
	<b>TADANO AMERICA CORPORATION</b>											
	C75TD003	TR-300XL-4	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 30 TON, 112' BOOM, 4X4	180 HP	D-off	\$339,569	70.50	16.17	20.15	6.09	14.64	537
	C75TD007	TR-500XL-4	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 50 TON, 175' BOOM, 4X4	247 HP	D-off	\$643,905	122.85	30.40	37.71	11.54	20.10	882
	C75TD008	TR-650XL-3	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 65 TON, 180' BOOM, 4X4	247 HP	D-off	\$596,810	121.71	28.13	34.86	10.70	20.10	945

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>TEREX CORPORATION</b>											
	C75TE001	RT230	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 30 TON, 94' BOOM, 4X4	130 HP	D-off	\$319,372	61.37	15.27	19.07	5.73	10.58	563
	C75TE002	RT335/40	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 40 TON, 94' BOOM, 4X4	152 HP	D-off	\$439,507	82.17	20.99	26.21	7.88	12.37	634
	C75TE004	RT160	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 60 TON, 115' BOOM, 4X4	215 HP	D-off	\$512,237	98.20	23.84	29.31	9.18	17.49	905
	C75TE005	RT175	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 75 TON, 126' BOOM, 4X4	260 HP	D-off	\$695,221	129.45	32.68	40.41	12.47	21.15	982
	C75TE006	RT190	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 90 TON, 124' BOOM, 4X4	260 HP	D-off	\$751,772	137.83	35.41	43.85	13.48	21.15	1,106
	C75TE007	RT1100	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 100 TON, 149' BOOM, 4X4	260 HP	D-off	\$862,094	161.50	40.99	51.05	15.46	21.15	1,230
<b>C80</b>	<b>CRANES, HYDRAULIC, TRUCK MOUNTED</b>											
	<b>SUBCATEGORY 0.01 UNDER 26 TON</b>											
	<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>											
	C80LB005	ATC-822	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 22 TON, 70' BOOM, 4X4	190 HP	D-off	\$291,544	55.11	13.88	17.30	5.23	13.31	392
	<b>TEREX CORPORATION</b>											
	C80TE005	T 220	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 20 TON, 94' BOOM, 6X4X2	242 HP	D-off	\$267,680	56.28	12.71	15.81	4.80	16.95	472
	C80TE006	T 225	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 25 TON, 94' BOOM, 6X4X2	242 HP	D-off	\$267,680	56.28	12.71	15.81	4.80	16.95	472
	<b>SUBCATEGORY 0.02 26 TON THRU 65 TON</b>											
	<b>GROVE CRANES</b>											
	C80GV025	TMS-500E	CRANES, HYDRAULIC, TRUCK MTD, 40 TON, 95' BOOM, 6X4	300 HP	D-off	\$404,274	74.70	17.80	21.22	7.19	21.02	540

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C80</b>	<b>GROVE CRANES (continued)</b>											
	C80GV027	TMS640	CRANES, HYDRAULIC, TRUCK MTD, 40 TON, 105' BOOM, 8X4X4	250 HP	D-off	\$508,146	84.56	22.30	26.52	9.04	17.52	743
	C80GV006	TMS-700E	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X4	400 HP	D-off	\$619,643	109.47	27.32	32.60	11.02	28.02	771
	C80GV029	TMS750E	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X4X4	400 HP	D-off	\$621,519	110.72	27.28	32.45	11.05	28.02	947
	C80GV028	AT700D	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X8X8	400 HP	D-off	\$652,836	114.61	28.67	34.12	11.61	28.02	856
	C80GV026	GMK 3050	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 55 TON, 125' BOOM, 8X4	348 HP	D-off	\$610,971	104.96	26.86	31.98	10.87	24.38	745
	C80GV030	TMS760E	CRANES, HYDRAULIC, TRUCK MTD, 60 TON, 110' BOOM, 8X4X4	400 HP	D-off	\$622,580	110.85	27.33	32.51	11.07	28.02	949
	<b>LINK-BELT CONSTRUCTION EQUIPMENT COMPANY</b>											
	C80LI009	HTC-8640	CRANES, HYDRAULIC, TRUCK MTD, 40 TON, 105' BOOM, 6X4X2	350 HP	D-off	\$387,369	77.08	16.99	20.19	6.89	24.52	575
	C80LI010	HTC-8650 II	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X4X4	315 HP	D-off	\$443,464	81.69	19.42	23.06	7.89	22.07	780
	C80LI011	HTC-8660	CRANES, HYDRAULIC, TRUCK MTD, 60 TON, 110' BOOM, 8X4X4	365 HP	D-off	\$501,014	93.07	21.94	26.05	8.91	25.57	831
	<b>TEREX CORPORATION</b>											
	C80TE001	T230	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 30 TON, 94' BOOM, 6X4	250 HP	D-off	\$402,227	70.87	17.67	21.04	7.15	17.52	506
	C80TE002	T335/40	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 40 TON, 94' BOOM, 6X4	250 HP	D-off	\$323,529	61.18	14.17	16.84	5.75	17.52	493
	C80TE003	T 500	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 50 TON, 110' BOOM, 8X4	370 HP	D-off	\$430,388	84.57	18.82	22.33	7.65	25.92	806
	C80TE007	T 560	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 60 TON, 110' BOOM, 8X4X4, 32 FT	316 HP	D-off	\$423,800	79.33	18.55	22.02	7.54	22.14	736
	<b>SUBCATEGORY 0.03 66 TON THRU 125 TON</b>											
	<b>GROVE CRANES</b>											
	C80GV020	TMS-870	CRANES, HYDRAULIC, TRUCK MTD, 70 TON, 110' BOOM, 8X4	400 HP	D-off	\$755,636	122.99	30.97	35.28	13.33	28.02	9,161

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT	
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL		
<b>C80</b>	<b>GROVE CRANES (continued)</b>												
	C80GV031	TMS875C	CRANES, HYDRAULIC, TRUCK MTD, 75 TON, 110' BOOM, 8X4X4	400 HP	D-off	\$705,190	117.51	28.84	32.80	12.44	28.02	817	
	C80GV032	GMK4090	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 80 TON, 142' BOOM, 8X6X8	422 HP	D-off	\$939,577	151.89	38.39	43.64	16.57	29.57	1,184	
	<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>												
	C80LB001	HTC-8670	CRANES, HYDRAULIC, TRUCK MTD, 70 TON, 115' BOOM, 8X4	365 HP	D-off	\$562,116	97.67	22.96	26.07	9.92	25.57	895	
	C80LB002	HTC-11100	CRANES, HYDRAULIC, TRUCK MTD, 100 TON, 115' BOOM, 8X4	430 HP	D-off	\$747,241	122.91	30.78	35.20	13.18	30.13	1,139	
	<b>TADANO AMERICA CORPORATION</b>												
	C80TD001	ATF-650XL	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 65 TON, 132' BOOM, 8X8	121 HP	D-off	349 HP D-on	\$654,660	96.21	26.64	30.18	11.55	13.30	1,090
	C80TD002	ATF-1000XL	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 100 TON, 138' BOOM, 8X8	158 HP	D-off	375 HP D-on	\$816,897	118.65	33.34	37.85	14.41	16.25	1,070
	<b>SUBCATEGORY 0.04 OVER 125 TON</b>												
	<b>GROVE CRANES</b>												
	C80GV013	GMK 5240	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 125 TON, 197' BOOM, 10X8	174 HP	D-off	600 HP D-on	\$1,843,597	243.79	71.13	77.53	32.36	20.47	1,180
	C80GV014	GMK 5240	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 165 TON, 197' BOOM, 10X8	174 HP	D-off	600 HP D-on	\$1,848,373	244.34	71.31	77.74	32.44	20.47	1,336
	C80GV015	GMK 5240	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 200 TON, 197' BOOM, 10X8	174 HP	D-off	600 HP D-on	\$1,855,494	245.16	71.59	78.04	32.57	20.47	2,348
	C80GV016	GMK 6350	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 200 TON, 197' BOOM, 12X8	165 HP	D-off	525 HP D-on	\$2,614,093	331.98	100.95	110.11	45.89	18.81	1,425
	<b>TADANO AMERICA CORPORATION</b>												
	C80TD005	ATF-1500XL	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 150 TON, 162' BOOM, 10X8	533 HP	D-off	503 HP D-on	\$980,501	166.35	37.64	40.85	17.21	44.28	1,330



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>C85 CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED</b>											
<b>SUBCATEGORY 0.12 DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY</b>												
<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>												
C85LB019	LS-208H II		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 80 TON, 100' BOOM (ADD BUCKET)	263 HP	D-off	\$717,218	113.16	31.14	35.86	13.21	15.45	1,390
C85LB020	LS-218H II		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 100 TON, 100' BOOM (ADD BUCKET)	263 HP	D-off	\$921,879	140.36	40.03	46.09	16.98	15.45	1,789
<b>TEREX CORPORATION</b>												
C85TE001	5220		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 50 TON, 100' BOOM (ADD BUCKET)	150 HP	D-off	\$582,462	87.59	25.29	29.12	10.73	8.81	831
C85TE002	7225		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 85 TON, 100' BOOM (ADD BUCKET)	250 HP	D-off	\$810,195	124.65	35.19	40.51	14.93	14.69	1,259
<b>SUBCATEGORY 0.13 DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY</b>												
<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>												
C85LB021	LS-238H		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 150 TON, 100' BOOM (ADD BUCKET)	207 HP	D-off	\$1,000,921	140.35	40.57	44.49	18.32	12.16	3,357
C85LB022	LS-248H II		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 200 TON, 120' BOOM (ADD BUCKET)	237 HP	D-off	\$1,344,652	185.91	54.50	59.76	24.62	13.93	3,242
<b>MANITOWOC ENGINEERING CO.</b>												
C85MA001	222HD		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 3.5 CY, 80' BOOM (ADD BUCKET)	350 HP	D-off	\$922,034	139.59	37.37	40.98	16.88	20.57	1,988
C85MA002	777		CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 5.0 CY, 130' BOOM (ADD BUCKET)	340 HP	D-off	\$1,128,383	165.12	45.74	50.15	20.66	19.98	3,815

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>TEREX CORPORATION</b>												
	C85TE003	9225	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 150 TON, 100' BOOM (ADD BUCKET)	335 HP	D-off	\$1,019,942	151.03	41.34	45.33	18.67	19.68	2,482
	<b>SUBCATEGORY 0.14</b>		<b>DRAGLINE, CLAMSHELL, OVER 5.0 CY</b>									
<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>												
	C85LB023	LS-278H	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 250 TON, 120' BOOM (ADD BUCKET)	440 HP	D-off	\$1,584,004	221.86	60.54	63.36	28.86	25.85	4,064
<b>MANITOWOC ENGINEERING CO.</b>												
	C85MA003	999	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 7.0 CY, 140' BOOM (ADD BUCKET)	375 HP	D-off	\$1,681,279	229.50	64.26	67.25	30.63	22.04	5,100
	C85MA009	888	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 10 CY, 70' BOOM (ADD BUCKET)	340 HP	D-off	\$1,478,600	202.49	56.51	59.14	26.94	19.98	3,397
	<b>SUBCATEGORY 0.22</b>		<b>LIFTING, 26 TON THRU 50 TON</b>									
<b>KOBELCO AMERICA INC.</b>												
	C85KC007	CK550	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 50 TON, 30' BOOM, LIFTING	178 HP	D-off	\$534,890	68.96	21.68	23.77	9.79	7.64	1,001
<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>												
	C85LB018	LS-108H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 50 TON, 70' BOOM, LIFTING	157 HP	D-off	\$478,401	61.58	19.39	21.26	8.76	6.74	1,027
	<b>SUBCATEGORY 0.23</b>		<b>LIFTING, 51 TON THRU 150 TON</b>									
<b>KOBELCO AMERICA INC.</b>												
	C85KC004	CK550	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 55 TON, 160' BOOM, LIFTING	178 HP	D-off	\$578,064	72.95	22.44	24.57	10.15	7.64	1,071

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C85</b>	<b>KOBELCO AMERICA INC. (continued)</b>											
	C85KC005	CK850	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 85 TON, 180' BOOM, LIFTING	213 HP	D-off	\$666,410	84.47	25.86	28.32	11.70	9.15	1,729
	C85KC003	CK1000	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 200' BOOM, LIFTING	265 HP	D-off	\$915,530	114.73	35.53	38.91	16.07	11.38	1,899
	<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>											
	C85LB013	LS-208H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 80 TON, 190' BOOM, LIFTING	263 HP	D-off	\$737,807	94.80	28.63	31.36	12.95	11.29	1,390
	C85LB014	LS-218H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 110 TON, 230' BOOM, LIFTING	263 HP	D-off	\$952,051	118.72	36.94	40.46	16.71	11.29	1,790
	C85LB015	LS-238H	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 150 TON, 240' BOOM, LIFTING	207 HP	D-off	\$1,000,921	121.54	38.84	42.54	17.57	8.89	3,357
	<b>LINK-BELT CONSTRUCTION EQUIPMENT COMPANY</b>											
	C85LI001	LS-138H SERIES II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 80 TON, 40' TUBULAR BOOM, LIFTING	207 HP	D-off	\$603,262	77.14	23.41	25.64	10.59	8.89	1,464
	<b>MANITOWOC ENGINEERING CO.</b>											
	C85MA004	222HD	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 210' BOOM, LIFTING	350 HP	D-off	\$911,247	118.28	35.37	38.73	16.00	15.03	2,354
	C85MA008	555	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 260' BOOM, LIFTING	335 HP	D-off	\$903,143	116.64	35.04	38.38	15.85	14.38	3,121
	C85MA005	555	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 150 TON, 250' BOOM, LIFTING	335 HP	D-off	\$853,266	111.08	33.11	36.26	14.98	14.38	2,744
	<b>TEREX CORPORATION</b>											
	C85TE008	HC 80	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 80 TON, 200' BOOM, LIFTING	184 HP	D-off	\$611,275	76.94	23.72	25.98	10.73	7.90	1,430
	C85TE009	HC 110	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 230' BOOM, LIFTING	230 HP	D-off	\$753,320	94.98	29.23	32.02	13.22	9.88	1,911
	C85TE010	HC 125	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 125 TON, 240' BOOM, LIFTING	240 HP	D-off	\$1,000,173	123.02	38.82	42.51	17.56	10.31	2,128

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>SUBCATEGORY 0.24 LIFTING, OVER 150 TON</b>											
	<b>AMERICAN CRANE CORPORATION</b>											
	C85AM017	HC 210	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 210 TON, 50' BOOM, LIFTING	315 HP	D-off	\$1,211,392	146.50	44.56	46.80	21.16	13.53	3,344
	<b>KOBELCO AMERICA INC.</b>											
	C85KC008	CK2000	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 200 TON, 50' BOOM, LIFTING	316 HP	D-off	\$1,213,501	146.79	44.65	46.89	21.20	13.57	3,622
	C85KC006	CK2500	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 250 TON, 280' BOOM, LIFTING	279 HP	D-off	\$1,709,864	198.89	62.89	66.06	29.86	11.98	4,985
	<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>											
	C85LB016	LS-248H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 200 TON, 280' BOOM, LIFTING	237 HP	D-off	\$1,344,652	157.26	49.47	51.95	23.49	10.18	3,242
	C85LB017	LS-278H	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 250 TON, 330' BOOM, LIFTING	440 HP	D-off	\$1,658,233	200.95	61.00	64.07	28.96	18.89	4,064
	<b>MANITOWOC ENGINEERING CO.</b>											
	C85MA006	777	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 200 TON, 260' BOOM, LIFTING	340 HP	D-off	\$1,185,856	144.92	43.62	45.82	20.71	14.60	3,929
	C85MA010	888	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 230 TON, 300' BOOM, LIFTING	340 HP	D-off	\$1,515,163	180.67	55.73	58.54	26.46	14.60	3,697
	C85MA007	999	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 250 TON, 260' BOOM, LIFTING	375 HP	D-off	\$1,673,641	199.53	61.56	64.66	29.23	16.10	4,942
	<b>TEREX CORPORATION</b>											
	C85TE011	HC 210	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 210 TON, 280' BOOM, LIFTING	315 HP	D-off	\$1,475,873	175.22	54.29	57.02	25.78	13.53	3,708

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C90 CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED</b>												
	<b>SUBCATEGORY 0.04 OVER 125 TON</b>											
	<b>LINK-BELT CONSTRUCTION EQUIPMENT CO.</b>											
	C90LB001	HC-238H II	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 150 TON, 260' BOOM, 8X4	207 HP D-off	430 HP D-on	\$1,303,969	175.14	49.50	51.48	23.76	17.16	1,913
	C90LB002	HC-248H	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 200 TON, 280' BOOM, 8X4	248 HP D-off	430 HP D-on	\$1,503,206	200.11	57.12	59.45	27.39	19.38	2,476
	C90LB003	HC-278H	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 300 TON, 330' BOOM, 12X6	360 HP D-off	430 HP D-on	\$2,385,736	310.89	90.68	94.41	43.47	25.46	3,385
<b>C95 CRANES, TOWER</b>												
	<b>SUBCATEGORY 0.00 CRANES, TOWER</b>											
	<b>PECCO AND WOLFF TOWER CRANES</b>											
	C95AP004	SK200	TOWER CRANE, 3.4 TON @ 181' RADIUS 42.6' HEIGHT (ADD 95KW GENERATOR & T-SECTION)	128 HP	E	\$467,984	71.80	18.97	20.80	8.57	7.40	970
	C95AP005	S16-35 TOWER SECTION	TOWER CRANE OPTION, 1.1' T-TRANSITION S35 -S16 (ADD SK 140 - SK 225 TOWER CRANE)			\$14,781	1.78	0.60	0.66	0.27	0.00	16
	C95AP006	S35 TOWER SECTION	TOWER CRANE OPTION, 19.33' TOWER SECTION (ADD TO SK 140 - SK 400 TOWER CRANE)			\$27,554	3.30	1.11	1.22	0.50	0.00	89
	C95AP007	SK400	TOWER CRANE, 3.3 TON @ 245' RADIUS, 56.7' HEIGHT (ADD 160 KW GENERATOR & T-SECTION)	213 HP	E	\$739,058	113.06	29.96	32.85	13.53	12.32	1,783
	C95AP008	S35 CLIMBING UNIT	TOWER CRANE OPTION, 29.2' CLIMBING UNIT (ADD TO SK 200 - SK 400 TOWER CRANE)			\$112,647	14.03	4.57	5.01	2.06	0.00	248
	C95AP009	S35-60 TOWER SECTION	TOWER CRANE OPTION, 19.4' T-TRANSITION S60 S35 (ADD SK 225 - SK 560 TOWER CRANE)			\$37,270	4.48	1.51	1.66	0.68	0.00	99
	C95AP010	SK560	TOWER CRANE, 2.8 TON @ 265' RADIUS, 76.5' HEIGHT (ADD 161 KW GENERATOR & T-SECTION)	217 HP	E	\$987,702	143.28	40.03	43.90	18.08	12.55	1,557

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>C95</b>	<b>PECCO AND WOLFF TOWER CRANES (continued)</b>											
	C95AP011	S60 TOWER SECTION	TOWER CRANE OPTION, 19.33' TOWER SECTION (ADD TO SK 225 - SK 560 TOWER CRANE)			\$34,792	4.18	1.42	1.55	0.64	0.00	99
	C95AP012	S60 CLIMB UNIT	TOWER CRANE OPTION, 32.8' CLIMBING UNIT (ADD TO SK 225 - SK 560 TOWER CRANE)			\$140,760	17.41	5.71	6.26	2.58	0.00	258
	C95AP013	SN355	TOWER CRANE, 3.8 TON @ 197' RADIUS, 110' TALL, LUFFING (ADD 300 KW GENERATOR & T-SECTION)	354 HP	E	\$942,552	150.27	38.20	41.89	17.25	20.48	2,748
	C95AP014	SN35 TOWER SECTION	TOWER CRANE OPTION, 14.75' TOWER SECTION (ADD TO SN 141 - SN 355 TOWER CRANE)			\$31,667	3.81	1.29	1.41	0.58	0.00	89
	C95AP015	SN35 CLIMBING UNIT	TOWER CRANE OPTION, 29.2' CLIMBING UNIT (ADD TO SN 141 - SN 355 TOWER CRANE)			\$122,636	15.22	4.97	5.45	2.24	0.00	248
	C95AP016	S35N-60TOWER SECTION	TOWER CRANE OPTION, 19.4' T-TRANSITION S60 S35N (ADD SN 141 - SK 355 TOWER CRANE)			\$42,681	5.13	1.73	1.90	0.78	0.00	99
	C95AP017	SK140	TOWER CRANE, 3.1 TON @ 151' RADIUS, 85.0' HEIGHT (ADD 95KW GENERATOR & T-SECTION)	125 HP	E	\$398,460	62.18	16.15	17.71	7.29	7.23	1,309
	C95AP018	S16 TOWER SECTION	TOWER CRANE OPTION, 14.75' TOWER SECTION (ADD TO SK 140 - SK 200 TOWER CRANE)			\$13,118	1.57	0.53	0.58	0.24	0.00	55
	C95AP019	S16 CLIMBING UNIT	TOWER CRANE OPTION, 29.2' CLIMBING UNIT (ADD TO SK140 - SK 200 TOWER CRANE)			\$75,988	9.63	3.08	3.38	1.39	0.00	165
	C95AP020	SN141	TOWER CRANE, 1.6 TON @ 147' RADIUS, 89' TALL, LUFFING (ADD 200 KW GENERATOR & T-SECTION)	223 HP	E	\$439,808	76.04	17.83	19.55	8.05	12.90	1,082
	C95AP021	SN160-16	TOWER CRANE, 2.8 TON @ 164' RADIUS, 88' TALL, LUFFING (ADD 250 KW GENERATOR & T-SECTION)	258 HP	E	\$688,871	110.13	27.92	30.62	12.61	14.93	1,179
	C95AP022	PH5000-12	TOWER CRANE OPTION, 24 PERSON / 2.4 TON MATERIAL ELEVATOR/HOIST (ADD 4.9' MAST SECTION & 18 KW GENERATOR)	24 HP	E	\$103,709	15.64	4.21	4.61	1.90	1.39	130
	C95AP023	MAST SECTION	TOWER CRANE OPTION, 4.9' MAST-> PERSON/MATERIAL ELEVATOR/HOIST (ADD WALL TIE & CABLE GUIDE @30')			\$2,449	0.29	0.10	0.11	0.04	0.00	3

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>MORROW EQUIPMENT COMPANY, LLC</b>											
	C95LH022	97K	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 13.2 TON MAX, 1.9 TON @ 148' RADIUS, 66' HEIGHT, SELF/ERECTING, W/FIVE - 7' 10" TOWER SECTIONS/ & ROAD TRANSPORT EQUIPMENT (ADD 40KW GENERATOR)	35 HP	E	\$361,621	49.03	14.57	15.89	6.62	2.02	1,593
	C95LH023	140K	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 11.0 TON MAX, 1.7 TON @ 180' RAD 146' HEIGHT, SELF/ERECTING, W/EIGHT - 9' 10" TOWER SECTIONS/ & ROAD TRANSPORT EQUIPMENT (ADD 60KW GENERATOR)	65 HP	E	\$505,337	70.12	20.37	22.23	9.25	3.76	1,836
	C95LH003	132 HC	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 8.8 TON MAX, 2.4 TON @ 168' RADIUS, 147.8' HEIGHT, W/FOURTEEN - 8' 2" TOWER SECTIONS (ADD 85 KW GENERATOR)	109 HP	E	\$407,929	61.88	16.54	18.13	7.47	6.31	1,156
	C95LH005	200 HC	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 11.0 TON MAX, 2.5 TON @ 201' RADIUS, 162.7' HEIGHT, W/NINE - 13' 7" TOWER SECTIONS (ADD 110 KW GENERATOR)	148 HP	E	\$530,874	81.16	21.52	23.59	9.72	8.56	1,374
	C95LH011	390 HC	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 17.6 TON MAX, 3.3 TON @ 246' RADIUS, 199.1' HEIGHT, W/NINE - 19' 0" TOWER SECTIONS (ADD 170 KW GENERATOR)	223 HP	E	\$991,493	144.29	40.19	44.07	18.15	12.90	2,744
	C95LH013	550 HC20	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 22.0 TON MAX, 3.8 TON @ 265' RADIUS, 237.5' HEIGHT, W/TWELVE - 19' 0" TOWER SECTIONS (ADD 170 KW GENERATOR)	223 HP	E	\$1,265,908	177.23	51.30	56.26	23.17	12.90	3,765
	C95LH015	550 HC-L	TOWER CRANE, 26.4 TON MAX, 3/4 TON @ 197' RADIUS, 210' HEIGHT, LUFFING, W/SIX 19' 0" TOWER SECTIONS (ADD 480 KW GENERATOR)	317 HP	E	\$1,687,089	238.33	68.37	74.98	30.88	18.34	5,075

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>D10</b>	<b>DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)</b>											
	<b>SUBCATEGORY 0.10</b>		<b>DRILLS, AIR TRACK (Add cost for drill steel and bit wear)</b>									
	<b>INGERSOLL RAND ROCK DRILL DIV</b>											
D10IR003	ECM350/VL140		DRILL, AIR TRACK, CRAWLER, 2.5-4.0" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 750 CFM COMPRESSOR)	750 CFM	A	\$198,535	33.53	9.14	10.64	3.82	0.00	129
	<b>SULLIVAN INDUSTRIES, INC.</b>											
D10SU002	RAM EXT, VCR360		DRILL, AIR TRACK, CRAWLER, 2.5-4.0" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 750 CFM COMPRESSOR)	750 CFM	A	\$244,629	41.13	11.26	13.11	4.70	0.00	152
D10SU003	RAM EXT, VCR361		DRILL, AIR TRACK, CRAWLER, 3.0-4.0" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 900 CFM COMPRESSOR)	900 CFM	A	\$249,993	42.02	11.51	13.39	4.81	0.00	205
	<b>SUBCATEGORY 0.20</b>		<b>DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)</b>									
	<b>INGERSOLL RAND ROCK DRILL DIV</b>											
D10IR005	ECM590/YH80A		DRILL, HYDRAULIC TRACK, CRAWLER, 2.5-4.5" DIA, 14' DRIFTER TRAVEL, SELF-CONTAINED (ADD COST FOR DRILL STEEL AND BIT WEAR)	215 HP	D-off	\$535,811	140.61	30.64	40.19	10.54	18.46	245
	<b>SULLIVAN INDUSTRIES, INC.</b>											
D10SU005	SCORPION VCR360		DRILL, HYDRAULIC TRACK, CRAWLER, 5.25" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR)	260 HP	D-off	\$271,501	85.87	15.52	20.36	5.34	22.33	265
D10SU006	SCORPION VCR361		DRILL, HYDRAULIC TRACK, CRAWLER, 6.5" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR)	260 HP	D-off	\$274,819	86.61	15.72	20.61	5.41	22.33	265



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>D15 DRILLS, HORIZONTAL BORING &amp; GROUND PIERCING (Add cost for drill steel and bit wear)</b>												
<b>SUBCATEGORY 0.00 DRILLS, HORIZONTAL BORING &amp; GROUND PIERCING (Add cost for drill steel and bit wear)</b>												
<b>BOR-IT MANUFACTURING COMPANY INC.</b>												
D15BI001	12 MIGHT MAX		DRILL, HORIZONTAL BORING, 12" DIA, COMBINED HEAD 28,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	12 HP	G	\$19,131	7.03	1.10	1.43	0.38	2.62	18
D15BI002	20 POWER HOUSE II		DRILL, HORIZONTAL BORING, 20" DIA, COMBINED HEAD 44,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	20 HP	D-off	\$34,460	9.20	1.97	2.58	0.68	1.72	15
D15BI003	24 BRUTE		DRILL, HORIZONTAL BORING, 24" DIA, COMBINED HEAD 84,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	30 HP	D-off	\$51,720	13.81	2.96	3.88	1.02	2.58	38
D15BI004	30 POWER PLUS		DRILL, HORIZONTAL BORING, 30" DIA, COMBINED HEAD 170,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	45 HP	D-off	\$80,654	21.35	4.62	6.05	1.59	3.86	70
D15BI005	36 WORKHORSE		DRILL, HORIZONTAL BORING, 36" DIA, COMBINED HEAD 225,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	68 HP	D-off	\$111,967	30.17	6.40	8.40	2.20	5.84	90
D15BI006	48 TERMINATOR		DRILL, HORIZONTAL BORING, 48" DIA, COMBINED HEAD 525,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	119 HP	D-off	\$177,141	48.84	10.13	13.29	3.48	10.22	170
D15BI008	54 TERMINATOR II		DRILL, HORIZONTAL BORING, 54" DIA, COMBINED HEAD 32,700,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	171 HP	D-off	\$218,023	62.49	12.47	16.35	4.29	14.69	250
D15BI007	60		DRILL, HORIZONTAL BORING, 60" DIA, COMBINED HEAD 1,100,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	171 HP	D-off	\$259,888	71.31	14.86	19.49	5.11	14.69	250

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>NO SPECIFIC MANUFACTURER</b>											
	D15XX001	MC-500H	DRILL, HORIZONTAL BORING, 3" - 6" DIA, 15,000 LBS THRUST, HYDRAULIC MOTOR (ADD COST FOR DRILL STEEL AND BIT WEAR)			\$10,088	2.13	0.58	0.76	0.20	0.00	10
	D15XX002	H-12/RM-12	DRILL, HORIZONTAL BORING, 4" - 12" DIA, 24,000 LBS THRUST, HYDRAULIC MOTOR (ADD COST FOR DRILL STEEL AND BIT WEAR)			\$15,224	3.21	0.87	1.14	0.30	0.00	12
<b>D20</b>	<b>DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)</b>											
	<b>SUBCATEGORY 0.00 DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)</b>											
	<b>ACKER DRILL COMPANY INC.</b>											
	D20AD005	630-E	DRILL, CORE, COLUMN MOUNTED, 4" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	2 HP	E	\$7,018	2.22	0.47	0.66	0.14	0.14	1
	D20AD002	930-E	DRILL, CORE, COLUMN MOUNTED, 10" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	2 HP	E	\$7,122	2.25	0.48	0.67	0.14	0.14	2
	D20AD006	1040-E	DRILL, CORE, COLUMN MOUNTED, 10" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	4 HP	E	\$11,624	3.73	0.78	1.09	0.23	0.28	1
	D20AD007	1200-G	DRILL, CORE, COLUMN MOUNTED, 12" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	8 HP	E	\$19,166	6.47	1.28	1.80	0.38	0.57	3
	<b>CUSHION CUT, INC.</b>											
	D20CQ001	HCD24/12	DRILL, CORE, COLUMN MOUNTED, 9"-36" BIT DIA (ADD COST FOR DRILL STEEL AND BIT WEAR)	42 HP	G	\$27,671	18.27	1.86	2.59	0.56	9.16	11
	<b>BOART LONGYEAR COMPANY</b>											
	D20LY001	752	DRILL, CORE, COLUMN MOUNTED, 1.5"-6" BIT DIA, W/E4-230/110 MOTOR (110V) (ADD COST FOR DRILL STEEL AND BIT WEAR)	3 HP	E	\$10,333	3.42	0.70	0.97	0.21	0.21	2

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>D20</b>	<b>BOART LONGYEAR COMPANY (continued)</b>										
	D20LY002	42N	DRILL, CORE, COLUMN MOUNTED, 0.5"-36" BIT DIA, W/A4-350 MOTOR (ADD COST FOR DRILL STEEL AND BIT WEAR AND ADD 185 CFM AIR COMPRESSOR)	185 CFM	A	\$10,676	3.27	0.71	1.00	0.21	0.00	3
<b>D25</b>	<b>DRILLS, CORE &amp; DOWELLING (Add cost for drill steel and bit wear)</b>											
	<b>SUBCATEGORY 0.00 DRILLS, CORE &amp; DOWELLING (Add cost for drill steel and bit wear)</b>											
	<b>ACKER DRILL COMPANY INC.</b>											
	D25AD004	ACEW	DRILL, CORE, SKID MTD, 725' MAX DRILL DEPTH (ADD COST FOR DRILL STEEL AND BIT WEAR)	28 HP	D-off	\$99,657	24.94	5.70	7.47	1.96	2.40	35
	D25AD003	BUSH MASTER	DRILL, CORE, SKID MTD, 1500' MAX DRILL DEPTH (ADD COST FOR DRILL STEEL AND BIT WEAR)	69 HP	D-off	\$124,908	34.50	7.15	9.37	2.46	5.93	45
	<b>E-Z DRILL, INC.</b>											
	D25EZ002	210 B	DRILL, CORE, SKID MTD, 0.6"-2.5" DIA., 18" DEPTH, HORIZONTAL DOWELLING ASSEMBLY (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM	A	\$7,247	2.12	0.39	0.50	0.14	0.00	3
	D25EZ003	210 B SRA	DRILL, CORE, SKID MTD, 0.6"-2.5" DIA., 18" DEPTH, HORIZONTAL DOWELLING ASSEMBLY (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM	A	\$7,749	2.23	0.43	0.55	0.15	0.00	3
	D25EZ001	210 B SR HORIZONTAL	DRILL, CORE, SKID MTD, 0.6"-2.5" DIA., 18" DEPTH, HORIZONTAL DOWELLING ASSEMBLY (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM	A	\$8,451	2.39	0.49	0.63	0.17	0.00	3
	D25EZ005	210-3 SRA	DRILL, CORE, SELF PROPELLED, 0.6"-2.5" DIA., 18" DEPTH, DOWELLING MACHINE (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM	A	\$28,939	7.74	1.63	2.12	0.57	0.00	12

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT		
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL			
	<b>D30 DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)</b>													
<b>SUBCATEGORY 0.00 DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)</b>														
<b>HYDRAULIC POWER SYSTEMS, INC.</b>														
D30HD001	H-15		DRILL, AUGER, HYDRAULIC, W/60' 8" X 21" LEADS, 15,000 FT-LBS TORQUE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR AND CRANE)	210 HP	D-off	\$93,173	43.15	5.33	6.99	1.83	18.03	146		
D30HD002	H-35VT		DRILL, AUGER, HYDRAULIC, W/60' 8" X 27" LEADS, 33,000 FT-LBS TORQUE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR AND CRANE)	270 HP	D-off	\$139,940	60.43	8.00	10.50	2.75	23.19	200		
D30HD003	H-50VT		DRILL, AUGER, HYDRAULIC, W/60' 8" X 33" LEADS, 50,000 FT-LBS TORQUE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR AND CRANE)	335 HP	D-off	\$182,458	77.22	10.43	13.68	3.59	28.77	269		
<b>FOREMOST MOBILE DRILLING COMPANY, INC.</b>														
D30MR001	MINUTEMAN		DRILL, EARTH / AUGER, W/AUGER KIT, 3" DIA, 30' DEPTH, 350 FT-LBS TORQUE, PORTABLE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	8 HP	G	\$13,609	5.04	0.78	1.02	0.27	1.75	4		
D30MR003	B-31		DRILL, EARTH / AUGER, HYDRAULIC AUGER, 14" DIA, 30' DEPTH, 3,500 FT-LBS TORQUE, TRAILER MOUNTED (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	58 HP	D-off	\$136,112	36.03	7.75	10.13	2.68	4.98	42		
D30MR005	B-53		DRILL, EARTH / AUGER, MULTI-PURPOSE, 6" DIA, 245' DEPTH, 5,955 FT-LBS TORQUE, W/21,000 GVW TRUCK (W/PTO DRIVE)(ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	100 HP	D-on	2,205 HP	D-on	\$249,854	102.04	14.16	18.50	4.91	40.92	120
D30MR006	B-58		DRILL, EARTH / AUGER, MULTI-PURPOSE, 8" DIA, 250' DEPTH, 7,000 FT-LBS TORQUE W/33,000 GVW TRUCK (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	115 HP	D-off	205 HP	D-on	\$287,651	78.70	16.33	21.33	5.66	12.71	130

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>D30</b>	<b>FOREMOST MOBILE DRILLING COMPANY, INC. (continued)</b>											
	D30MR007	B-61HDX	DRILL, EARTH / AUGER, MULTI-PURPOSE, 8" DIA, 375' DEPTH, 20,000 FT-LBS TORQUE W/33,000 GVW TRUCK (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	115 HP D-off	205 HP D-on	\$408,915	105.82	23.26	30.43	8.04	12.71	205
<b>D35</b>	<b>DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)</b>											
	<b>SUBCATEGORY 0.11</b>		<b>DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)</b>									
	<b>DRILTECH, INC.</b>											
	D35DT001	D25KS	DRILL, ROTARY BLASTHOLE, 5"-6.75" DIA., 27,000 LB PULLDOWN, CRAWLER, 88' DEEP(ADD COST FOR DRILL STEEL AND BIT WEAR)	450 HP D-off		\$537,367	135.49	25.34	30.71	9.98	38.65	620
	D35DT002	D245S	DRILL, ROTARY BLASTHOLE, 5"-8" DIA., 40,000 LB PULLDOWN, CRAWLER, 148' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	450 HP D-off		\$566,638	140.39	26.71	32.38	10.52	38.65	720
	D35DT003	D45KS	DRILL, ROTARY BLASTHOLE, 6"-9" DIA., 45,000 LB PULLDOWN, CRAWLER, 208' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	450 HP D-off		\$624,477	150.09	29.43	35.68	11.59	38.65	1,050
	D35DT004	D50KS	DRILL, ROTARY BLASTHOLE, 6"-9.875" DIA., 50,000 LB PULLDOWN, CRAWLER, 148' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	525 HP D-off		\$658,485	163.36	31.05	37.63	12.23	45.09	1,050
	D35DT005	D55SP	DRILL, ROTARY BLASTHOLE, 6.75"-10" DIA., 45,000 LB PULLDOWN, CRAWLER, 55' DEEP (SINGLE PASS) (ADD COST FOR DRILL STEEL AND BIT WEAR)	760 HP D-off		\$991,118	242.82	46.72	56.64	18.40	65.27	1,320
	<b>REEDRILL, INC.</b>											
	D35RD001	SK5AD	DRILL, ROTARY BLASTHOLE, 4"-7" DIA, 12,000 LBS PULL BACK, TRUCK MTD, 148' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	400 HP D-off	350 HP D-on	\$551,746	138.50	26.01	31.53	10.24	39.18	525

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT		
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL			
	<b>SUBCATEGORY 0.12 DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)</b>													
<b>DRILTECH, INC.</b>														
D35DT006	D75KS		DRILL, ROTARY BLASTHOLE, 9"-11" DIA., 75,000 LB PULLDOWN, CRAWLER, 173' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	760 HP	D-off	\$854,978	189.62	34.65	38.00	15.65	65.27	1,400		
<b>INGERSOLL RAND ROTARY DRILL DIV</b>														
D35IB004	T3W		DRILL, ROTARY BLASTHOLE, WATER WELL 6"-24" DIA, 30,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	465 HP	D-off	380 HP	D-on	\$776,710	156.79	31.33	34.22	14.22	45.17	660
D35IB003	TH-60		DRILL, ROTARY BLASTHOLE, WATER WELL, 12" DIA, 26,500 LBS PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	475 HP	D-off	380 HP	D-on	\$815,214	162.78	32.92	36.00	14.92	46.03	600
D35IB005	T3W DEEPHOLE		DRILL, ROTARY BLASTHOLE, WATER WELL 6"-18" DIA, 50,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	575 HP	D-off	380 HP	D-on	\$900,707	184.27	36.36	39.73	16.49	54.62	688
D35IB006	T4W		DRILL, ROTARY BLASTHOLE, WATER WELL 6"-20" DIA, 70,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	600 HP	D-off	305 HP	D-on	\$947,169	191.81	38.24	41.80	17.34	55.74	688
<b>F10 FORK LIFTS</b>														
<b>SUBCATEGORY 0.00 FORK LIFTS</b>														
<b>JCB INC.</b>														
F10JC001	930-4		FORK LIFT, ROUGH TERRAIN, 6,000 LBS @ 28' HIGH STRAIGHT MAST, 4X4	75 HP	D-off	\$62,419	18.17	3.60	4.81	1.19	5.25	150		
F10JC002	940-4		FORK LIFT, ROUGH TERRAIN, 8,000 LBS @ 30' HIGH STRAIGHT MAST, 4X4	75 HP	D-off	\$67,886	19.21	3.92	5.25	1.29	5.25	165		

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>G10 GENERATOR SETS</b>											
<b>SUBCATEGORY 0.10 PORTABLE</b>												
<b>WACKER CORPORATION</b>												
G10WC001	GP 3800A		GENERATOR SET, PORTABLE, 3.7 KW, 120/240V, 60 HZ	8 HP	G	\$2,043	2.05	0.16	0.23	0.04	1.43	2
G10WC002	GP 5600A		GENERATOR SET, PORTABLE, 5.6 KW, 120/240V, 60 HZ	11 HP	G	\$2,606	2.76	0.20	0.29	0.05	1.97	2
G10WC003	GS 8.5V		GENERATOR SET, PORTABLE, 8.5 KW, 120/240V, 60 HZ, WITH ELECTRIC START	16 HP	G	\$4,212	4.11	0.32	0.47	0.08	2.86	2
G10WC004	GS 9.7V		GENERATOR SET, PORTABLE, 9.7 KW, 120/240V, 60 HZ, WITH ELECTRIC START	18 HP	G	\$4,739	4.63	0.36	0.53	0.09	3.22	2
<b>NO SPECIFIC MANUFACTURER</b>												
G10XX001	1000		GENERATOR SET, PORTABLE, 1 KW	1 HP	G	\$888	0.40	0.07	0.10	0.02	0.18	1
G10XX004	D4500		GENERATOR SET, PORTABLE, 5 KW	9 HP	D-off	\$5,122	1.84	0.38	0.58	0.09	0.63	3
G10XX002	10000		GENERATOR SET, PORTABLE, 10 KW	19 HP	G	\$4,327	4.74	0.33	0.49	0.08	3.40	6
G10XX003	10000D		GENERATOR SET, PORTABLE, 10 KW	23 HP	D-off	\$9,884	3.99	0.74	1.11	0.18	1.61	9
<b>SUBCATEGORY 0.20 SKID MOUNTED</b>												
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
G10CA020	3304 PKG - P 304DE03		GENERATOR SET, SKID MTD, 113 EKW, 240/480V, 60 HZ PGS PRIME	174 HP	D-off	\$24,255	18.22	1.52	2.18	0.43	12.19	37
G10CA012	3306 PKG - 306DE39		GENERATOR SET, SKID MTD, 210 EKW, 240 VOLT, 60 HZ PGS PRIME	314 HP	D-off	\$30,354	30.27	1.91	2.73	0.54	22.00	50
G10CA013	3406 PKG - 306DE30		GENERATOR SET, SKID MTD, 275 EKW, 480 VOLT, 60 HZ PGS PRIME	405 HP	D-off	\$39,103	39.03	2.46	3.52	0.70	28.37	68
G10CA014	3406 PKG - 406DE30		GENERATOR SET, SKID MTD, 365 EKW, 240/480V, 60 HZ PGS PRIME	536 HP	D-off	\$51,462	51.61	3.24	4.63	0.92	37.55	72
G10CA015	3412 PKG - 412DE3H		GENERATOR SET, SKID MTD, 455 EKW, 240/480V, 60 HZ PGS PRIME	687 HP	D-off	\$71,349	67.19	4.48	6.42	1.27	48.13	93
G10CA016	3412 PKG - 412DE30		GENERATOR SET, SKID MTD, 545 EKW, 240/480V, 60 HZ PGS PRIME	817 HP	D-off	\$87,322	80.39	5.49	7.86	1.56	57.24	100

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>G10</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	G10CA017	3508 PKG - 508DE34	GENERATOR SET, SKID MTD, 725 EKW, 480 VOLT, 60 HZ PGS PRIME	1,089 HP	D-off	\$136,987	111.14	8.61	12.33	2.44	76.30	181
	G10CA018	3512 PKG - 512DE1F	GENERATOR SET, SKID MTD, 1000 EKW, 480 VOLT, 60 HZ PGS PRIME	1,443 HP	D-off	\$173,927	145.80	10.93	15.65	3.10	101.10	236
	G10CA019	3516 PKG - 516DE35	GENERATOR SET, SKID MTD, 1600 EKW, 480 VOLT, 60 HZ PGS PRIME	2,304 HP	D-off	\$292,714	235.69	18.38	26.34	5.21	161.42	291
	<b>NO SPECIFIC MANUFACTURER</b>											
	G10XX005	25G	GENERATOR SET, SKID MTD, 25 KW	36 HP	G	\$15,597	10.16	0.98	1.40	0.28	6.44	16
	G10XX006	35G	GENERATOR SET, SKID MTD, 35 KW	50 HP	G	\$13,703	12.56	0.86	1.23	0.24	8.94	17
	G10XX007	50G	GENERATOR SET, SKID MTD, 50 KW	70 HP	G	\$20,664	17.88	1.30	1.86	0.37	12.51	26
	G10XX008	75D	GENERATOR SET, SKID MTD, 75 KW	107 HP	D-off	\$25,246	13.21	1.59	2.27	0.45	7.50	38
	G10XX009	100D	GENERATOR SET, SKID MTD, 100 KW	143 HP	D-off	\$21,597	15.29	1.35	1.94	0.38	10.02	42
	G10XX010	125D	GENERATOR SET, SKID MTD, 125 KW	200 HP	D-off	\$32,281	21.80	2.04	2.91	0.58	14.01	44
	G10XX011	200D	GENERATOR SET, SKID MTD, 200 KW	375 HP	D-off	\$35,394	35.99	2.23	3.19	0.63	26.27	60
	G10XX012	300D	GENERATOR SET, SKID MTD, 300 KW	428 HP	D-off	\$41,716	41.33	2.62	3.75	0.74	29.99	105
	G10XX013	400D	GENERATOR SET, SKID MTD, 400 KW	570 HP	D-off	\$52,032	54.35	3.27	4.68	0.93	39.93	150
	G10XX014	500D	GENERATOR SET, SKID MTD, 500 KW	713 HP	D-off	\$75,149	69.94	4.72	6.76	1.34	49.95	170
	G10XX015	750D	GENERATOR SET, SKID MTD, 750 KW	1,050 HP	D-off	\$124,417	105.68	7.82	11.20	2.22	73.56	215
	G10XX016	1000D	GENERATOR SET, SKID MTD, 1,000 KW	1,425 HP	D-off	\$176,610	144.92	11.10	15.89	3.15	99.84	250
<b>G15</b>	<b>GRADERS, MOTOR</b>											
	<b>SUBCATEGORY 0.00 GRADERS, MOTOR</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	G15CA001	120-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/17 TEETH SCARIFIERS	125 HP	D-off	\$203,736	37.27	9.11	10.40	3.91	8.19	299
	G15CA007	135-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/17 TEETH SCARIFIERS	135 HP	D-off	\$216,325	39.69	9.68	11.05	4.15	8.85	309
	G15CA003	12-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/17 TEETH SCARIFIERS	140 HP	D-off	\$239,524	43.13	10.73	12.25	4.60	9.18	336
	G15CA004	140-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/5 RIPPER/SCARIFIERS	165 HP	D-off	\$256,158	47.30	11.47	13.09	4.92	10.81	347



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>G15</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	G15CA008	143-H	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	185 HP	D-off	\$297,001	54.38	13.31	15.21	5.70	12.12	364
	G15CA009	160-H	GRADER, MOTOR, ARTICULATED, 6X4, 14' BLADE W/5 RIPPER/SCARIFIERS	185 HP	D-off	\$277,474	51.63	12.43	14.20	5.33	12.12	372
	G15CA010	163-H	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 14' BLADE W/5 RIPPER/SCARIFIERS	200 HP	D-off	\$321,297	58.72	14.40	16.46	6.17	13.11	388
	G15CA005	14-H	GRADER, MOTOR, ARTICULATED, 6X4, 14' BLADE W/7 SHANK RIPPER	215 HP	D-off	\$352,592	65.68	15.67	17.79	6.77	14.09	448
	G15CA006	16-H	GRADER, MOTOR, ARTICULATED, 6X4, 16' BLADE W/7 SHANK RIPPER	275 HP	D-off	\$509,691	92.80	22.67	25.75	9.79	18.02	594
	<b>DEERE &amp; COMPANY</b>											
	G15JD008	670CH	GRADER, MOTOR, ARTICULATED, 6X4, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	151 HP	D-off	\$222,288	43.84	9.78	11.02	4.27	9.90	343
	G15JD009	672CH (HFWD)	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	156 HP	D-off	\$256,310	49.21	11.31	12.78	4.92	10.22	353
	G15JD010	770CH	GRADER, MOTOR, ARTICULATED, 6X4, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	185 HP	D-off	\$257,224	51.01	11.36	12.83	4.94	12.12	353
	G15JD011	772CH (HFWD)	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	205 HP	D-off	\$290,788	57.49	12.87	14.57	5.58	13.44	363
<b>H10</b>	<b>HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)</b>											
	<b>SUBCATEGORY 0.00 HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)</b>											
	<b>NPK CONSTRUCTION EQUIPMENT</b>											
	H10NP001	E-200	HAMMERS, HYDRAULIC, 150 FT-LBS, IMPACT FREQUENCY 700 BPM (ADD 150-250 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$6,552	2.82	0.57	0.87	0.13	0.00	2
	H10NP002	E-201	HAMMERS, HYDRAULIC, 200 FT-LBS, IMPACT FREQUENCY 750 BPM (ADD 60-75 HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			\$7,278	3.09	0.64	0.97	0.15	0.00	2

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H10</b>	<b>NPK CONSTRUCTION EQUIPMENT (continued)</b>											
	H10NP003	E-202	HAMMERS, HYDRAULIC, 350 FT-LBS, IMPACT FREQUENCY 800 BPM (ADD 60-75HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			\$10,888	4.62	0.95	1.45	0.22	0.00	4
	H10NP004	E-203	HAMMERS, HYDRAULIC, 500 FT-LBS, IMPACT FREQUENCY 800 BPM (ADD 60-75 HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			\$14,012	5.73	1.22	1.87	0.28	0.00	4
	H10NP005	E-204	HAMMERS, HYDRAULIC, 750 FT-LBS, IMPACT FREQUENCY 700 BPM (ADD 75-100 HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			\$18,554	7.58	1.61	2.47	0.37	0.00	7
	H10NP006	E-205	HAMMERS, HYDRAULIC, 1,300 FT-LBS, IMPACT FREQUENCY 750 BPM (ADD 95-125 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$24,939	9.86	2.17	3.33	0.50	0.00	11
	H10NP008	E-207	HAMMERS, HYDRAULIC, 2,000 FT-LBS, IMPACT FREQUENCY 550 BPM (ADD 95-125 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$37,826	14.68	3.28	5.04	0.76	0.00	19
	H10NP009	E-208	HAMMERS, HYDRAULIC, 2,500 FT-LBS, IMPACT FREQUENCY 550 BPM (ADD 95-125 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$48,252	18.39	4.19	6.43	0.97	0.00	28
	H10NP015	E-210A	HAMMERS, HYDRAULIC, 3,000 FT-LBS, IMPACT FREQUENCY 670 BPM (ADD 20-28 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$58,777	22.14	5.11	7.84	1.19	0.00	34
	H10NP016	E-216	HAMMERS, HYDRAULIC, 5,500 FT-LBS, IMPACT FREQUENCY 500 BPM (ADD 28-43 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$80,937	30.01	7.03	10.79	1.63	0.00	56
	H10NP017	E-220	HAMMERS, HYDRAULIC, 8,000 FT-LBS, IMPACT FREQUENCY 430 BPM (ADD 33-50 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$105,723	38.82	9.18	14.10	2.13	0.00	68
	H10NP018	E-260A	HAMMERS, HYDRAULIC, 20,000 FT-LBS, IMPACT FREQUENCY 330 BPM (ADD 80-130 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			\$245,319	88.42	21.31	32.71	4.95	0.00	170

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H13 HAZARDOUS/TOXIC WASTE EQUIPMENT</b>												
	<b>SUBCATEGORY 0.11</b>		<b>COMPACTORS (Compression force) 0 THRU 50 TONS</b>									
	<b>CONSOLIDATED BALING MACHINE COMPANY, INC</b>											
H13CB001	DOS RAW WI		HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, RADIOLOGICAL WASTE, 12.5 TON, LOW LEVEL	5 HP	E	\$21,321	4.97	1.30	1.81	0.39	0.29	25
H13CB002	DOS RAW W2		HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, RADIOLOGICAL WASTE, 20 TON, LOW LEVEL	10 HP	E	\$23,069	5.79	1.41	1.96	0.43	0.58	25
	<b>BOMAG AMERICAS</b>											
H13CO002	8040		HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 37 TON HAZARD WASTE IN- DRUM , EXPLOSION PROOF	5 HP	E	\$8,664	2.44	0.53	0.74	0.16	0.29	167
	<b>ENVIRO-PAK</b>											
H13EP001	4000HM		HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 30 TON HAZARDOUS WASTE, HAZ-MAT STORAGE CONTAINER 40"X40"X40"	5 HP	E	\$20,977	4.90	1.28	1.78	0.39	0.29	32
	<b>TEEMARK CORPORATION</b>											
H13TH001	DPC60-E50		HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 30 TON DRUM CRUSHER	5 HP	E	\$11,117	2.68	0.68	0.94	0.21	0.29	19
H13TH002	DPC60-D90		HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 30 TON DRUM CRUSHER, TRAILER MOUNTED	9 HP	D-off	\$20,879	4.88	1.26	1.73	0.39	0.63	19
H13TH003	DPC85-D160		HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 42.5 TON DRUM CRUSHER, TRAILER MOUNTED	16 HP	D-off	\$26,095	6.47	1.57	2.18	0.48	1.12	36

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>ADVANCED ENVIRONMENTAL SOLUTIONS</b>											
	H13YB001	CCYC	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 700 PSI OPERATING PRESSURE, FINAL COMPACTED SIZE 39.4" X 39.4" X 39.4"	50 HP	E	\$328,166	70.28	20.01	27.89	6.06	2.89	320
	H13YB002	CCYC-HD-E	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 1,000 PSI OPERATING PRESSURE, FINAL COMPACTED SIZE 39.4" X 39.4" X 39.4"	50 HP	E	\$328,166	70.28	20.01	27.89	6.06	2.89	320
	H13YB003	CMC-HD	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 1,200 PSI OPERATING PRESSURE, FINAL COMPACTED SIZE 39.4" X 39.4" X 39.4"	50 HP	E	\$328,166	70.28	20.01	27.89	6.06	2.89	320
	<b>SUBCATEGORY 0.12 COMPACTORS (Compression force) OVER 50 TONS</b>											
	<b>BOMAG AMERICAS</b>											
	H13CO003	8550	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM	3 HP	E	\$18,223	3.73	0.95	1.21	0.34	0.17	270
	H13CO004	8560-C	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM, W/HEPA FILTER	3 HP	E	\$35,429	7.01	1.84	2.36	0.66	0.17	290
	H13CO006	8560-R	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM, W/HEPA FILTER & SS PLATEN & CHAMBER	3 HP	E	\$41,921	8.01	2.19	2.79	0.79	0.17	300
	H13CO005	8560-EXL	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM, EXPLOSION PROOF, W/LIQUID REMOVAL SYSTEM	3 HP	E	\$57,149	10.84	2.98	3.81	1.07	0.17	310
	<b>ENVIRO-PAK</b>											
	H13EP002	9600HM	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 250 TON HAZARDOUS WASTE, B-25 METAL STORAGE CONTAINER 4'X4'X6'	8 HP	E	\$34,021	6.97	1.78	2.27	0.64	0.43	100

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>SUBCATEGORY 0.21</b>		<b>FILTER PRESSES, STATIONARY</b>									
			<b>KOMLINE-SANDERSON ENGINEERING CO.</b>									
	H13AY015	L/S 1200/25	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 25 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$55,539	11.55	3.28	4.44	1.06	0.00	112
	H13AY016	K/F 1200/25	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 25 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$35,717	7.43	2.11	2.86	0.68	0.00	108
	H13AY013	L/S 1200/50	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 50 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$94,406	19.64	5.58	7.55	1.80	0.00	173
	H13AY014	K/F 1200/50	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 50 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$50,127	10.43	2.97	4.01	0.96	0.00	168
	H13AY011	L/S 1200/75	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 75 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$117,846	24.53	6.97	9.43	2.25	0.00	194
	H13AY012	K/F 1200/75	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 75 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$59,588	12.41	3.53	4.77	1.14	0.00	188
	H13AY009	L/S 1200/100	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 100 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$141,168	29.37	8.34	11.29	2.69	0.00	199
	H13AY010	K/F 1200/100	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 100 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$71,252	14.83	4.21	5.70	1.36	0.00	191
	H13AY007	L/S 1200/125	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 125 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$158,756	33.03	9.38	12.70	3.03	0.00	216

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>H13</b>	<b>KOMLINE-SANDERSON ENGINEERING CO. (continued)</b>										
	H13AY008	K/F 1200/125	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 125 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$77,191	16.06	4.56	6.18	1.47	0.00	207
	H13AY017	L/S 1200/150	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 150 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$176,359	36.69	10.42	14.11	3.36	0.00	235
	H13AY018	K/F 1200/150	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 150 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$88,958	18.52	5.26	7.12	1.70	0.00	224
	H13AY019		HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, FILTER PRESS PLATE SHIFTING UNIT, 1,200 MM SQ, MECHANIZED	1 HP	E	\$11,621	2.76	0.69	0.93	0.22	0.06	5
	H13AY020	SLC-500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, PLC CONTROL PANEL - PLATE SHIFTING, COMPUTER AUTOMATED	1 HP	E	\$15,092	3.49	0.90	1.21	0.29	0.06	2
	<b>USFILTER PERRIN PRODUCTS</b>											
	H13PR001	PLC 25-1000	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 25 CF STANDARD FILTER PRESS, 1,000 MM SQ	3 HP	E	\$107,659	22.66	6.36	8.61	2.05	0.17	125
	H13PR003	PLC 115-1200	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 115 CF STANDARD FILTER PRESS, 1,200 MM SQ	5 HP	E	\$189,851	39.95	11.22	15.19	3.62	0.29	460
	H13PR005	PLC 180-1500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 180 CF STANDARD FILTER PRESS, 1,500 MM SQ	5 HP	E	\$252,348	52.96	14.91	20.19	4.81	0.29	680
	H13PR007	PLC 270-1500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 270 CF MAXI FILTER PRESS, 1,500 MM SQ	10 HP	E	\$308,047	65.00	18.19	24.64	5.87	0.58	1,100
	H13PR022	BPR 1200-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 47" WIDE FILTER BELT PRESS, 2 HP	2 HP	E	\$223,405	46.67	13.20	17.87	4.26	0.12	191

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>H13</b>	<b>USFILTER PERRIN PRODUCTS (continued)</b>										
	H13PR023	BPR 1600-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 63" WIDE FILTER BELT PRESS, 3 HP	3 HP	E	\$255,472	53.43	15.09	20.44	4.87	0.17	258
	H13PR024	BPR 2000-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 78.75" WIDE FILTER BELT PRESS, 3 HP	3 HP	E	\$283,228	59.20	16.73	22.66	5.40	0.17	319
	H13PR025	BPR 2500-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 98.5" WIDE FILTER BELT PRESS, 3 HP	3 HP	E	\$343,234	71.68	20.27	27.46	6.54	0.17	515
	H13PR026	BPR 3000-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 118" WIDE FILTER BELT PRESS, 4 HP	4 HP	E	\$180,293	37.87	10.65	14.42	3.44	0.23	594
	<b>SUBCATEGORY 0.22 FILTER PRESSES, MOBILE</b>											
	<b>KOMLINE-SANDERSON ENGINEERING CO.</b>											
	H13AY031	L/S 1200/25M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 25 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$69,343	14.13	4.12	5.68	1.28	0.00	112
	H13AY032	K/F 1200/25M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 25 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$46,036	9.46	2.70	3.70	0.85	0.00	109
	H13AY029	L/S 1200/50M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 50 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$104,864	21.24	6.28	8.70	1.93	0.00	193
	H13AY030	K/F 1200/50M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 50 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$60,585	12.38	3.59	4.94	1.12	0.00	188
	H13AY027	L/S 1200/75M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 75 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$129,437	26.18	7.79	10.79	2.39	0.00	214
	H13AY028	K/F 1200/75M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 75 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$71,179	14.50	4.23	5.84	1.31	0.00	208

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H13</b>	<b>KOMLINE-SANDERSON ENGINEERING CO.</b> <i>(continued)</i>											
	H13AY025	L/S 1200/100M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 100 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$153,892	31.08	9.28	12.87	2.84	0.00	219
	H13AY026	K/F 1200/100M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 100 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$83,977	17.06	5.01	6.92	1.55	0.00	211
	H13AY023	L/S 1200/125M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 125 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$172,615	34.82	10.41	14.46	3.18	0.00	236
	H13AY024	K/F 1200/125M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 125 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$91,049	18.49	5.45	7.53	1.68	0.00	227
	H13AY021	L/S 1200/150M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 150 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$190,220	38.36	11.49	15.96	3.51	0.00	255
	H13AY022	K/F 1200/150M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 150 CF CONVENTIONAL, 1200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A	\$102,819	20.85	6.17	8.53	1.90	0.00	244
	<b>KOCH-WATER</b>											
	H13KP001	BFP-0500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 20" (0.5M) WIDE, 0.6 - 2.0 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	13 HP	E	\$73,413	15.89	4.45	6.19	1.35	0.72	40



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H13</b>	<b>KOCH-WATER (continued)</b>											
	H13KP002	BFP-1000	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 39" (1.0M) WIDE, 3.0 - 6.5 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	16 HP	E	\$83,221	18.14	5.05	7.02	1.54	0.90	48
	H13KP003	BFP-1500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 59" (1.5M) WIDE, 6.0 - 14.0 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	22 HP	E	\$97,897	21.66	5.95	8.27	1.81	1.27	55
	H13KP004	BFP-2000	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 79" (2.0M) WIDE, 14.0 - 20.0 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	28 HP	E	\$112,594	25.16	6.84	9.52	2.08	1.62	65
	<b>USFILTER PERRIN PRODUCTS</b>											
	H13PR002	PLC 25-1000M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 25 CF STANDARD FILTER PRESS, 1,000 MM SQ, TRAILER MOUNTED (COMPLETE)	3 HP	E	\$305,148	63.14	18.49	25.72	5.63	0.17	145
	H13PR006	180-1500M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 180 CF STANDARD FILTER PRESS, 1,500 MM SQ, TRAILER MOUNTED	5 HP	E	\$268,727	56.03	16.28	22.63	4.96	0.29	705
	H13PR011	BPR 1200-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 47" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	2 HP	E	\$421,069	86.30	25.56	35.58	7.77	0.12	235

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H13</b>	<b>USFILTER PERRIN PRODUCTS (continued)</b>											
	H13PR012	BPR 1600-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 63" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	3 HP	E	\$452,834	92.74	27.50	38.28	8.36	0.17	302
	H13PR013	BPR 2000-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 78.75" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	5 HP	E	\$480,570	98.48	29.19	40.64	8.87	0.29	319
	H13PR014	BPR 2500-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 98.5" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	8 HP	E	\$540,576	110.77	32.84	45.74	9.97	0.46	515
	H13PR015	BPR 3000-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 118" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	8 HP	E	\$615,847	125.84	37.43	52.13	11.36	0.46	594
	<b>SOMAT WASTE REDUCTION TECHNOLOGY</b>											
	H13S5001	1PB-6D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 6-15 GPM CAPACITY, TRAILER MOUNTED	3 HP	E	\$61,622	12.62	3.76	5.24	1.14	0.17	14
	H13S5002	1PB-9D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 15-40 GPM CAPACITY, TRAILER MOUNTED	5 HP	E	\$126,379	25.77	7.70	10.74	2.33	0.29	35
	H13S5003	2PB-9D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 30-80 GPM CAPACITY, TRAILER MOUNTED	5 HP	E	\$150,862	30.67	9.19	12.82	2.78	0.29	40

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H13</b>	<b>SOMAT WASTE REDUCTION TECHNOLOGY (continued)</b>											
	H13S5004	3PB-9D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 45-120 GPM CAPACITY, TRAILER MOUNTED	5 HP	E	\$209,448	42.41	12.76	17.80	3.86	0.29	52
	<b>SUBCATEGORY 0.30</b>		<b>CENTRIFUGES</b>									
	<b>BOCK ENGINEERED PRODUCTS, INC.</b>											
	H13BC013	GP 35	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 35 LB DRY WT.	3 HP	E	\$13,612	6.17	1.65	2.72	0.29	0.17	9
	H13BC010	305 TX	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 35 LB DRY WT.	3 HP	E	\$14,460	6.54	1.76	2.89	0.31	0.17	6
	H13BC012	GP 60	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 60 LB DRY WT.	3 HP	E	\$15,051	6.79	1.83	3.01	0.32	0.17	9
	H13BC006	605 TX	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 60 LB DRY WT.	3 HP	E	\$18,885	8.46	2.30	3.78	0.41	0.17	9
	H13BC011	GP 100	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 100 LB DRY WT.	5 HP	E	\$18,389	8.43	2.24	3.68	0.40	0.29	12
	H13BC003	GP 130	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 130 LB DRY WT.	5 HP	E	\$20,212	9.21	2.46	4.04	0.44	0.29	12
	H13BC009	355	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, MANUAL CONTROL, EXPLOSION PROOF, 35 LB	3 HP	E	\$24,603	10.94	2.99	4.92	0.53	0.17	6
	H13BC007	655	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, MANUAL CONTROL, EXPLOSION PROOF, 60 LB	3 HP	E	\$29,318	12.98	3.56	5.86	0.63	0.17	9
	H13BC008	755	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, MANUAL CONTROL, EXPLOSION PROOF, 100 LB	5 HP	E	\$35,862	15.99	4.36	7.17	0.77	0.29	12

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>SUBCATEGORY 0.40</b>		<b>SHREDDERS</b>									
	<b>MAC CORPORATION</b>											
	H13MN001	52-32HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 32" X 52" OPENING, TRAILER MTD, W/DIESEL GENERATOR SET/ BELT-TYPE INFEED & DISCHARGE CONVEYORS	150 HP	E	\$260,172	71.30	15.66	21.72	4.80	8.68	200
	H13MN002	62-40HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 38" X 62" OPENING, TRAILER MTD, W/DIESEL GENERATOR SET, HOOK-TYPE INFEED FOR TIRES, & DISCHARGE CONVEYOR	200 HP	E	\$315,193	88.34	18.96	26.28	5.82	11.57	300
	H13MN003	62-40HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 38" X 62" OPENING, TRAILER MTD, W/DIESEL GENERATOR SET, CRANE GRAPPLE & DISCHARGE CONVEYOR SYSTEM	200 HP	E	\$371,071	101.21	22.37	31.03	6.85	11.57	300
	H13MN004	72-46HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 45" X 72" OPENING, TRAILER MTD, W/DIESEL GENERATOR SET, CRANE GRAPPLE & DISCHARGE CONVEYOR SYSTEM	300 HP	E	\$425,094	122.42	25.65	35.62	7.84	17.36	400
	<b>SHRED-TECH LIMITED</b>											
	H13SH001	ST-25E	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 29" X 42" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	20 HP	E	\$48,445	12.04	2.95	4.12	0.89	1.16	20
	H13SH002	ST-25EL	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 29" X 46" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	20 HP	E	\$45,408	11.40	2.77	3.86	0.84	1.16	23
	H13SH003	ST-50	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 40" X 55" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	40 HP	E	\$78,121	20.09	4.76	6.64	1.44	2.31	45
	H13SH004	ST-50L	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 40" X 65" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	40 HP	E	\$81,500	20.80	4.97	6.93	1.50	2.31	50

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>H13</b>	<b>SHRED-TECH LIMITED (continued)</b>										
	H13SH005	ST-100	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 63" X 70" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	100 HP	E	\$129,586	36.27	7.90	11.01	2.39	5.79	200
	H13SH006	ST-500	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 66" X 96" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	300 HP	E	\$419,402	115.32	25.57	35.65	7.74	17.36	420
	H13SH007	ST-500L	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 66" X 115" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	600 HP	E	\$546,644	168.56	33.32	46.46	10.09	34.71	440
	<b>SUBCATEGORY 0.71 WASTE HANDLING EQUIPMENT, DRUM HANDLING</b>											
	<b>BASCO</b>											
	H13BB001	VELT 55/35	HAZARDOUS/TOXIC WASTE EQUIPMENT, WASTE HANDLING EQUIPMENT, DRUM HANDLING, DRUM FILLER, 55 GAL TOP FILL	10 HP	E	\$18,451	11.53	2.35	3.92	0.39	0.58	11
	H13BB002	2B	HAZARDOUS/TOXIC WASTE EQUIPMENT, WASTE HANDLING EQUIPMENT, DRUM CLEANER, 12 DRUM/HR CAP INTERIOR	15 HP	E	\$16,365	11.09	2.09	3.48	0.35	0.87	19
<b>H20</b>	<b>HOISTS &amp; AIR WINCHES</b>											
	<b>SUBCATEGORY 0.00 HOISTS &amp; AIR WINCHES</b>											
	<b>INGERSOLL RAND MATERIAL HANDLING</b>											
	H20BE002	FA2.5	AIR WINCH, MANUAL BRAKE, 24" DRUM, 5,000 LBS CAP, 145 FPM (ADD 700 CFM COMPRESSOR)	700 CFM	A	\$21,721	4.89	1.39	1.93	0.42	0.00	10
	H20BE003	FA5	AIR WINCH, MANUAL BRAKE, 24" DRUM, 10,000 LBS CAP, 65 FPM (ADD 700 CFM COMPRESSOR)	700 CFM	A	\$28,630	6.47	1.82	2.54	0.55	0.00	19
	H20BE004	FA10	AIR WINCH, AUTOMATIC BRAKE, 24" DRUM, 22,000 LBS CAP, 30 FPM (ADD 800 CFM COMPRESSOR)	800 CFM	A	\$46,855	10.50	2.98	4.16	0.90	0.00	35

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H25</b>	<b>HYDRAULIC EXCAVATORS, CRAWLER MOUNTED</b>											
	<b>SUBCATEGORY 0.10 0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	H25CA034	301.8	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 3,800 LBS, 0.04 CY BUCKET, 7.50' MAX DIGGING DEPTH	17 HP	D-off	\$35,265	9.15	2.37	3.31	0.71	1.19	37
	H25CA035	303 CR	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 7,500 LBS, 0.11 CY BUCKET, 9.08' MAX DIGGING DEPTH	25 HP	D-off	\$42,163	11.31	2.83	3.95	0.85	1.75	73
	H25CA036	305 CR	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 10,800 LBS, 0.17 CY BUCKET, 11.08' MAX DIGGING DEPTH	42 HP	D-off	\$69,891	18.79	4.68	6.55	1.40	2.94	109
	<b>Komatsu America International Company</b>											
	H25KM018	PC20MR-2	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 4,800 LBS, 0.05 CY BUCKET, 8'11" MAX DIGGING DEPTH	20 HP	D-off	\$41,564	10.77	2.78	3.90	0.83	1.40	51
	H25KM021	PC40MR-2	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 10,000 LBS, 0.18 CY BUCKET, 12'9" MAX DIGGING DEPTH	39 HP	D-off	\$55,648	15.42	3.73	5.22	1.12	2.73	106
	H25KM022	PC58UU-3	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 11,400 LBS, 0.29 CY BUCKET, 13'1" MAX DIGGING DEPTH	40 HP	D-off	\$71,280	18.93	4.77	6.68	1.43	2.80	115
	H25KM023	PC78US-6	HYDRAULIC EXCAVATOR, CRAWLER, 6,200 LBS, 0.37 CY BUCKET, 12'4" MAX DIGGING DEPTH	54 HP	D-off	\$87,742	23.69	5.88	8.23	1.76	3.78	159
	<b>MELROE COMPANY/BOBCAT</b>											
	H25ME001	323	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 3,600 LBS, 0.04 CY BUCKET, 7'6" MAX DIGGING DEPTH	13 HP	D-off	\$27,959	7.23	1.87	2.62	0.56	0.93	37
	H25ME002	331	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 7,200 LBS, 0.10 CY BUCKET, 10'2" MAX DIGGING DEPTH	40 HP	D-off	\$40,599	12.18	2.72	3.81	0.81	2.80	72

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H25</b>	<b>MELROE COMPANY/BOBCAT (continued)</b>											
	H25ME003	337	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 11,000 LBS, 0.18 CY BUCKET, 12' MAX DIGGING DEPTH	48 HP	D-off	\$57,765	16.62	3.87	5.42	1.16	3.36	110
	<b>SUBCATEGORY 0.11</b>		<b>OVER 12,500 LBS THRU 40,000 LBS</b>									
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	H25CA038	307C	HYDRAULIC EXCAVATOR, CRAWLER, 14,310 LBS, 0.48 CY BUCKET, 15.25' MAX DIGGING DEPTH	54 HP	D-off	\$97,341	24.64	6.24	8.59	1.94	3.78	159
	H25CA020	311-CU	HYDRAULIC EXCAVATOR, CRAWLER, 24,640 LBS, 0.60 CY BUCKET, 16.50' MAX DIGGING DEPTH	79 HP	D-off	\$128,536	33.17	8.24	11.34	2.57	5.53	258
	H25CA021	312-C L	HYDRAULIC EXCAVATOR, CRAWLER, 26,900 LBS, 0.68 CY BUCKET, 18.16' MAX DIGGING DEPTH	84 HP	D-off	\$140,844	36.15	9.03	12.43	2.81	5.89	288
	<b>KOBELCO AMERICA INC.</b>											
	H25KC017	70SR	HYDRAULIC EXCAVATOR, CRAWLER, 16,400 LBS, 0.33 CY BUCKET, 14.75' MAX DIGGING DEPTH	54 HP	D-off	\$96,317	24.43	6.17	8.50	1.92	3.78	168
	H25KC016	135SR LC	HYDRAULIC EXCAVATOR, CRAWLER, 30,870 LBS, 0.60 CY BUCKET, 19.58' MAX DIGGING DEPTH	94 HP	D-off	\$136,679	36.10	8.76	12.06	2.73	6.59	319
	<b>Komatsu America International Company</b>											
	H25KM027	PC128UU-2	HYDRAULIC EXCAVATOR, CRAWLER, 12,200 LBS, 0.58 CY BUCKET, 16' 0" MAX DIGGING DEPTH	86 HP	D-off	\$170,913	42.57	10.95	15.08	3.41	6.03	295
	H25KM001	PC 120-6	HYDRAULIC EXCAVATOR, CRAWLER, 26,950 LBS, 0.75 CY BUCKET, 18.08' MAX DIGGING DEPTH	89 HP	D-off	\$120,547	32.33	7.73	10.64	2.41	6.24	265
	H25KM003	PC 160LC-7	HYDRAULIC EXCAVATOR, CRAWLER, 39,400 LBS, 1.12 CY BUCKET, 19.58' MAX DIGGING DEPTH	110 HP	D-off	\$186,684	47.81	11.97	16.47	3.73	7.71	395

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>LINK-BELT CONSTRUCTION EQUIPMENT COMPANY</b>												
	H25LI003	130 LX	HYDRAULIC EXCAVATOR, CRAWLER, 27,100 LBS, 0.50 CY BUCKET, 18' 2" MAX DIGGING DEPTH	89 HP	D-off	\$124,987	33.25	8.01	11.03	2.49	6.24	271
	H25LI005	160 LX	HYDRAULIC EXCAVATOR, CRAWLER, 35,275 LBS, 0.66 CY BUCKET, 20' 1" MAX DIGGING DEPTH	101 HP	D-off	\$146,136	38.63	9.37	12.89	2.92	7.08	362
<b>SUBCATEGORY 0.12 OVER 40,000 LBS THRU 100,000 LBS</b>												
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
	H25CA040	318CL	HYDRAULIC EXCAVATOR, CRAWLER, 40,600 LBS, 1.00 CY BUCKET, 22.50' MAX DIGGING DEPTH	125 HP	D-off	\$147,363	34.17	7.47	9.21	2.86	8.76	405
	H25CA022	320C	HYDRAULIC EXCAVATOR, CRAWLER, 43,800 LBS, 1.50 CY BUCKET, 21.75' MAX DIGGING DEPTH	128 HP	D-off	\$214,177	45.30	10.86	13.39	4.16	8.97	444
	H25CA023	320CL	HYDRAULIC EXCAVATOR, CRAWLER, 49,000 LBS, 0.80 CY BUCKET, 39.0' MAX DIGGING DEPTH, LONG REACH BOOM	128 HP	D-off	\$271,393	54.61	13.75	16.96	5.27	8.97	536
<b>KOBELCO AMERICA INC.</b>												
	H25KC019	SK210 LC	HYDRAULIC EXCAVATOR, CRAWLER, 48,000 LBS, 1.13 CY BUCKET, 22.00' MAX DIGGING DEPTH	143 HP	D-off	\$213,590	46.42	10.83	13.35	4.15	10.02	480
	H25KC020	SK210 LC	HYDRAULIC EXCAVATOR, CRAWLER, 53,400 LBS, 0.63 CY BUCKET, 39' MAX DIGGING DEPTH, LONG REACH BOOM	143 HP	D-off	\$235,740	50.01	11.94	14.73	4.57	10.02	534
	H25KC021	SK250 LC	HYDRAULIC EXCAVATOR, CRAWLER, 55,100 LBS, 1.875 CY BUCKET, 23.08' MAX DIGGING DEPTH	176 HP	D-off	\$249,398	54.93	12.64	15.59	4.84	12.33	551
	H25KC022	SK250 LC	HYDRAULIC EXCAVATOR, CRAWLER, 59,100 LBS, 0.50 CY BUCKET, 23' MAX DIGGING DEPTH, LONG REACH BOOM	176 HP	D-off	\$282,561	60.33	14.31	17.66	5.48	12.33	591
	H25KC023	SK330 LC	HYDRAULIC EXCAVATOR, CRAWLER, 77,800 LBS, 2.05 CY BUCKET, 24.58' MAX DIGGING DEPTH	238 HP	D-off	\$351,945	76.67	17.83	22.00	6.83	16.67	778



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>Komatsu America International Company</b>											
	H25KM013	PC 400 LC-6	HYDRAULIC EXCAVATOR, CRAWLER, 99,517 LBS, 2.75 CY BUCKET, 25.50' MAX DIGGING DEPTH	306 HP	D-off	\$549,693	114.42	27.85	34.36	10.67	21.44	952
	<b>SUBCATEGORY 0.13 OVER 100,000 LBS THRU 160,000 LBS</b>											
	<b>KOBELCO AMERICA INC.</b>											
	H25KC024	SK400 LC	HYDRAULIC EXCAVATOR, CRAWLER, 101,900 LBS 3.06 CY BUCKET, 25.58' MAX DIGGING DEPTH	306 HP	D-off	\$446,776	85.89	19.00	20.94	8.53	21.44	1,019
	H25KC026	SK480LC	HYDRAULIC EXCAVATOR, CRAWLER, 108,000 LBS, 2.25 CY BUCKET, 25.58' MAX DIGGING DEPTH	315 HP	D-off	\$468,061	89.56	19.90	21.94	8.93	22.07	1,080
	<b>Komatsu America International Company</b>											
	H25KM015	PC 600 LC-7	HYDRAULIC EXCAVATOR, CRAWLER, 133,160 LBS, 4.25 CY BUCKET, 27.83' MAX DIGGING DEPTH	384 HP	D-off	\$803,754	142.25	34.18	37.68	15.34	26.90	1,332
	<b>SUBCATEGORY 0.14 OVER 160,000 LBS</b>											
	<b>Komatsu America International Company</b>											
	H25KM009	PC 750LC-7	HYDRAULIC EXCAVATOR, CRAWLER, 171,070 LBS, 4.05 CY BUCKET, 27.66' MAX DIGGING DEPTH	454 HP	D-off	\$962,787	157.49	37.24	38.00	18.24	31.81	1,750
	H25KM033	PC1800-6	HYDRAULIC EXCAVATOR, CRAWLER, 396,800 LBS, 15.70 CY BUCKET, 30'5" MAX DIGGING DEPTH	908 HP	D-off	\$1,927,554	315.22	74.56	76.09	36.51	63.61	3,968
	<b>SUBCATEGORY 0.21 ATTACHMENTS, MOBILE SHEARS</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	H25CA055	S305	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 9.4" JAW OPENING (ADD 10,000 LB HYDRAULIC EXCAVATOR)			\$23,751	8.54	2.15	3.36	0.47	0.00	15

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H25</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	H25CA057	S320	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 15.4" JAW OPENING (ADD 20,000 LB HYDRAULIC EXCAVATOR)			\$80,690	28.47	7.30	11.43	1.58	0.00	57
	H25CA052	S230	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 22.0" JAW OPENING (ADD 35,000 LB HYDARULIC EXCAVATOR)			\$91,345	32.82	8.26	12.94	1.79	0.00	84
	H25CA053	S250	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 28.0" JAW OPENING (ADD 45,000 LB HYDRAULIC EXCAVATOR)			\$123,634	44.00	11.19	17.51	2.43	0.00	158
	H25CA054	S280	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 32.0" JAW OPENING (ADD 100,000 LB HYDRAULIC EXCAVATOR)			\$159,066	57.55	14.39	22.53	3.12	0.00	191
	H25CA056	S2130	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 43.0" JAW OPENING (ADD 100,000 LB HYDRAULIC EXCAVATOR)			\$259,964	92.17	23.53	36.83	5.11	0.00	307
	<b>LABOUNTY MANUFACTURING,</b>											
	H25LU001	MSD 7	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 10" JAW OPENING (ADD 10,000 LB HYDRAULIC EXCAVATOR)			\$19,211	6.99	1.74	2.72	0.38	0.00	10
	H25LU002	MSD 7R	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 10" JAW OPENING (ADD 14,000 LB HYDRAULIC EXCAVATOR)			\$21,132	7.75	1.92	2.99	0.42	0.00	11
	H25LU003	MSD 15	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 18" JAW OPENING (ADD 20,000 LB HYDRAULIC EXCAVATOR)			\$40,510	14.70	3.67	5.74	0.80	0.00	30
	H25LU004	MSD 15R	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 18" JAW OPENING (ADD 25,000 LB HYDRAULIC EXCAVATOR)			\$47,093	17.05	4.26	6.67	0.92	0.00	35
	H25LU005	MSD 30 - III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 22" JAW OPENING (ADD 25,000 LB HYDRAULIC EXCAVATOR)			\$58,988	21.34	5.34	8.36	1.16	0.00	50
	H25LU006	MSD 30R - III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 22" JAW OPENING (ADD 35,000 LB HYDRAULIC EXCAVATOR)			\$82,682	29.85	7.48	11.71	1.62	0.00	67

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H25</b>	<b>LABOUNTY MANUFACTURING, (continued)</b>											
	H25LU007	MSD 40-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 27" JAW OPENING (ADD 40,000 LB HYDRAULIC EXCAVATOR)			\$70,416	25.55	6.37	9.98	1.38	0.00	70
	H25LU008	MSD 40R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 27" JAW OPENING (ADD 45,000 LB HYDRAULIC EXCAVATOR)			\$92,117	33.19	8.34	13.05	1.81	0.00	90
	H25LU009	MSD 50-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 32" JAW OPENING (ADD 45,000 LB HYDRAULIC EXCAVATOR)			\$101,020	36.34	9.14	14.31	1.98	0.00	109
	H25LU010	MSD 50R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 32" JAW OPENING (ADD 60,000 LB HYDRAULIC EXCAVATOR)			\$121,291	43.59	10.97	17.18	2.38	0.00	140
	H25LU011	MSD 70-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 35" JAW OPENING (ADD 60,000 LB HYDRAULIC EXCAVATOR)			\$120,211	43.23	10.88	17.03	2.36	0.00	130
	H25LU012	MSD 70R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 35" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			\$147,152	52.97	13.32	20.85	2.89	0.00	164
	H25LU013	MSD 100-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 38" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			\$152,186	54.80	13.77	21.56	2.99	0.00	150
	H25LU014	MSD 100R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 38" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			\$177,084	63.74	16.03	25.09	3.48	0.00	180
	<b>SUBCATEGORY 0.22 ATTACHMENTS, MATERIAL HANDLING</b>											
	<b>BALDERSON, INC.</b>											
	H25BS001		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 0.50 CY BUCKET, W/TIPS (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			\$4,565	1.44	0.40	0.61	0.09	0.00	10
	H25BS002		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 0.75 CY BUCKET, W/TIPS (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			\$5,235	1.66	0.46	0.70	0.11	0.00	16
	H25BS003		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 1.25 CY BUCKET, W/TIPS (ADD 25,000-60,000 LB HYDRAULIC EXCAVATOR)			\$5,576	1.75	0.48	0.74	0.11	0.00	30

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>H25</b>	<b>BALDERSON, INC. (continued)</b>											
	H25BS004		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 1.50 CY BUCKET, W/TIPS (ADD 50,000-60,000 LB HYDRAULIC EXCAVATOR)			\$7,021	2.21	0.61	0.94	0.14	0.00	22
	H25BS005		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 3.25 CY BUCKET, W/TIPS (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			\$10,746	3.39	0.94	1.43	0.22	0.00	52
	<b>LABOUNTY MANUFACTURING,</b>											
	H25LU023	100 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 1.25CY, 3- TINE/ 4-TINE (ADD 25,000 LB HYDRAULIC EXCAVATOR)			\$11,196	3.78	0.98	1.49	0.23	0.00	16
	H25LU024	110 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 3.50CY, 4- TINE/ 5-TINE (ADD 35,000 LB HYDRAULIC EXCAVATOR)			\$15,867	5.30	1.38	2.12	0.32	0.00	28
	H25LU025	120 TR	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 3.50CY, 4- TINE/ 5-TINE (ADD 45,000 LB HYDRAULIC EXCAVATOR)			\$19,444	6.52	1.69	2.59	0.39	0.00	35
	H25LU026	140 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 5.50CY, 4- TINE/ 5-TINE (ADD 60,000 LB HYDRAULIC EXCAVATOR)			\$22,057	7.45	1.92	2.94	0.45	0.00	48
	H25LU027	160 TR	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 6.50CY, 4- TINE/ 5-TINE (ADD 75,000 LB HYDRAULIC EXCAVATOR)			\$24,648	8.37	2.15	3.29	0.50	0.00	58
	H25LU028	170 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 9.00CY, 4- TINE/ 5-TINE (ADD 100,000 LB HYDRAULIC EXCAVATOR)			\$31,493	10.63	2.74	4.20	0.64	0.00	78
	H25LU034	RDG 60	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, ROTATING GRAPPLE, 1.75 CY (ADD 38,000-70,000 LB HYDRAULIC EXCAVATOR)			\$46,086	15.31	4.00	6.14	0.93	0.00	35

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>H25</b>	<b>LABOUNTY MANUFACTURING, (continued)</b>											
	H25LU035	RDG 90	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, ROTATING GRAPPLE, 1.25 CY (ADD 70,000-140,000 LB HYDRAULIC EXCAVATOR)			\$48,853	16.29	4.25	6.51	0.99	0.00	69
	H25LU036	RDG 120	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, ROTATING GRAPPLE, 2.00 CY (ADD 120,000-160,000 LB HYDRAULIC EXCAVATOR)			\$51,598	17.25	4.48	6.88	1.04	0.00	100
	<b>WAIN-ROY, INC.</b>											
	H25WN001		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, BUCKET, 36" CONCRETE/PAVEMENT REMOVAL (ADD 75,000 LB HYDRAULIC EXCAVATOR)			\$6,477	2.04	0.56	0.86	0.13	0.00	16
	<b>SUBCATEGORY 0.23 ATTACHMENTS, CONCRETE PULVERIZERS</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	H25CA058	CR3	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 16.0" JAW OPENING (ADD 40,000 LB MIN HYDRAULIC EXCAVATOR)			\$19,434	7.55	1.76	2.75	0.38	0.00	6
	H25CA059	P16	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 30.0" JAW OPENING (ADD 40,000 LB MIN HYDRAULIC EXCAVATOR)			\$70,700	26.28	6.40	10.02	1.39	0.00	53
	H25CA060	P28	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 34.0" JAW OPENING (ADD 40,000 LB MIN HYDRAULIC EXCAVATOR)			\$104,063	38.53	9.41	14.74	2.04	0.00	87
	H25CA061	CR28	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 36.0" JAW OPENING (ADD 45,000 LB MIN HYDRAULIC EXCAVATOR)			\$90,788	33.71	8.21	12.86	1.78	0.00	81
	H25CA062	P60	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 45.0" JAW OPENING (ADD 45,000 LB MIN HYDRAULIC EXCAVATOR)			\$166,013	61.19	15.02	23.52	3.26	0.00	194

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H25</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	H25CA063	CR35	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 47.0" JAW OPENING (ADD 50,000 LB MIN HYDRAULIC EXCAVATOR)			\$118,829	44.04	10.75	16.83	2.33	0.00	111
	H25CA064	CR50	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 63.0" JAW OPENING (ADD 50,000 LB MIN HYDRAULIC EXCAVATOR)			\$144,421	53.45	13.07	20.46	2.84	0.00	155
	<b>KENT DEMOLITION TOOLS</b>											
	H25KN001	KF12 TLB	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 2,000 FT-LB, W/4.25" DIA. POINT (ADD 16,000-24,000 LB HYDRAULIC EXCAVATOR)			\$28,333	10.79	2.57	4.01	0.56	0.00	19
	H25KN002	KF19 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 3,000 FT-LB, W/4.75" DIA. POINT (ADD 26,000-36,000 LB HYDRAULIC EXCAVATOR)			\$39,188	14.73	3.55	5.55	0.77	0.00	31
	H25KN003	KF22 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 4,000 FT-LB, W/5.25" DIA. POINT (ADD 36,000-50,000 LB HYDRAULIC EXCAVATOR)			\$47,792	17.86	4.33	6.77	0.94	0.00	38
	H25KN004	KF27 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 5,000 FT-LB, W/5.51" DIA. POINT (ADD 50,000-64,000 LB HYDRAULIC EXCAVATOR)			\$54,926	20.45	4.97	7.78	1.08	0.00	43
	H25KN005	KHB40G 11	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 7,000 FT-LB, W/6.25" DIA. POINT (ADD 64,000-88,000 LB HYDRAULIC EXCAVATOR)			\$79,011	29.69	7.15	11.19	1.55	0.00	75
	H25KN006	KF70 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 10,000 FT-LB, W/7.09 " DIA. POINT (ADD 80,000 LB HYDRAULIC EXCAVATOR)			\$110,728	41.21	10.02	15.69	2.17	0.00	103
	<b>LABOUNTY MANUFACTURING,</b>											
	H25LU046	CP 40	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 30" JAW OPENING (ADD 40,000 LB HYDRAULIC EXCAVATOR)			\$23,379	8.99	2.12	3.31	0.46	0.00	29

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H25</b>	<b>LABOUNTY MANUFACTURING, (continued)</b>											
	H25LU047	CP 60	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 36" JAW OPENING (ADD 60,000 LB HYDRAULIC EXCAVATOR)			\$26,911	10.37	2.44	3.81	0.53	0.00	30
	H25LU048	CP 80	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 42" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			\$30,446	11.76	2.76	4.31	0.60	0.00	45
	H25LU049	CP 100	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 48" JAW OPENING (ADD 100,000 LB HYDRAULIC EXCAVATOR)			\$36,916	14.20	3.34	5.23	0.72	0.00	62
	H25LU050	CP 120	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 54" JAW OPENING (ADD 140,000 LB HYDRAULIC EXCAVATOR)			\$45,043	17.25	4.07	6.38	0.88	0.00	99
	H25LU040	UP 45 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRACKING JAWS, 45" JAW OPENING (ADD 55,000 LB HYDRAULIC EXCAVATOR)			\$99,479	36.87	9.00	14.09	1.95	0.00	105
	H25LU041	UP 75 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRACKING JAWS, 49" JAW OPENING (ADD 80,000 LB HYDRAULIC EXCAVATOR)			\$121,800	44.98	11.02	17.26	2.39	0.00	127
	H25LU042	UP 90	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRACKING JAWS, 62" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			\$144,282	53.89	13.05	20.44	2.83	0.00	171
	H25LU053	UP 45 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 36" JAW OPENING (ADD 55,000 LB HYDRAULIC EXCAVATOR)			\$104,516	38.70	9.46	14.81	2.05	0.00	105
	H25LU054	UP 75 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 40" JAW OPENING (ADD 80,000 LB HYDRAULIC EXCAVATOR)			\$128,844	47.54	11.66	18.25	2.53	0.00	126
	<b>SUBCATEGORY 0.24 ATTACHMENTS, COMPACTORS</b>											
	<b>ALLIED CONSTRUCTION PRODUCTS</b>											
	H25AU001	4700 W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 18" X 12" PLATE, 3,000 LBS FORCE (ADD 15,000-20,000 LB HYDRAULIC EXCAVATOR)			\$6,644	2.41	0.60	0.94	0.13	0.00	4

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>H25</b>	<b>ALLIED CONSTRUCTION PRODUCTS</b> <i>(continued)</i>											
	H25AU002	8700C W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 34" X 24" PLATE, 6,400 LBS FORCE (ADD 20,000-30,000 LB HYDRAULIC EXCAVATOR)			\$7,614	2.77	0.69	1.08	0.15	0.00	9
	H25AU003	9700C W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 40" X 29" PLATE, 13,000 LBS FORCE (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			\$10,589	3.85	0.96	1.50	0.21	0.00	16
	H25AU004	9800 W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 46" X 34" PLATE, 20,000 LBS FORCE (ADD 40,000-75,000 LB HYDRAULIC EXCAVATOR)			\$16,525	6.00	1.49	2.34	0.32	0.00	23
	H25AU005	9801 W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 46" X 34" PLATE, 22,000 LBS FORCE (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			\$16,567	6.02	1.51	2.35	0.33	0.00	23
	<b>AMERICAN COMPACTION EQUIPMENT, INC.</b>											
	H25AX001	DC-24BL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 23" WIDE, SHEEPS FOOT, 3 RIMS - 38" DIA (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			\$6,579	2.39	0.60	0.93	0.13	0.00	25
	H25AX003	DC-24EX	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 23" WIDE, SHEEPS FOOT, 3 RIMS - 42" DIA (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			\$7,899	2.87	0.72	1.12	0.16	0.00	33
	H25AX005	DC-24EXL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 23" WIDE, SHEEPS FOOT, 3 RIMS - 48" DIA (ADD 75,000-110,000 LB HYDRAULIC EXCAVATOR)			\$8,912	3.24	0.81	1.26	0.18	0.00	39
	H25AX002	DC-36BL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 35" WIDE, SHEEPS FOOT, 4 RIMS - 38" DIA (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			\$7,705	2.80	0.70	1.09	0.15	0.00	33
	H25AX004	DC-36EX	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 35" WIDE, SHEEPS FOOT, 4 RIMS - 42" DIA (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			\$9,524	3.46	0.87	1.35	0.19	0.00	43



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>H25</b>	<b>AMERICAN COMPACTION EQUIPMENT, INC. (continued)</b>											
	H25AX006	DC-36EXL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 36" WIDE, SHEEPS FOOT, 4 RIMS - 48" DIA (ADD 75,000-110,000 LB HYDRAULIC EXCAVATOR)			\$10,955	3.98	1.00	1.55	0.22	0.00	53
	<b>KENT DEMOLITION TOOLS</b>											
	H25KN007	KHP-35 FT	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 12" X 26" PLATE, 3000 LB FORCE (ADD 14,000-25,000 LB HYDRAULIC EXCAVATOR)			\$5,645	2.20	0.51	0.80	0.11	0.00	4
	H25KN009	KHP-135FT - II	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 28" X 40" PLATE, 13500 LB FORCE (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			\$11,640	4.38	1.06	1.65	0.23	0.00	14
	H25KN010	KHP-210FT - II	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 34" X 46" PLATE, 21000 LB FORCE (ADD 40,000-75,000 LB HYDRAULIC EXCAVATOR)			\$16,053	5.98	1.46	2.27	0.32	0.00	23
	<b>WAIN-ROY, INC.</b>											
	H25WN002	24-3 (15-22.5 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 24" WIDE, SHEEPSFOOT, 3 RIMS - 33" DIA (ADD 15-22.5 TON HYDRAULIC EXCAVATOR)			\$6,864	2.49	0.62	0.97	0.13	0.00	22
	H25WN003	36-4 (15-22.5 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 36" WIDE, SHEEPSFOOT, 4 RIMS - 33" DIA (ADD 15-22.5 TON HYDRAULIC EXCAVATOR)			\$7,518	2.74	0.69	1.07	0.15	0.00	26
	H25WN004	24-3 (22.5-30 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 24" WIDE, SHEEPSFOOT, 3 RIMS - 39" DIA (ADD 22.5-30 TON HYDRAULIC EXCAVATOR)			\$8,205	2.98	0.74	1.16	0.16	0.00	31
	H25WN005	36-4 (22.5-30 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 36" WIDE, SHEEPSFOOT, 4 RIMS - 39" DIA (ADD 22.5-30 TON HYDRAULIC EXCAVATOR)			\$9,299	3.38	0.84	1.32	0.18	0.00	38

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT	
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL		
<b>H30</b>	<b>HYDRAULIC EXCAVATORS, WHEEL MOUNTED</b>												
	<b>SUBCATEGORY 0.01 0 THRU 1.0 CY</b>												
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
	H30CA005	M318 C	HYDRAULIC EXCAVATORS, WHEEL, 33,700 LBS, 1.00 CY BUCKET, 1-PIECE BOOM, 19' DIGGING DEPTH, 4X4	151 HP	D-off	\$198,585	50.14	12.99	18.00	3.99	9.90	393	
	H30CA007	M315C	HYDRAULIC EXCAVATORS, WHEEL, 35,100 LBS, 0.70 CY BUCKET, 1-PIECE BOOM, 17' 7" DIGGING DEPTH, 4X4X2	121 HP	D-off	\$165,869	41.95	10.72	14.77	3.33	7.93	352	
	<b>GRADALL COMPANY</b>												
	H30GA006	XL4100 II	HYDRAULIC EXCAVATORS, WHEEL, 44,851 LBS, 0.75 CY BUCKET, TELESCOPIC BOOM, 22' 6" DIGGING DEPTH, 6X4	233 HP	D-off	D-on	\$261,756	68.12	17.20	23.89	5.25	15.27	469
	H30GA007	XL 3300	HYDRAULIC EXCAVATORS, WHEEL, 15,270 LBS, 0.68 CY BUCKET, TELESCOPIC BOOM, 4X4X2	138 HP	D-off	\$198,132	48.53	13.07	18.18	3.98	9.04	370	
	<b>SUBCATEGORY 0.02 OVER 1.0 CY</b>												
	<b>GRADALL COMPANY</b>												
	H30GA008	XL 5100	HYDRAULIC EXCAVATORS, WHEEL, 22,800 LBS, 1.25 CY BUCKET, TELESCOPIC BOOM, 25' 4" DIGGING DEPTH, 6X4	163 HP	D-off	230 HP D-on	\$307,566	72.01	17.13	22.15	6.05	13.85	553
	<b>Komatsu America International Company</b>												
	H30KM001	PW170ES-6	HYDRAULIC EXCAVATORS, WHEEL, 37,600 LBS, 1.12 CY BUCKET, 1-PIECE BOOM, 18' 8" DIGGING DEPTH, 4X4	123 HP	D-off	\$212,071	45.55	11.97	15.60	4.17	8.06	376	

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>H35 HYDRAULIC SHOVELS, CRAWLER MOUNTED</b>											
<b>SUBCATEGORY 0.12 DIESEL, OVER 5.0 CY</b>												
<b>HITACHI CONSTRUCTION MACHINERY</b>												
H35HI006	EX1200-5		HYDRAULIC SHOVEL, CRAWLER, 8.5 CY BUCKET, FRONT SHOVEL, 17' 3" DIGGING DEPTH	641 HP	D-off	\$1,184,083	236.20	51.41	59.20	21.81	44.91	2,447
<b>O &amp; K ORENSTEIN &amp; KOPPEL INC.</b>												
H35OK001	RH 40 E		HYDRAULIC SHOVEL, CRAWLER, 9.20 CY BUCKET, BACKHOE, 28' 10" DIGGING DEPTH	607 HP	D-off	\$750,245	164.50	32.58	37.51	13.82	42.53	2,204
H35OK003	RH 90 C		HYDRAULIC SHOVEL, CRAWLER, 13.10 CY BUCKET, BACKHOE, 31' 1" DIGGING DEPTH	1,018 HP	D-off	\$1,523,833	318.23	66.17	76.19	28.07	71.32	3,594
H35OK004	RH 120 C		HYDRAULIC SHOVEL, CRAWLER, 17.00 CY BUCKET, FRONT SHOVEL, 7' 7" DIGGING DEPTH	1,280 HP	D-off	\$2,431,036	482.28	105.56	121.55	44.78	89.68	5,842
H35OK005	RH 200		HYDRAULIC SHOVEL, CRAWLER, 34.00 CY BUCKET, BACKHOE, 30' 6" DIGGING DEPTH	2,250 HP	D-off	\$4,583,666	897.26	199.03	229.18	84.44	157.64	10,582
<b>L10 LAND CLEARING EQUIPMENT</b>												
<b>SUBCATEGORY 0.00 LAND CLEARING EQUIPMENT</b>												
<b>BALDERSON, INC.</b>												
L10BS004	BBL7		LAND CLEARING EQUIPMENT, ROCK & ROOT RAKE, 12.0' WIDE, 9 TEETH (ADD 200 - 250 HP TRACTOR DOZER)			\$8,970	2.10	0.53	0.72	0.17	0.00	24
L10BS005	BRK8		LAND CLEARING EQUIPMENT, ROCK & ROOT RAKE 12.5' WIDE, 9 TEETH (ADD 275 - 325 HP TRACTOR DOZER)			\$23,679	5.17	1.40	1.89	0.45	0.00	72
L10BS002	BMA8		LAND CLEARING EQUIPMENT, MULTI-APPLICATION RAKE, 12.5' WIDE, 9 TEETH (ADD 275 - 325 HP TRACTOR DOZER)			\$26,003	5.65	1.54	2.08	0.50	0.00	68

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>L10</b>	<b>BALDERSON, INC. (continued)</b>											
	L10BS007	988 DTC	LAND CLEARING EQUIPMENT, LOGGING FORK, 92" TINES (ADD 400 - 450 HP FE LOADER)			\$33,407	7.37	1.98	2.67	0.64	0.00	90
	<b>BUSH HOG</b>											
	L10BU009	FH174	LAND CLEARING EQUIPMENT, FLAIL MOWER, 62" WIDE, 0.5 - 5" HEIGHT (ADD FARM 30 - 60 HP TRACTOR)			\$4,506	1.83	0.27	0.36	0.09	0.00	10
	L10BU005	SM-60	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 5' WIDE-SIDE MTD (ADD FARM 50 HP TRACTOR)			\$8,522	2.85	0.50	0.68	0.16	0.00	17
	L10BU010	287	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 7' WIDE, 1.5 - 12" HEIGHT (ADD FARM 40 HP TRACTOR)			\$4,309	1.68	0.25	0.34	0.08	0.00	11
	L10BU011	3210	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 10.5' WIDE, 2 - 14" HEIGHT (ADD FARM 70 HP TRACTOR)			\$9,257	3.41	0.55	0.74	0.18	0.00	25
	L10BU012	3715	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 15' WIDE, 2 - 14" HEIGHT (ADD FARM 80 HP TRACTOR)			\$18,996	5.91	1.12	1.52	0.36	0.00	50
	L10BU013	2720	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 20' WIDE, 2 - 14" HEIGHT (ADD FARM 90 HP TRACTOR)			\$19,660	6.54	1.16	1.57	0.37	0.00	56
	<b>ROME PLOW CO.</b>											
	L10RM001	RV8N	LAND CLEARING EQUIPMENT, V-TREE CUTTER (ADD 275 - 325 HP TRACTOR DOZER)			\$44,869	9.64	2.66	3.59	0.86	0.00	134
	L10RM002	MA-152R-8S	LAND CLEARING EQUIPMENT, MULTI-APPLICATION RAKE, 12' 8" WIDE, 9 TEETH (ADD 275 - 325 HP TRACTOR DOZER)			\$38,452	7.91	2.27	3.08	0.73	0.00	150
	<b>VERMEER MANUFACTURING CO.</b>											
	L10VE010	SC 252	LAND CLEARING EQUIPMENT, STUMPER, 16" DIA WHEEL, TRAILER MTD	25 HP	G	\$12,497	7.22	0.73	0.98	0.24	4.09	11
	L10VE002	SC 630B	LAND CLEARING EQUIPMENT, STUMPER, 18" DIA WHEEL, TRAILER MTD	34 HP	G	\$16,080	9.64	0.94	1.25	0.31	5.56	17
	L10VE009	SC 752	LAND CLEARING EQUIPMENT, STUMPER, 25" DIA WHEEL, TRAILER MTD	75 HP	G	\$31,366	20.41	1.84	2.48	0.60	12.27	40

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>L10</b>	<b>VERMEER MANUFACTURING CO.</b> <i>(continued)</i>										
	L10VE005	TS-30	LAND CLEARING EQUIPMENT, TREE SPADE, 30" DIA, 26" DEPTH, TRAILER MTD	13 HP	G	\$11,434	4.79	0.67	0.89	0.22	2.13	38
	L10VE006	TS-44A	LAND CLEARING EQUIPMENT, TREE SPADE, 44" DIA, 40" DEPTH, TRAILER MTD	20 HP	G	\$25,018	8.88	1.47	1.97	0.48	3.27	66
	L10VE007	TS-50M	LAND CLEARING EQUIPMENT, TREE SPADE, 50" DIA, 48" DEPTH (ADD 13,800 GVW TRUCK)			\$22,399	6.11	1.33	1.79	0.43	0.00	81
<b>L15</b>	<b>LANDSCAPING EQUIPMENT</b>											
	<b>SUBCATEGORY 0.00 LANDSCAPING EQUIPMENT</b>											
	<b>BOWIE INDUSTRIES, INC.</b>											
	L15BW001	LANCER 500	LANDSCAPING EQUIPMENT, 500 GAL, HYDROMULCHER, TRAILER MTD	25 HP	G	\$14,599	12.51	1.83	3.03	0.31	5.45	25
	L15BW002	VICTOR 800	LANDSCAPING EQUIPMENT, 800 GAL, HYDROMULCHER, TRAILER MTD	35 HP	G	\$26,301	20.13	3.29	5.45	0.56	7.64	48
	L15BW003	VICTOR 1100	LANDSCAPING EQUIPMENT, 1,100 GAL, HYDROMULCHER, GOOSENECK TRAILER MTD	50 HP	G	\$30,167	25.48	3.78	6.27	0.64	10.91	60
	L15BW004	IMPERIAL 3000	LANDSCAPING EQUIPMENT, 3,000 GAL, HYDROMULCHER, TRUCK MTD (ADD 55,000 GVW TRUCK)	90 HP	D-off	\$42,899	27.69	5.47	9.12	0.91	7.73	88
	<b>FINN CORPORATION</b>											
	L15FG001	T330	LANDSCAPING EQUIPMENT, 3,000 GAL, HYDROSEEDER, TRUCK MTD (INCLUDES 56,000 GVW TRUCK)	115 HP	D-off	\$166,059	89.61	21.16	35.29	3.51	14.08	96
	L15FG002	B260T	LANDSCAPING EQUIPMENT, MULCHER, STRAW BLOWER, 20 TONS PER HOUR, TRAILER MOUNTED	115 HP	D-off	\$37,891	27.77	4.77	7.93	0.80	9.88	48
	<b>HOFFCO-COMET</b>											
	L15HZ001	PH980E	POST HOLE DRILL, UP TO 8" DIA, 30" DEEP, ONE MAN OPERATION	3 HP	G	\$1,040	1.18	0.13	0.22	0.02	0.65	1

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>DEERE &amp; COMPANY</b>												
L15JD001	F725		LANDSCAPING EQUIPMENT, LAWNMOWER, 54" DECK, SIDE DISCHARGE RIDING, 4X2	20 HP	G	\$9,773	9.69	0.83	1.24	0.21	4.36	12
L15JD005	MX5		LANDSCAPING EQUIPMENT, ROTARY MOWER, 60" WIDE, MEDIUM DUTY, PTO DRIVE (ADD 45 - 100 HP AGRICULTURAL TRACTOR)			\$1,836	0.82	0.24	0.39	0.04	0.00	8
L15JD006	609		LANDSCAPING EQUIPMENT, ROTARY MOWER, 60" WIDE, HEAVY DUTY, PTO DRIVE (ADD 45 - 100 HP AGRICULTURAL TRACTOR)			\$3,461	1.54	0.44	0.74	0.07	0.00	12
<b>TORO</b>												
L15TO001	22172 - PRO-LINE 21"		LANDSCAPING EQUIPMENT, LAWNMOWER, 21" DECK, REAR BAGGER, PUSH MOWER	6 HP	G	\$1,252	2.02	0.17	0.27	0.03	1.31	1
L15TO002	30316 MID-SIZE		LANDSCAPING EQUIPMENT, LAWNMOWER, 32" DECK, SIDE DISCHARGE, RIDING MOWER	13 HP	G	\$3,207	4.61	0.39	0.63	0.07	2.84	4
L15TO003	Z147		LANDSCAPING EQUIPMENT, LAWNMOWER, 48" DECK W/Z100 TRACTOR, SIDE DISCHARGE, RIDING MOWER	17 HP	G	\$7,736	7.58	0.96	1.59	0.16	3.71	11
L15TO004	Z149		LANDSCAPING EQUIPMENT, LAWNMOWER, 52" DECK W/Z100 TRACTOR, SIDE DISCHARGE, RIDING MOWER	19 HP	G	\$8,549	8.43	1.06	1.76	0.18	4.15	11
L15TO006	Z587L		LANDSCAPING EQUIPMENT, LAWNMOWER, 60" DECK W/Z500 TRACTOR, SIDE DISCHARGE, RIDING MOWER	27 HP	G	\$14,651	13.16	1.81	3.00	0.31	5.89	18
L15TO007	Z587L		LANDSCAPING EQUIPMENT, LAWNMOWER, 72" DECK, W/Z500 TRACTOR, SIDE DISCHARGE, RIDING MOWER	27 HP	G	\$16,426	13.94	2.04	3.37	0.35	5.89	20
<b>WILLMAR EQUIPMENT COMPANY</b>												
L15WI001	S-200		LANDSCAPING EQUIPMENT, SPREADER, 85 CF DRY CHEMICAL (ADD 55 HP FARM TRACTOR)			\$6,409	2.88	0.79	1.30	0.14	0.00	15

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>L20</b>	<b>LIGHTING SETS, TRAILER MOUNTED</b>											
	<b>SUBCATEGORY 0.10</b>		<b>METALLIC VAPOR</b>									
	<b>ALLMAND BROTHERS INC.</b>											
	L20AB017	MAXI-LITE 695	LITE SET, TRAILER MTD., 4/1250W, W/6 KW GEN, ELECTRIC MAST WINCH	11 HP	D-off	\$12,591	5.49	0.87	1.23	0.25	1.02	20
	L20AB018	MAXI-LITE 895	LITE SET, TRAILER MTD., 4/1,250W, W/8 KW GEN, ELECTRIC MAST WINCH	14 HP	D-off	\$13,171	6.00	0.91	1.29	0.26	1.30	20
	L20AB019	MAXI-LITE 883XL	LITE SET, TRAILER MTD., 6/1,000W, W/8 KW GEN, ELECTRIC MAST WINCH	14 HP	D-off	\$14,038	6.30	0.96	1.38	0.27	1.30	21
	L20AB020	NIGHT-LITE 6330	LITE SET, TRAILER MTD., 4/1,000W, W/6 KW GEN, MANUAL MAST WINCH	11 HP	D-off	\$11,246	5.02	0.77	1.10	0.22	1.02	20
	L20AB021	NIGHT-LITE 8330	LITE SET, TRAILER MTD., 4/1,000W, W/8 KW GEN, MANUAL MAST WINCH	14 HP	D-off	\$11,826	5.53	0.81	1.15	0.23	1.30	20
	L20AB022	NIGHT-LITE 8500XL	LITE SET, TRAILER MTD., 6/1,000W, W/8 KW GEN, ELECTRIC MAST WINCH	14 HP	D-off	\$13,667	6.17	0.94	1.34	0.27	1.30	21
	L20AB023	ECLIPSE 2220/SE ALT	LITE SET, TRAILER MTD., 15 LED LAMP, FLASHING ARROW, W/TWO 8D BATTERIES AND 50W SOLAR ARRAY			\$5,362	1.85	0.36	0.52	0.10	0.00	12
	L20AB024	ECLIPSE 2220/SE APF	LITE SET, TRAILER MTD., 25 LED LAMP, FLASHING ARROW, W/TWO 8D BATTERIES AND 50W SOLAR ARRAY			\$5,956	2.07	0.41	0.58	0.12	0.00	12
<b>L25</b>	<b>LINE STRIPING EQUIPMENT</b>											
	<b>SUBCATEGORY 0.00</b>		<b>LINE STRIPING EQUIPMENT</b>									
	<b>JCL EQUIPMENT CO.</b>											
	L25JE001	4-B	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 2 GUNS, SELF PROPELLED, SINGLE COLOR	13 HP	G	\$10,272	6.46	0.72	1.03	0.20	3.03	15
	L25JE002	ROAD RUNNER	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3 GUNS, TRUCK MOUNTED (11,000 LB GVW), TWO COLORS	230 HP	D-off	\$87,604	50.08	6.03	8.64	1.71	21.31	116

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>M-B COMPANIES, INC.</b>												
	L25MB002	5-10	LINE STRIPING EQUIPMENT, STRIPER, 1 GUN, WALK-BEHIND, SINGLE COLOR	5 HP	G	\$5,463	4.00	0.33	0.44	0.11	1.17	6
	L25MB005	5-12A	LINE STRIPING EQUIPMENT, STRIPER, 2 GUNS, WALK BEHIND, SINGLE COLOR	10 HP	G	\$9,996	6.64	0.64	0.90	0.19	2.33	6
	L25MB007	220	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3-4 GUNS, SELF PROPELLED, THREE COLORS	23 HP	G	\$46,546	20.96	3.24	4.65	0.91	5.37	30
	L25MB006	245	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3 GUNS, SELF PROPELLED, TWO COLORS	60 HP	G	\$82,966	41.76	5.77	8.30	1.62	14.00	48
	L25MB004	VANMARK 360	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3-4 GUNS, W/11,000 LBS GVW TRUCK, TWO COLORS	190 HP	G	\$136,139	91.71	9.40	13.49	2.65	44.33	133
	L25MB008	360	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3-4 GUNS, THERMAL 120 GAL, TRUCK MTD, TWO COLORS	190 HP	D-off	\$149,300	66.22	10.15	14.47	2.91	17.61	80
<b>L30 LOADERS, BELT (Conveyor belts) &amp; ACCESSORIES</b>												
<b>SUBCATEGORY 0.00 LOADERS, BELT (Conveyor belts) &amp; ACCESSORIES</b>												
<b>HEWITT-ROBINS</b>												
	L30HW015	V-11 6X16FT, TD	LOADER, CONVEYOR BELT & ACCESSORIES, SCREENING PLANT, W/6' X 16' VIBRATORY SLOPE TRIPLE DECK SCREENS/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER	25 HP	E	\$126,120	30.24	7.30	9.79	2.40	1.45	138
<b>KOLBERG - PIONEER, INC</b>												
	L30KB001	11-2450	LOADER, CONVEYOR BELT & ACCESSORIES, COVEYOR 50', MOBILE, CONCRETE & AGGREGATE, 24" WIDE	15 HP	E	\$30,693	8.16	1.75	2.34	0.58	0.87	57
	L30KB002	11-2460	LOADER, CONVEYOR BELT & ACCESSORIES, CONVEYOR, 60', MOBILE, CONCRETE & AGGREGATE, 24" WIDE	15 HP	E	\$32,691	8.60	1.87	2.50	0.62	0.87	62



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>METSO MINERALS</b>												
L30RA001	CV50D		LOADER, CONVEYOR BELT & ACCESSORIES, GRIZZLY SINGLE SCREEN, 40 CY/HR TRAILER MTD	25 HP	D-off	\$54,837	14.15	3.18	4.26	1.05	1.75	130
<b>SUPERIOR INDUSTRIES, AN ASTEC COMPANY</b>												
L30S4001	36"X35' FEED CONVEY		LOADER, CONVEYOR BELT & ACCESSORIES, BELT FEEDER	15 HP	E	\$16,334	4.91	0.97	1.31	0.31	0.87	33
L30S4002	RUN-ON HYDRAULIC LEG		LOADER, CONVEYOR BELT & ACCESSORIES, 4 HYDRAULIC JACK LEGS			\$18,732	4.13	1.11	1.50	0.36	0.00	28
L30S4003	SIDE SKIRTING UPPER		LOADER, CONVEYOR BELT & ACCESSORIES, SIDE GUARD, ONE SIDE, UPPER			\$1,325	0.30	0.09	0.11	0.03	0.00	9
L30S4004	SIDE SKIRTING LOWER		LOADER, CONVEYOR BELT & ACCESSORIES, SIDE GUARD, ONE SIDE, LOWER			\$2,288	0.50	0.13	0.18	0.04	0.00	9
<b>TELSMITH INC.</b>												
L30TS001	PTC 24IN X 50FT		LOADER, CONVEYOR BELT & ACCESSORIES, CONVEYOR, TRUSS FRAME, 24"W X 50"L, WHEEL MTD, 300 TPH	12 HP	E	\$28,655	7.56	1.60	2.09	0.55	0.69	10
<b>L35 LOADERS, FRONT END, CRAWLER TYPE</b>												
<b>SUBCATEGORY 0.00 LOADERS, FRONT END, CRAWLER TYPE</b>												
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
L35CA013	939-C		LOADER, FRONT END, CRAWLER, 1.50 CY BUCKET	90 HP	D-off	\$111,949	33.36	6.61	8.96	2.13	6.92	209
L35CA005	953-C		LOADER, FRONT END, CRAWLER, 2.25 CY BUCKET	121 HP	D-off	\$182,212	52.12	10.76	14.58	3.47	9.30	334
L35CA014	963-C		LOADER, FRONT END, CRAWLER, 3.20 CY BUCKET	160 HP	D-off	\$238,059	68.24	14.06	19.04	4.54	12.29	433
L35CA007	973-C		LOADER, FRONT END, CRAWLER, 3.70 CY BUCKET	242 HP	D-off	\$364,649	104.28	21.54	29.17	6.95	18.60	581

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>Komatsu America International Company</b>											
	L35KM006	D75S-5	LOADER, FRONT END, CRAWLER, 3.30 CY BUCKET	200 HP	D-off	\$411,701	111.51	24.32	32.94	7.85	15.37	485
<b>L40</b>	<b>LOADERS, FRONT END, WHEEL TYPE</b>											
	<b>SUBCATEGORY 0.11 ARTICULATED, 0 THRU 225 HP</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	L40CA032	904B	LOADER, FRONT END, WHEEL, 0.80 CY BUCKET, ARTICULATED, 4X4	45 HP	D-off	\$66,883	16.70	3.94	5.21	1.33	3.15	96
	L40CA033	906	LOADER, FRONT END, WHEEL, 1.00 CY BUCKET, ARTICULATED, 4X4	60 HP	D-off	\$69,328	18.34	4.08	5.41	1.37	4.20	111
	L40CA034	908	LOADER, FRONT END, WHEEL, 1.30 CY BUCKET, ARTICULATED, 4X4	82 HP	D-off	\$76,417	23.90	4.37	5.71	1.51	5.74	133
	L40CA019	914G	LOADER, FRONT END, WHEEL, 1.70 CY BUCKET, ARTICULATED, 4X4	89 HP	D-off	\$94,020	25.87	5.56	7.40	1.86	6.24	157
	L40CA022	924GZ	LOADER, FRONT END, WHEEL, 2.20 CY BUCKET, ARTICULATED, 4X4	112 HP	D-off	\$122,678	33.17	7.29	9.71	2.43	7.85	212
	L40CA015	928G	LOADER, FRONT END, WHEEL, 2.60 CY BUCKET, ARTICULATED, 4X4	135 HP	D-off	\$135,274	37.37	8.05	10.73	2.68	9.46	258
	L40CA023	938G II	LOADER, FRONT END, WHEEL, 3.65 CY BUCKET, ARTICULATED, 4X4	160 HP	D-off	\$163,182	46.02	9.56	12.66	3.23	11.21	297
	L40CA024	950G	LOADER, FRONT END, WHEEL, 3.50 CY BUCKET, ARTICULATED, 4X4	180 HP	D-off	\$216,915	58.92	12.69	16.77	4.30	12.61	392
	L40CA025	962G II	LOADER, FRONT END, WHEEL, 4.00 CY BUCKET, ARTICULATED, 4X4	200 HP	D-off	\$227,457	62.49	13.32	17.62	4.51	14.01	405
	<b>CASE CORPORATION</b>											
	L40CS009	621D	LOADER, FRONT END, WHEEL, 2.5 CY BUCKET, ARTICULATED, 4X4	136 HP	D-off	\$141,130	39.46	8.30	10.99	2.80	9.53	261
	L40CS010	721D	LOADER, FRONT END, WHEEL, 3.0 CY BUCKET, ARTICULATED, 4X4	181 HP	D-off	\$168,500	48.21	9.95	13.21	3.34	12.68	306
	L40CS011	821C	LOADER, FRONT END, WHEEL, 3.5 CY BUCKET, ARTICULATED, 4X4	187 HP	D-off	\$212,836	58.70	12.44	16.44	4.22	13.10	379

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>Komatsu America International Company</b>												
	L40KM014	WA65-3	LOADER, FRONT END, WHEEL, 0.92 CY BUCKET, ARTICULATED, 4X4	50 HP	D-off	\$83,793	20.50	4.91	6.50	1.66	3.50	93
	L40KM015	WA95-3	LOADER, FRONT END, WHEEL, 1.40 CY BUCKET, ARTICULATED, 4X4	75 HP	D-off	\$79,230	21.73	4.60	6.06	1.57	5.25	128
	L40KM001	WA120-3	LOADER, FRONT END, WHEEL, 1.85 CY BUCKET, ARTICULATED, 4X4	105 HP	D-off	\$101,374	28.72	5.98	7.94	2.01	7.36	181
	L40KM002	WA180-3	LOADER, FRONT END, WHEEL, 2.25 CY BUCKET, ARTICULATED, 4X4	128 HP	D-off	\$121,801	34.43	7.21	9.60	2.41	8.97	208
	L40KM003	WA250-5	LOADER, FRONT END, WHEEL, 3.00 CY BUCKET, ARTICULATED, 4X4	139 HP	D-off	\$134,914	37.78	8.00	10.66	2.67	9.74	241
	L40KM004	WA320-3	LOADER, FRONT END, WHEEL, 3.50 CY BUCKET, ARTICULATED, 4X4	173 HP	D-off	\$158,650	46.19	9.29	12.30	3.14	12.12	312
<b>SUBCATEGORY 0.12 ARTICULATED, OVER 225 HP</b>												
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
	L40CA026	966G II	LOADER, FRONT END, WHEEL, 4.75 CY BUCKET, ARTICULATED, 4X4	246 HP	D-off	\$310,249	67.62	14.57	17.57	5.78	17.23	502
	L40CA027	972G II	LOADER, FRONT END, WHEEL, 5.25 CY BUCKET, ARTICULATED, 4X4	265 HP	D-off	\$339,087	73.10	15.96	19.28	6.32	18.57	555
	L40CA007	980G II	LOADER, FRONT END, WHEEL, 6.00 CY BUCKET, ARTICULATED, 4X4	300 HP	D-off	\$429,109	91.92	20.04	24.10	7.99	21.02	660
	L40CA008	988G	LOADER, FRONT END, WHEEL, 9.00 CY BUCKET, ARTICULATED, 4X4	430 HP	D-off	\$648,468	131.44	30.20	36.24	12.08	30.13	1,077
	L40CA018	990 SERIES II	LOADER, FRONT END, WHEEL, 11.00 CY BUCKET, ARTICULATED, 4X4	618 HP	D-off	\$1,074,506	202.96	50.03	60.04	20.01	43.30	1,628
	L40CA009	992-G	LOADER, FRONT END, WHEEL, 16.00 CY BUCKET, ARTICULATED, 4X4	800 HP	D-off	\$1,486,364	276.98	69.09	82.81	27.68	56.05	2,023
<b>Komatsu America International Company</b>												
	L40KM008	WA500-3	LOADER, FRONT END, WHEEL, 6.50 CY BUCKET, ARTICULATED, 4X4	335 HP	D-off	\$428,819	90.32	20.03	24.08	7.99	23.47	671
	L40KM009	WA600-3	LOADER, FRONT END, WHEEL, 8.00 CY BUCKET, ARTICULATED, 4X4	490 HP	D-off	\$616,942	127.12	28.64	34.29	11.49	34.33	1,019
	L40KM010	WA700-3	LOADER, FRONT END, WHEEL, 11.10 CY BUCKET, ARTICULATED, 4X4	684 HP	D-off	\$1,003,324	198.06	46.60	55.82	18.69	47.92	1,574

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>L40</b>	<i>Komatsu America International Company (continued)</i>											
	L40KM011	WA800-3	LOADER, FRONT END, WHEEL, 13.10 CY BUCKET, ARTICULATED, 4X4	853 HP	D-off	\$1,288,011	253.37	59.52	71.06	23.99	59.76	2,230
	<b>SUBCATEGORY 0.20 SKID STEER</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	L40CA028	216B	LOADER, FRONT END, WHEEL, SKID-STEER, 13.0 CF, 60" BUCKET, 4X4	49 HP	D-off	\$25,493	10.84	1.71	2.42	0.50	3.77	54
	L40CA029	226B	LOADER, FRONT END, WHEEL, SKID-STEER, 13.0 CF, 60" BUCKET, 4X4	54 HP	D-off	\$29,255	12.16	1.97	2.80	0.57	4.15	58
	L40CA030	236B	LOADER, FRONT END, WHEEL, SKID-STEER, 14.0 CF, 66" BUCKET, 4X4	59 HP	D-off	\$31,903	13.42	2.13	3.01	0.62	4.53	71
	L40CA031	246B	LOADER, FRONT END, WHEEL, SKID-STEER, 15.4 CF, 72" BUCKET, 4X4	74 HP	D-off	\$34,643	15.39	2.33	3.29	0.68	5.69	74
	<b>MELROE COMPANY/BOBCAT</b>											
	L40ME016	463	LOADER, FRONT END, WHEEL, SKID-STEER, 6.5 CF, 44" BUCKET, 4X4	23 HP	D-off	\$14,803	5.66	1.01	1.43	0.29	1.73	27
	L40ME017	553	LOADER, FRONT END, WHEEL, SKID-STEER, 6.7 CF, 48" BUCKET, 4X4	25 HP	D-off	\$16,843	6.57	1.13	1.59	0.33	1.92	37
	L40ME012	S175	LOADER, FRONT END, WHEEL, SKID-STEER, 14.3 CF, 60" BUCKET	46 HP	D-off	\$23,298	9.79	1.58	2.26	0.45	3.53	62
	<b>SUBCATEGORY 0.31 TOOL CARRIER &amp; TELESCOPIC HANDLERS, 0 THRU 225 HP</b>											
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
L40CA013	IT14G	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 1.75 CY LOADER; 6,303 LB @ 12.17' HIGH, FORK LIFT, OR 1,841 LB @ 22.42' HIGH, MATERIAL HANDLING ARM	90 HP	D-off	\$112,503	30.01	6.33	8.23	2.21	6.31	180	
L40CA012	IT28G	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 2.50 CY LOADER; 10,640 LB @ 12.58' HIGH FORK LIFT, OR 3,195 LB @ 23.25' HIGH, MATERIAL HANDLING ARM	145 HP	D-off	\$153,820	42.44	8.69	11.32	3.03	10.16	279	

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>L40</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION) (continued)</b>											
	L40CA014	IT62G II	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 4.25 CY LOADER; 13,670 LB @ 12.42' HIGH, FORK LIFT, OR 5,040 LB @ 22.67' HIGH, MATERIAL HANDLING ARM	200 HP	D-off	\$248,098	65.46	14.04	18.32	4.88	14.01	454
	<b>Komatsu America International Company</b>											
	L40KM012	WA180-3 PT	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 2.25 CY LOADER; 4,966 LB @ 12.00' HIGH, FORK LIFT; OR 2,306 LB @ 18.50' HIGH, MATERIAL HANDLING ARM	128 HP	D-off	\$129,675	36.55	7.29	9.47	2.55	8.97	230
<b>L50</b>	<b>LOADERS / BACKHOE, WHEEL TYPE</b>											
	<b>SUBCATEGORY 0.00 LOADERS / BACKHOE, WHEEL TYPE</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	L50CA001	416D	LOADER / BACKHOE, WHEEL, 1.00 CY FRONT END BUCKET, 18" DIP, 4.5 CF, 14.5' DIGGING DEPTH, 4X2	78 HP	D-off	\$65,812	19.08	3.66	4.74	1.29	4.23	162
	L50CA004	446D	LOADER / BACKHOE, WHEEL, 1.50 CY FRONT END BUCKET, 36" DIP, 19 CF, 17.1' DIGGING DEPTH, 4X2	110 HP	D-off	\$134,186	34.87	7.49	9.69	2.64	5.97	193
	<b>CASE CORPORATION</b>											
	L50CS005	580 SUPER M SERIES 2	LOADER / BACKHOE, WHEEL, 1.00 CY FRONT END BUCKET, 24" DIP, 6.2 CF, 14.25' DIGGING DEPTH, 4X4	90 HP	D-off	\$84,684	23.69	4.73	6.12	1.67	4.88	143
	L50CS006	590 SUPER M SERIES 2	LOADER / BACKHOE, WHEEL, 1.30 CY FRONT END BUCKET, 24" DIP, 6.4 CF, 18' DIGGING DEPTH, 4X4, EXTENDAHOE	98 HP	D-off	\$101,933	27.77	5.66	7.31	2.00	5.32	153
	<b>JCB INC.</b>											
	L50JC001	212S (4WS)	LOADER / BACKHOE, WHEEL, 0.80 CY FRONT END BUCKET, 24" DIP, 4.3 CF, 12' DIGGING DEPTH, 4X4	67 HP	D-off	\$63,898	17.80	3.58	4.63	1.26	3.63	120

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>L50</b>	<b>JCB INC. (continued)</b>											
	L50JC002	214S (2WD)	LOADER / BACKHOE, WHEEL, 1.25 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 14.6' DIGGING DEPTH, 4X2	92 HP	D-off	\$72,767	21.61	4.03	5.20	1.43	4.99	158
	L50JC003	214S (4WS)	LOADER / BACKHOE, WHEEL, 1.40 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 14.6' DIGGING DEPTH, 4X4	100 HP	D-off	\$88,511	25.45	4.91	6.33	1.74	5.42	164
	L50JC005	215S (4WS)	LOADER / BACKHOE, WHEEL, 1.40 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 20.1' DIGGING DEPTH, 4X4	100 HP	D-off	\$102,658	28.13	5.72	7.39	2.02	5.42	176
	L50JC007	217S (4WS)	LOADER / BACKHOE, WHEEL, 1.60 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 21.5' DIGGING DEPTH, 4X4	100 HP	D-off	\$131,657	33.62	7.38	9.57	2.59	5.42	178
<b>L55</b>	<b>LOADER / BACKHOE, ATTACHMENTS</b>											
	<b>SUBCATEGORY 0.00 LOADER / BACKHOE, ATTACHMENTS</b>											
	<b>KENT DEMOLITION TOOLS</b>											
	L55KN001	KB-555	LOADER / BACKHOE, ATTACHMENT, AIR RAM, 500 FT-LB, W/2.5" DIA. POINT (ADD 175 CFM COMPRESSOR & LDR/BH)	175 CFM	A	\$6,698	2.90	0.59	0.89	0.14	0.00	6
	L55KN002	KB-999	LOADER / BACKHOE, ATTACHMENT, AIR RAM, 1000 FT-LB, W/ 3.5" DIA. POINT (ADD 250 CFM COMPRESSOR & LDR/BH)	250 CFM	A	\$13,796	5.96	1.20	1.84	0.28	0.00	10
	L55KN004	KF6TLB	LOADER / BACKHOE, ATTACHMENT, HYDRA RAM, 1000 FT-LB, W/3" DIA. POINT (ADD 12,000-14,000 LB LDR/BH)			\$12,283	4.37	1.07	1.64	0.25	0.00	7
	L55KN005	KF9TLB	LOADER / BACKHOE, ATTACHMENT, HYDRA RAM, 1500 FT-LB, W/3.5" DIA. POINT (ADD 14,000-20,000 LB LDR/BH)			\$18,175	6.46	1.58	2.42	0.37	0.00	11
	L55KN006	KF12TLB	LOADER / BACKHOE, ATTACHMENT, HYDRA RAM, 2000 FT-LB, W/4.25" DIA. POINT (ADD 20,000-30,000 LB LDR/BH)			\$27,002	9.60	2.35	3.60	0.55	0.00	19

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>L60</b>	<b>LOG SKIDDERS</b>											
	<b>SUBCATEGORY 0.00 LOG SKIDDERS</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	L60CA014	517 GRAPPLE	LOG SKIDDER, 8 SF GRAPPLE, CABLE 41,050 LBS LINE-PULL AND WINCH, CRAWLER	120 HP	D-off	\$259,494	58.05	15.82	22.06	4.79	8.41	405
	L60CA013	525 B	LOG SKIDDER, 11 SF GRAPPLE, CABLE 43,000 LBS LINE-PULL AND WINCH, WHEEL, 4X2	160 HP	D-off	\$206,983	52.44	12.29	16.94	3.82	11.21	358
	L60CA010	527 CABLE	LOG SKIDDER, CABLE, 69,200 LBS LINE-PULL AND WINCH, BLADE, CRAWLER	150 HP	D-off	\$298,087	67.64	18.17	25.34	5.50	10.51	407
	L60CA011	527 GRAPPLE	LOG SKIDDER, 10 SF GRAPPLE, CABLE 69,200 LBS LINE-PULL AND WINCH, CRAWLER	150 HP	D-off	\$356,613	78.59	21.74	30.31	6.58	10.51	473
	<b>DEERE &amp; COMPANY</b>											
	L60JD001	540G II - SKIDDER	LOG SKIDDER, CABLE, 40,525 LBS LINE-PULL WINCH AND BLADE, WHEEL, 4X4	119 HP	D-off	\$139,136	37.17	8.12	11.09	2.57	8.34	219
	L60JD003	548G III - GRAPPLE	LOG SKIDDER, 8.0 SF GRAPPLE WITH BLADE, WHEEL, 4X4	119 HP	D-off	\$135,768	36.55	7.92	10.81	2.51	8.34	217
	L60JD004	648G III - GRAPPLE	LOG SKIDDER, 10.4 SF GRAPPLE WITH BLADE, WHEEL, 4X4	160 HP	D-off	\$180,458	49.30	10.39	14.11	3.33	11.21	266
	L60JD002	640G III - SKIDDER	LOG SKIDDER, CABLE, 48,867 LBS LINE-PULL WINCH AND BLADE, WHEEL, 4X4	151 HP	D-off	\$165,102	44.56	9.70	13.30	3.05	10.58	239
	L60JD006	643H	LOG SKIDDER, LOG FELLER/BUNCHER, 18" DIA TREE SAW CUTTER, WHEEL, 4X4	170 HP	D-off	\$218,263	56.57	12.82	17.57	4.03	11.91	320
	L60JD008	653G	LOG SKIDDER, LOG FELLER/BUNCHER, 28" DIA TREE SAW CUTTER, CRAWLER	170 HP	D-off	\$314,526	72.28	19.17	26.73	5.80	11.91	410
	L60JD007	843G	LOG SKIDDER, LOG FELLER/BUNCHER, 20" DIA TREE SAW CUTTER, WHEEL, 4X4	200 HP	D-off	\$238,903	62.81	14.08	19.33	4.41	14.01	323

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>M10 MARINE EQUIPMENT (NON DREDGING)</b>												
<b>SUBCATEGORY 0.41 WORK FLOATS (NON-DREDGING)</b>												
<b>MARINE INLAND FABRICATORS</b>												
	M10MZ001		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY, 40' X 8' X 4', 23 TON			\$15,818	4.25	1.49	2.37	0.30	0.00	143
	M10MZ003		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY, 40' X 10' X 4', 30 TON			\$19,478	5.24	1.83	2.92	0.37	0.00	173
<b>SUBCATEGORY 0.42 WORK BARGES (SECTIONAL, NON-DREDGING)</b>												
<b>MARINE INLAND FABRICATORS</b>												
	M10MZ005	RAKE	MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY, W/ONE BUCKHEAD AND SPUDS, 40' X 12' X 4', 36 TON			\$22,453	1.58	0.71	0.67	0.37	0.00	193
	M10MZ007		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY, 40' X 12' X 5', 51 TON			\$23,240	1.65	0.74	0.70	0.39	0.00	217
<b>NO SPECIFIC MANUFACTURER</b>												
	M10XX001		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, BOW AND STERN SECTIONS			\$5,684	0.40	0.18	0.17	0.09	0.00	1
	M10XX002		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, LOADING RAMPS			\$17,685	1.24	0.56	0.53	0.29	0.00	1
	M10XX003		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MID-SECTION, 20' X 10' X 5'			\$21,359	1.50	0.67	0.64	0.35	0.00	1
	M10XX004		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MID-SECTION, 40' X 10' X 5'			\$34,615	2.44	1.09	1.04	0.57	0.00	1
<b>SUBCATEGORY 0.45 FLAT-DECK OR CARGO BARGE (NON-DREDGING)</b>												
<b>NO SPECIFIC MANUFACTURER</b>												
	M10XX005		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 120' X 30' X 7.25', 400 TON			\$149,334	5.08	3.10	1.58	2.31	0.00	1



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>M10</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>										
	M10XX006		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 120' X 45' X 7', 800 TON			\$210,203	7.15	4.36	2.22	3.25	0.00	1
	M10XX007		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 140' X 45' X 7', 900 TON			\$267,381	9.09	5.54	2.82	4.13	0.00	1
	M10XX008		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 150' X 45' X 9', 1,100 TON			\$371,082	12.62	7.69	3.92	5.73	0.00	1
	<b>SUBCATEGORY 0.48</b>		<b>ALL OTHER BARGES (NON-DREDGING)</b>									
	<b>NO SPECIFIC MANUFACTURER</b>											
	M10XX016	OPEN 195	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 195' X 35' X 12', 1,400 TON			\$223,143	16.86	7.08	7.07	3.54	0.00	1
	M10XX017	OPEN 200	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 200' X 35' X 12', 1,600 TON			\$235,929	17.82	7.48	7.47	3.74	0.00	1
	M10XX018	CLOSED 195	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 195' X 35' X 12', 1,400 TON			\$293,855	22.20	9.32	9.31	4.66	0.00	1
	M10XX019	CLOSED 200	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 200' X 35' X 12', 1,600 TON			\$300,264	22.69	9.53	9.51	4.77	0.00	1
	<b>SUBCATEGORY 0.51</b>		<b>BOATS &amp; LAUNCHES, 0 THRU 250 HP</b>									
	<b>MARINE INLAND FABRICATORS</b>											
	M10MZ010	COLT	MARINE EQUIPMENT, BOATS & LAUNCHES, TRUCKABLE WORKBOAT W/PILOT HOUSE & PUSH KNEES, INBOARD, 20.25' X 8' X 3'	140 HP	D-off	\$43,918	16.92	1.95	2.33	0.78	9.81	95
	M10MZ011	MUSTANG	MARINE EQUIPMENT, BOATS & LAUNCHES, TRUCKABLE WORKBOAT W/PILOT HOUSE & PUSH KNEES, INBOARD, 25.25' X 10' X 3.5'	210 HP	D-off	\$62,290	24.94	2.77	3.31	1.11	14.71	190
	<b>SEAARK MARINE</b>											
	M10SM005	18' - 72 SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 18' RIVER RUNNER, VEE HULL, NO CABIN, CAP 1,350 LBS, OUTBOARD, 18' X 7.9' X 0.5'	115 HP	G	\$24,343	26.54	1.08	1.29	0.43	20.56	15
	M10SM008	19' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 19' ROUSTABOUT, TRI HULL, NO CABIN, CAP 2,600 LBS, OUTBOARD, 19.4' X 8.5' X 0.8'	200 HP	G	\$44,291	46.41	1.97	2.35	0.79	35.75	17

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>M10</b>	<b>SEAARK MARINE (continued)</b>											
	M10SM001	17' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 17' LITTLE GIANT, W/CABIN TRI-HULL, CAP 2,000 LBS, OUTBOARD, 17.5' X 7.25' X 0.7'	150 HP	G	\$52,868	37.24	2.35	2.81	0.94	26.82	18
	M10SM003	21' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 21' LITTLE GIANT, W/CABIN TRI-HULL, CAP 2,800 LBS, OUTBOARD, 21.4' X 8.5' X 1'	200 HP	G	\$65,591	49.03	2.91	3.48	1.17	35.75	24
	M10SM004	23' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 23' LITTLE GIANT, W/CABIN TRI-HULL, CAP 3,400 LBS, OUTBOARD, 23.4' X 8.5' X 1.2'	250 HP	G	\$70,451	59.86	3.12	3.74	1.25	44.69	28
	<b>NO SPECIFIC MANUFACTURER</b>											
	M10XX010	12	MARINE EQUIPMENT, BOATS & LAUNCHES, 12' TENDER, 7' BEAM, INBOARD ENGINE	75 HP	D-off	\$44,682	11.67	1.98	2.37	0.79	5.25	1
	M10XX009	13	MARINE EQUIPMENT, BOATS & LAUNCHES, 13' RUNABOUT, 5' BEAM, OUTBOARD ENGINE	50 HP	G	\$13,286	11.89	0.60	0.71	0.24	8.94	13
	M10XX011	14	MARINE EQUIPMENT, BOATS & LAUNCHES, 14' TENDER, 7' BEAM, INBOARD ENGINE	100 HP	D-off	\$51,259	14.54	2.27	2.72	0.91	7.01	13
	M10XX012	100	MARINE EQUIPMENT, BOATS & LAUNCHES, 16', SHALLOW DRAFT, INLAND TUG	100 HP	D-off	\$52,220	14.66	2.32	2.77	0.93	7.01	13
	M10XX013	115	MARINE EQUIPMENT, BOATS & LAUNCHES, 22', SHALLOW DRAFT, INLAND TUG	115 HP	D-off	\$67,611	17.79	3.00	3.59	1.20	8.06	23
	M10XX014	175	MARINE EQUIPMENT, BOATS & LAUNCHES, 18', W/STEERING NOZZLE, INLAND TUG	175 HP	D-off	\$92,780	25.82	4.12	4.93	1.65	12.26	60
	M10XX015	250	MARINE EQUIPMENT, BOATS & LAUNCHES, 26', W/STEERING NOZZLE, INLAND TUG	250 HP	D-off	\$116,330	34.90	5.16	6.18	2.07	17.52	83
	<b>SUBCATEGORY 0.53 BOATS &amp; LAUNCHES, 251 THRU 500 HP</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	M10XX021	380	MARINE EQUIPMENT, BOATS & LAUNCHES, 40', STANDARD RUDDER, INLAND TUG	380 HP	D-off	\$309,426	68.43	12.99	15.47	5.25	26.62	100
	M10XX022	435	MARINE EQUIPMENT, BOATS & LAUNCHES, 45' LENGTH, 16' BEAM, 5' 0" DRAFT, PUSH BOAT	435 HP	D-off	\$352,205	78.11	14.79	17.61	5.98	30.48	100
	M10XX023	400	MARINE EQUIPMENT, BOATS & LAUNCHES, 48' LENGTH, 20' BEAM, 6' 6" DRAFT PUSH BOAT	400 HP	D-off	\$471,998	89.63	19.81	23.60	8.01	28.02	100

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>M10</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>											
	M10XX024	435	MARINE EQUIPMENT, BOATS & LAUNCHES, 58' LENGTH, 21' BEAM, 6' 0" DRAFT, PUSH BOAT	435 HP	D-off	\$673,136	116.73	28.26	33.66	11.43	30.48	130
<b>P10</b>	<b>PILE HAMMER ACCESSORIES - EXTRACTORS &amp; BOX LEADS</b>											
	<b>SUBCATEGORY 0.00 PILE HAMMER ACCESSORIES - EXTRACTORS &amp; BOX LEADS</b>											
	<b>INTERNATIONAL CONSTRUCTION EQUIPMENT, INC</b>											
	P10IC001	216	PILE HAMMER ACCESSORIES, PILE EXTRACTOR, 30 TON LINE PULL (ADD LEADS & CRANE)	175 HP	D-off	\$96,922	42.31	7.37	10.50	2.12	12.26	130
	P10IC002	416L	PILE HAMMER ACCESSORIES, PILE EXTRACTOR, 40 TON LINE PULL (ADD LEADS & CRANE)	300 HP	D-off	\$152,554	68.57	11.60	16.53	3.33	21.02	207
	P10IC005	1412B	PILE HAMMER ACCESSORIES, PILE EXTRACTOR, 150 TON LINE PULL (ADD LEADS & CRANE)	800 HP	D-off	\$410,187	183.83	31.18	44.44	8.96	56.05	593
	P10IC010		PILE HAMMER ACCESSORIES, PILE LEADS, SWING, 26" X 86"			\$13,681	3.99	1.04	1.48	0.30	0.00	101
	P10IC012		PILE HAMMER ACCESSORIES, PILE LEADS, SWING, 32" X 88"			\$19,204	5.60	1.46	2.08	0.42	0.00	155
	P10IC011		PILE HAMMER ACCESSORIES, PILE LEADS, FIXED, 26" X 86", W/SPOTTER	13 HP	D-off	\$27,465	9.06	2.09	2.98	0.60	0.91	134
	P10IC013		PILE HAMMER ACCESSORIES, PILE LEADS, FIXED, 32" X 88", W/SPOTTER	13 HP	G	\$33,865	12.54	2.58	3.67	0.74	2.32	193
<b>P20</b>	<b>PILE HAMMERS, DOUBLE ACTING</b>											
	<b>SUBCATEGORY 0.10 DIESEL</b>											
	<b>INTERNATIONAL CONSTRUCTION EQUIPMENT, INC</b>											
	P20IC002	422	PILE HAMMER, DOUBLE ACTING, DIESEL, 22,500 FT-LBS, MAX STROKE 5' 8" (ADD LEADS & CRANE)			\$87,956	34.24	7.32	10.99	1.82	0.00	122
	P20IC003	520	PILE HAMMER, DOUBLE ACTING, DIESEL, 30,000 FT-LBS, MAX STROKE 5' 11" (ADD LEADS & CRANE)			\$89,154	35.28	7.42	11.14	1.85	0.00	156

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>P20</b>	<b>INTERNATIONAL CONSTRUCTION EQUIPMENT, INC. (continued)</b>											
	P20IC004	640	PILE HAMMER, DOUBLE ACTING, DIESEL, 40,000 FT-LBS, MAX STROKE 6' 8" (ADD LEADS & CRANE)			\$94,998	38.08	7.91	11.87	1.97	0.00	187
	<b>MKT MANUFACTURING, INC.</b>											
	P20MK001	DA-15C	PILE HAMMER, DOUBLE ACTING, DIESEL, 8,200 FT-LBS, MAX STROKE 10' 6" (ADD LEADS & CRANE)			\$53,662	20.98	4.47	6.71	1.11	0.00	60
	<b>SUBCATEGORY 0.20</b>	<b>PNUEMATIC (STEAM/AIR)</b>										
	<b>MKT MANUFACTURING, INC.</b>											
	P20MK002	5	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 1,000 FT-LBS, MAX STROKE 7" (ADD 250 CFM COMPRESSOR, LEADS & CRANE)	250 CFM	A	\$16,029	6.52	1.39	2.14	0.32	0.00	16
	P20MK003	6	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 2,500 FT-LBS, MAX STROKE 8.75" (ADD 400 CFM COMPRESSOR, LEADS & CRANE)	400 CFM	A	\$20,122	8.56	1.75	2.68	0.41	0.00	30
	P20MK004	7	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 4,150 FT-LBS, MAX STROKE 9.5" (ADD 450 CFM COMPRESSOR, LEADS & CRANE)	450 CFM	A	\$24,814	10.57	2.16	3.31	0.50	0.00	51
	P20MK005	9B3	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 8,750 FT-LBS, MAX STROKE 17" (ADD 600 CFM COMPRESSOR, LEADS & CRANE)	600 CFM	A	\$41,920	17.00	3.65	5.59	0.85	0.00	71
	P20MK006	10B3	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 13,100 FT-LBS, MAX STROKE 19" (ADD 750 CFM COMPRESSOR, LEADS & CRANE)	750 CFM	A	\$46,196	19.85	4.01	6.16	0.93	0.00	110
	P20MK007	11B3	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 19,150 FT-LBS, MAX STROKE 19" (ADD 900 CFM COMPRESSOR, LEADS & CRANE)	900 CFM	A	\$50,420	21.43	4.38	6.72	1.02	0.00	142

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>P25</b>	<b>PILE HAMMERS, SINGLE ACTING</b>											
	<b>SUBCATEGORY 0.10</b>		<b>DIESEL</b>									
	<b>PILECO, INC.</b>											
P25DL001	D6-32		PILE HAMMER, SINGLE ACTING, DIESEL, 10,500 FT-LBS (ADD LEADS & CRANE)			\$48,495	18.19	4.22	6.47	0.98	0.00	40
P25DL003	D12-42		PILE HAMMER, SINGLE ACTING, DIESEL, 31,320 FT-LBS (ADD LEADS & CRANE)			\$58,014	21.82	5.04	7.74	1.17	0.00	63
P25DL004	D19-42		PILE HAMMER, SINGLE ACTING, DIESEL, 42,800 FT-LBS (ADD LEADS & CRANE)			\$66,203	25.33	5.76	8.83	1.34	0.00	88
P25DL005	D25-32		PILE HAMMER, SINGLE ACTING, DIESEL, 58,248 FT-LBS (ADD LEADS & CRANE)			\$91,050	35.01	7.91	12.14	1.84	0.00	130
P25DL006	D30-32		PILE HAMMER, SINGLE ACTING, DIESEL, 69,898 FT-LBS (ADD LEADS & CRANE)			\$94,268	36.80	8.19	12.57	1.90	0.00	141
P25DL008	D46-32		PILE HAMMER, SINGLE ACTING, DIESEL, 107,177 FT-LBS (ADD LEADS & CRANE)			\$115,755	46.43	10.06	15.43	2.34	0.00	207
P25DL009	D62-22		PILE HAMMER, SINGLE ACTING, DIESEL, 165,000 FT-LBS (ADD LEADS & CRANE)			\$174,937	68.76	15.19	23.32	3.53	0.00	283
P25DL010	D80-23		PILE HAMMER, SINGLE ACTING, DIESEL, 225,000 FT-LBS (ADD LEADS & CRANE)			\$255,549	99.06	22.20	34.07	5.16	0.00	382
P25DL011	D100-13		PILE HAMMER, SINGLE ACTING, DIESEL, 300,000 FT-LBS (ADD LEADS & CRANE)			\$273,294	107.02	23.74	36.44	5.52	0.00	459
	<b>INTERNATIONAL CONSTRUCTION EQUIPMENT, INC</b>											
P25IC001	30S		PILE HAMMER, SINGLE ACTING, DIESEL, 22,500 FT-LBS (ADD LEADS & CRANE)			\$60,266	23.62	5.24	8.04	1.22	0.00	73
P25IC002	42S		PILE HAMMER, SINGLE ACTING, DIESEL, 42,000 FT-LBS (ADD LEADS & CRANE)			\$67,012	27.26	5.82	8.93	1.35	0.00	91
P25IC003	60S		PILE HAMMER, SINGLE ACTING, DIESEL, 60,000 FT-LBS (ADD LEADS & CRANE)			\$96,256	38.60	8.36	12.83	1.94	0.00	159
P25IC004	80S		PILE HAMMER, SINGLE ACTING, DIESEL, 80,000 FT-LBS (ADD LEADS & CRANE)			\$106,603	43.18	9.26	14.21	2.15	0.00	220
P25IC005	100S		PILE HAMMER, SINGLE ACTING, DIESEL, 100,000 FT-LBS (ADD LEADS & CRANE)			\$133,036	53.53	11.56	17.74	2.69	0.00	220
P25IC006	120S		PILE HAMMER, SINGLE ACTING, DIESEL, 120,000 FT-LBS (ADD LEADS & CRANE)			\$164,654	65.70	14.30	21.95	3.32	0.00	274

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>MKT MANUFACTURING, INC.</b>											
	P25MK001	DE-33/30/20C	PILE HAMMER, SINGLE ACTING, DIESEL, 33,000 FT-LBS (ADD LEADS & CRANE)			\$59,108	23.50	5.13	7.88	1.19	0.00	81
	P25MK003	DE-70/50C	PILE HAMMER, SINGLE ACTING, DIESEL, 70,000 FT-LBS (ADD LEADS & CRANE)			\$97,888	38.94	8.51	13.05	1.98	0.00	153
	<b>SUBCATEGORY 0.20 PNUEMATIC (STEAM/AIR)</b>											
	<b>VULCAN FOUNDATION EQUIPMENT, INC</b>											
	P25VU002	306	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 18,000 FT-LBS (ADD 750 CFM COMPRESSOR, LEADS & CRANE)	750 CFM	A	\$62,529	25.21	5.66	8.86	1.23	0.00	121
	P25VU003	505	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 25,000 FT-LBS (ADD 600 CFM COMPRESSOR, LEADS & CRANE)	600 CFM	A	\$77,010	30.46	6.97	10.91	1.51	0.00	127
	P25VU004	506	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 32,500 FT-LBS (ADD 900 CFM COMPRESSOR, LEADS & CRANE)	900 CFM	A	\$78,651	31.05	7.11	11.14	1.54	0.00	140
	P25VU005	508	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 40,000 FT-LBS (ADD 900 CFM COMPRESSOR, LEADS & CRANE)	900 CFM	A	\$105,651	40.86	9.56	14.97	2.07	0.00	202
	P25VU010	510	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 50,000 FT-LBS (ADD 1,050 CFM COMPRESSOR, LEADS & CRANE)	1,050 CFM	A	\$108,507	40.35	9.82	15.37	2.13	0.00	222
	P25VU011	512	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 60,000 FT-LBS (ADD 1,200 CFM COMPRESSOR, LEADS & CRANE)	1,200 CFM	A	\$110,047	41.13	9.96	15.59	2.16	0.00	242
<b>P30</b>	<b>PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY</b>											
	<b>SUBCATEGORY 0.00 PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY</b>											
	<b>MKT MANUFACTURING, INC.</b>											
	P30MK001	V-5C	PILE HAMMER, DRIVER/EXTRACTOR, VIBRATORY, 53 TON FORCE DRIVE (ADD LEADS & CRANE)	185 HP	D-off	\$90,106	46.86	7.83	12.01	1.82	12.96	112

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>P30</b>	<b>MKT MANUFACTURING, INC. (continued)</b>										
	P30MK003	V-20B	PILE HAMMER, DRIVER/EXTRACTOR, VIBRATORY, 98.5 TON FORCE DRIVE (ADD LEADS & CRANE)	325 HP	D-off	\$154,180	80.86	13.39	20.56	3.11	22.77	211
	P30MK004	V-35	PILE HAMMER, DRIVER/EXTRACTOR, VIBRATORY, 200 TON FORCE DRIVE (ADD LEADS & CRANE)	600 HP	D-off	\$276,276	146.32	24.00	36.84	5.58	42.04	305
<b>P35</b>	<b>PIPELAYERS</b>											
	<b>SUBCATEGORY 0.00 PIPELAYERS</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	P35CA001	561M	PIPELAYER, 18' BOOM, 40,000 LBS CAPACITY	110 HP	D-off	\$200,479	36.30	9.45	11.46	3.72	4.23	358
	P35CA008	572-R	PIPELAYER, 20' BOOM, 90,000 LBS CAPACITY	230 HP	D-off	\$373,740	68.81	17.62	21.36	6.94	8.84	669
	P35CA009	583-R	PIPELAYER, 20' BOOM, 140,000 LBS CAPACITY	305 HP	D-off	\$484,306	89.46	22.83	27.67	8.99	11.72	984
	P35CA006	589	PIPELAYER, 28' BOOM, 230,000 LBS CAPACITY	420 HP	D-off	\$628,426	117.20	29.63	35.91	11.67	16.14	1,450
<b>P40</b>	<b>PLATFORMS &amp; MAN-LIFTS</b>											
	<b>SUBCATEGORY 0.00 PLATFORMS &amp; MAN-LIFTS</b>											
	<b>BIL-JAX, INC.</b>											
	P40BX001	SKYRIDER 15	MAN-LIFT, TELESCOPIC MAST, 14.8' HEIGHT, 500 LBS, 24 VOLT DC, RECHARGABLE BATTERIES, SELF PROPELLED, 2.2' X 4' PLATFORM			\$11,633	2.98	0.87	1.31	0.21	0.00	18
	<b>GROVE MANLIFT</b>											
	P40GW016	A60J 2	MAN-LIFT, ARTICULATED BOOM, 68' HEIGHT, 500 LBS, 64' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	60 HP	D-off	\$117,519	33.78	8.70	13.09	2.15	3.25	268

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>P40</b>	<b>GROVE MANLIFT (continued)</b>											
	P40GW017	A80J	MAN-LIFT, ARTICULATED BOOM, 86' HEIGHT, 500 LBS, 64' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	100 HP	D-off	\$191,950	55.87	14.12	21.22	3.51	5.42	428
	P40GW019	A125J	MAN-LIFT, ARTICULATED BOOM, 131' HEIGHT, 600 LBS, 69' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	100 HP	D-off	\$285,447	82.68	21.00	31.53	5.23	5.42	479
	P40GW023	T65J	MAN-LIFT, STRAIGHT BOOM, 65' HEIGHT, 500 LBS, 62' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	60 HP	D-off	\$127,982	36.64	9.44	14.20	2.34	3.25	267
	P40GW024	T80	MAN-LIFT, STRAIGHT BOOM, 86' HEIGHT, 600 LBS, 70' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	85 HP	D-off	\$163,408	46.79	12.13	18.28	2.99	4.61	340
	P40GW025	T86J	MAN-LIFT, STRAIGHT BOOM, 92' HEIGHT, 500 LBS, 76' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	85 HP	D-off	\$171,319	48.79	12.73	19.17	3.14	4.61	371
	<b>TEREX CORPORATION</b>											
	P40TE001	TS25RT	MAN-LIFT, SCISSOR, 25' HEIGHT, 1,500 LBS, 4X4, SELF PROPELLED, 5.3' X 10.3' PLATFORM	24 HP	G	\$34,600	12.74	2.54	3.81	0.63	3.27	58
	P40TE002	TS30RT	MAN-LIFT, SCISSOR, 30' HEIGHT, 2,000 LBS, 4X4, SELF PROPELLED, 6.3' X 13.3' PLATFORM	39 HP	G	\$43,590	17.37	3.22	4.83	0.80	5.32	89
	P40TE003	TA50RT	MAN-LIFT, ARTICULATED BOOM, 55' HEIGHT, 500 LBS, 29' REACH, 4X4, SELF PROPELLED, 2.2' X 5' PLATFORM	32 HP	D-off	\$78,565	22.49	5.76	8.64	1.44	1.74	154
	P40TE004	TA60RT	MAN-LIFT, ARTICULATED BOOM, 66' HEIGHT, 500 LBS, 33' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	44 HP	D-off	\$90,166	26.44	6.58	9.86	1.65	2.39	241
	P40TE005	TB42	MAN-LIFT, STRAIGHT BOOM, 43' HEIGHT, 650 LBS, 37' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	66 HP	D-off	\$69,203	22.20	5.06	7.58	1.27	3.58	131
	P40TE006	TB66	MAN-LIFT, STRAIGHT BOOM, 66' HEIGHT, 650 LBS, 51' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	66 HP	D-off	\$92,413	28.24	6.77	10.15	1.69	3.58	250
	P40TE007	TB85	MAN-LIFT, STRAIGHT BOOM, 86' HEIGHT, 600 LBS, 70' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	66 HP	D-off	\$154,953	44.02	11.43	17.18	2.84	3.58	373



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>P40</b>	<b>TEREX CORPORATION (continued)</b>										
	P40TE008	TB100	MAN-LIFT, STRAIGHT BOOM, 92' HEIGHT, 500 LBS, 67' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	76 HP	D-off	\$172,498	49.04	12.74	19.15	3.16	4.12	393
	P40TE009	TB110	MAN-LIFT, STRAIGHT BOOM, 110' HEIGHT, 500 LBS, 74' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	76 HP	D-off	\$193,007	54.22	14.26	21.46	3.53	4.12	420
	P40TE010	T-292	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 2.5' PLATFORM, 300 LBS, 34' HEIGHT, 23' RAD	210 HP	D-off	\$65,910	29.93	4.83	7.23	1.21	11.39	115
	P40TE011	T-38P	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 2.5' PLATFORM, 300 LBS, 43' HEIGHT, 26' RAD	210 HP	D-off	\$72,607	31.82	5.29	7.91	1.33	11.39	128
	P40TE012	Digger DerrickC-4045	MAN-LIFT, LINE-TRUCK, W/13.7 TON, 45' HIGH-BOOM TILT POLE CLAWS, & 1.5' DIA AUGER	210 HP	D-off	\$108,507	40.88	7.97	11.95	1.99	11.39	268
	P40TE013	5FC-52	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 4' PLATFORM, 700 LBS, 57' HEIGHT, 35' RAD	210 HP	D-off	\$99,254	38.55	7.28	10.91	1.82	11.39	215
	P40TE014	5FC-55	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 2.5' PLATFORM, 500 LBS, 60' HEIGHT, 38' RAD	210 HP	D-off	\$101,251	39.04	7.42	11.13	1.85	11.39	248
	P40TE015	6H-65	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 4' PLATFORM, 750 LBS, 70' HEIGHT, 39' RAD	210 HP	D-off	\$115,046	42.53	8.45	12.68	2.11	11.39	255
<b>P45</b>	<b>PUMPS, GROUT</b>											
	<b>SUBCATEGORY 0.00 PUMPS, GROUT</b>											
	<b>AIRPLACO EQUIPMENT CO., INC.</b>											
	P45AF002	HG-5	PUMP, GROUT, HAND PUMP, 12 CF/HR, 0-100 PSI, W/O HOPPER (ADD HOSES)			\$806	0.23	0.07	0.09	0.02	0.00	1
	P45AF003	HG-8	PUMP, GROUT, HAND PUMP, 15 CF/HR, 0-100 PSI, W/5 GAL HOPPER (ADD HOSES)			\$1,302	0.36	0.09	0.14	0.02	0.00	1
	P45AF008	HGA-530	PUMP, GROUT, 50 CF/HR, 0-250 PSI, SKID MTD, W/5 GAL HOPPER AND 30 GAL MIXER (ADD 50 CFM COMPRESSOR & HOSE)	5 CFM	A	\$7,452	2.16	0.54	0.79	0.14	0.00	4
	P45AF005	HJ-15 SG	PUMP, GROUT, HIGH PRESSURE SINGLE CYLINDER GROUT PUMP, 110 CF/HR, 400 PSI, GROUT-MUD JACKING-SHOTCRETE, TRAILER MTD, W/30 GAL HOPPER AND 30 GAL MIXER (ADD 200 CFM COMPRESSOR & 2" HOSE)	11 HP	G	\$10,554	6.22	0.75	1.09	0.20	2.87	5

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>P45</b>	<b>AIRPLACO EQUIPMENT CO., INC. (continued)</b>										
	P45AF009	MP-2J6/GM-70DA	PUMP, GROUT, 160 CF/HR, 1 - 225 PSI, SKID MTD, W/15 GAL HOPPER/ & TWO 70 GAL MIXERS (ADD 350 CFM COMPRESSOR & HOSE)	350 CFM	A	\$22,966	6.45	1.65	2.44	0.43	0.00	5
	P45AF006	HJ-15 DG	PUMP, GROUT, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 180 CF/HR, 0-300 PSI, GROUT-MUD JACKING-SHOTCRETE, TRAILER MTD, W/30 GAL HOPPER AND 30 GAL MIXER (ADD 200 CFM COMPRESSOR & 2" HOSE)	11 HP	G	\$13,665	7.08	0.97	1.42	0.26	2.87	7
	P45AF010	HJ-25	PUMP, GROUT, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 180 CF/HR, 0 - 400 PSI, GROUT-MUD JACK-PLASTER, TRAILER MTD, W/100 GAL HOPPER AND 45 GAL MIXER/ 2" HOSE	18 HP	G	\$26,903	12.81	1.92	2.82	0.51	4.69	23
	P45AF011	HJ-36 CRG	PUMP, GROUT, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 250 CF/HR, 0 - 250 PSI, GROUT-MUD JACK-SHOTCRETE, TRAILER MTD, W/120 GAL HOPPER/ 90 GAL MIXER/ 2" HOSE	35 HP	G	\$47,842	23.67	3.43	5.05	0.90	9.12	49
	P45AF007	P-280 HD	PUMP, GROUT, HIGH VOLUME DUAL CYLINDER GROUT PUMP, 756 CF/HR CONCRETE, 486 CF/HR SHOTCRETE, TRAILER MTD, W/1200 GAL HOPPER (ADD HOSE 2" - 3" DIA)	30 HP	D-off	\$29,667	11.65	2.12	3.12	0.56	3.05	25
	<b>ALLENTOWN EQUIPMENT</b>											
	P45AL015	POWER CRETER MAGNUM	PUMP, GROUT, GROUT-MUD JACK-SHOTCRE, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 135 CF/HR, 0 - 1,330 PSI, TRAILER MTD, W/75 GAL HOPPER/ 82 GAL MIXER/ 3" HOSE	41 HP	D-off	\$43,418	16.71	3.11	4.58	0.82	4.17	35
	<b>CHEMGROUT, INC.</b>											
	P45CG001	CG-050	PUMP, GROUT, MINI, AIR, 40 CF/HR, 225 PSI, PORTABLE, SKID MTD (ADD 15 CFM - 100 PSI COMPRESSOR)	15 CFM	A	\$3,307	0.96	0.24	0.35	0.06	0.00	1
	P45CG002	CG-550P	PUMP, GROUT, MIXER, AIR, 40 CF/HR, 225 PSI, SKID MTD (ADD 85 CFM - 100 PSI COMPRESSOR)	85 CFM	A	\$5,475	1.61	0.39	0.58	0.10	0.00	3

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>P45</b>	<b>CHEMGROUT, INC. (continued)</b>											
	P45CG003	CG-500/2TJ6	PUMP, GROUT, MIXER, AIR, 160 CF/HR, 160 PSI, SKID MTD, 15 GAL HOPPER & 2 - 70 GAL MIXING TANKS (ADD 250 CFM - 100 PSI COMPRESSOR)	230 CFM	A	\$13,276	3.82	0.96	1.41	0.25	0.00	12
	P45CG007	CG-570 / 3C6 / H	PUMP, GROUT, THICK MIX/SPRAY, 64 CF/HR, 261 PSI, SKID MTD, 15 GAL HOPPER & 45 GAL MIXING TANK, W/AIR COMPRESSOR, POWER UNIT	16 HP	G	\$19,091	10.06	1.38	2.03	0.36	4.17	13
	P45CG006	CG-570 / 3C6	PUMP, GROUT, THICK MIX/SPRAY, 64 CF/HR, 261 PSI, TRAILER MTD, 15 GAL HOPPER & 45 GAL MIXING TANK, W/AIR COMPRESSOR, POWER UNIT	16 HP	G	\$23,477	11.27	1.67	2.46	0.44	4.17	15
	<b>OLIN ENGINEERING, INC.</b>											
	P45OE001	5 25	PUMP, GROUT PUMP, 810 CF/HR, 750 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	42 HP	D-off	\$24,459	11.59	1.74	2.55	0.46	4.27	39
	P45OE002	5 40	PUMP, GROUT PUMP, 1,134 CF/HR, 750 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	55 HP	D-off	\$30,726	14.81	2.19	3.21	0.58	5.59	42
	P45OE003	5 65	PUMP, GROUT PUMP, 1,836 CF/HR, 1100 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	84 HP	D-off	\$39,936	20.68	2.85	4.19	0.75	8.54	48
	P45OE004	5 85	PUMP, GROUT PUMP, 2,295 CF/HR, 1100 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	120 HP	D-off	\$47,751	26.96	3.41	5.02	0.90	12.20	56
	P45OE005	5 140CA	PUMP, GROUT PUMP, 3,780 CF/HR, 900 PSI, 37 GAL HOPPER, TRAILER MTD TANDEM, W/POWER UNIT	181 HP	D-off	\$64,188	38.52	4.57	6.71	1.21	18.41	100
<b>P50</b>	<b>PUMPS, WATER, CENTRIFUGAL, TRASH</b>											
	<b>SUBCATEGORY 0.11 ENGINE DRIVE</b>											
	<b>WACKER CORPORATION</b>											
	P50WC001	PT 2A	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 2" DIA, 205 GPM @ 100' HEAD (ADD HOSES)	10 HP	G	\$1,435	3.18	0.10	0.14	0.03	2.45	1

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>P50</b>	<b>WACKER CORPORATION (continued)</b>											
	P50WC002	PT 3A	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 3" DIA, 425 GPM @ 95' HEAD (ADD HOSES)	15 HP	D-off	\$1,700	2.14	0.12	0.17	0.03	1.46	2
	P50WC003	PTS 4V	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 4" DIA, 705 GPM @ 106' HEAD (ADD HOSES)	16 HP	D-off	\$3,679	2.76	0.26	0.37	0.07	1.55	3
	P50WC004	PT 6LT	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 6" DIA, 1,300 GPM @ 100' HEAD , TRAILER MTD (ADD HOSES)	33 HP	D-off	\$16,441	7.97	1.13	1.62	0.32	3.21	25
	<b>NO SPECIFIC MANUFACTURER</b>											
	P50XX001	6" DIESEL	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 6" DIA, 1,165 GPM, AIR COOLED (ADD HOSES)	60 HP	D-off	\$21,452	12.33	1.50	2.15	0.42	5.83	22
	P50XX002	8" DIESEL	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 8" DIA, 2,085 GPM, WATER COOLED (ADD HOSES)	70 HP	D-off	\$39,664	18.11	2.76	3.97	0.77	6.80	35
	P50XX003	10" DIESEL	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 10" DIA, 2,665 GPM, WATER COOLED (ADD HOSES)	85 HP	D-off	\$42,500	20.55	2.96	4.25	0.83	8.26	43
	<b>SUBCATEGORY 0.31 HOSES, PUMP, SUCTION &amp; DISCHARGE</b>											
	<b>GORMAN-RUPP COMPANY</b>											
	P50GR001		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 2" DIA X 20' WITH COUPLING (PER SECTION)			\$367	0.26	0.05	0.08	0.01	0.00	1
	P50GR002		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 3" DIA X 20' WITH COUPLING (PER SECTION)			\$551	0.38	0.07	0.12	0.01	0.00	1
	P50GR003		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 4" DIA X 20' WITH COUPLING (PER SECTION)			\$769	0.54	0.11	0.17	0.02	0.00	1
	P50GR004		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 6" DIA X 20' WITH COUPLING (PER SECTION)			\$1,572	1.09	0.21	0.35	0.03	0.00	1
	P50GR005		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 2" DIA X 50' WITH COUPLING (PER SECTION)			\$508	0.35	0.07	0.11	0.01	0.00	1

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>P50</b>	<b>GORMAN-RUPP COMPANY (continued)</b>											
	P50GR006		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 3" DIA X 50' WITH COUPLING (PER SECTION)			\$745	0.53	0.11	0.17	0.02	0.00	1
	P50GR007		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 4" DIA X 50' WITH COUPLING (PER SECTION)			\$1,021	0.71	0.14	0.23	0.02	0.00	1
	P50GR008		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 6" DIA X 50' WITH COUPLING (PER SECTION)			\$2,207	1.55	0.30	0.50	0.05	0.00	1
<b>P55</b>	<b>PUMPS, WATER, SUBMERSIBLE</b>											
	<b>SUBCATEGORY 0.01 ENGINE DRIVE</b>											
	<b>GRIFFIN DEWATERING CORP.</b>											
	P55GF001	4MH	PUMP, WATER, SUBMERSIBLE, ENGINE DRIVE, 4" DIA, 400 GPM @ 20' HEAD, SKID MTD (INCLUDES POWER UNIT MODEL 250)(ADD HOSES)	21 HP	D-off	\$18,642	7.43	1.29	1.86	0.36	2.04	19
	P55GF002	6T	PUMP, WATER, SUBMERSIBLE, ENGINE DRIVE, 6" DIA, 2,000 GPM @ 20' HEAD, SKID MTD (INCLUDES POWER UNIT MODEL 400)(ADD HOSES)	72 HP	D-off	\$20,638	13.79	1.43	2.06	0.40	7.00	31
	<b>SUBCATEGORY 0.02 ELECTRIC DRIVE</b>											
	<b>GORMAN-RUPP COMPANY</b>											
	P55GR001	S2A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 2" DIA, 138 GPM @ 20' HEAD (ADD HOSES)	2 HP	E	\$2,959	0.88	0.22	0.31	0.06	0.16	2
	P55GR002	S3A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 3" DIA, 278 GPM @ 20' HEAD (ADD HOSES)	5 HP	E	\$3,975	1.46	0.29	0.42	0.08	0.40	3
	P55GR003	S4A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 4" DIA, 860 GPM @ 40' HEAD (ADD HOSES)	25 HP	E	\$13,744	5.99	0.99	1.46	0.26	2.00	12
	P55GR004	S6A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 6" DIA, 1,950 GPM @ 40' HEAD (ADD HOSES)	60 HP	E	\$18,662	11.30	1.34	1.98	0.35	4.81	14

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>WACKER CORPORATION</b>												
	P55WC001	PS2 500	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 2" DIA, 66 GPM @ 39' HEAD (ADD HOSES)	1 HP	E	\$434	0.22	0.04	0.05	0.01	0.08	1
	P55WC002	PS2 750	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 2" DIA, 100 GPM @ 52' HEAD (ADD HOSES)	1 HP	E	\$692	0.26	0.05	0.07	0.01	0.08	1
<b>P60 PUMPS, WATER, CENTRIFUGAL, DEWATERING</b>												
<b>SUBCATEGORY 0.11 SKID MOUNTED, ENGINE DRIVE</b>												
<b>HOMELITE, INC. (DEERE &amp; COMPANY)</b>												
	P60HO002	S2B	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 2" DIA, 150 GPM @ 22' HEAD (ADD HOSES)	4 HP	G	\$801	1.19	0.06	0.08	0.02	0.86	1
	P60HO003	TP3B	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 3" DIA, 293 GPM @ 20' HEAD (ADD HOSES)	8 HP	G	\$1,464	2.62	0.11	0.15	0.03	1.96	1
<b>WACKER CORPORATION</b>												
	P60WC001	PG 2A	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 2" DIA, 159 GPM @ 98' HEAD (ADD HOSES)	4 HP	G	\$589	1.27	0.04	0.06	0.01	0.98	1
	P60WC002	PG 3A	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 3" DIA, 264 GPM @ 98' HEAD (ADD HOSES)	6 HP	G	\$712	1.86	0.05	0.07	0.01	1.47	1
<b>SUBCATEGORY 0.21 WHEEL MOUNTED, ENGINE DRIVE</b>												
<b>GRIFFIN DEWATERING CORP.</b>												
	P60GF003	250/4"MH	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 4" DIA, 400 GPM @ 60' HEAD (ADD HOSES)	21 HP	D-off	\$21,104	7.80	1.45	2.08	0.41	2.04	19
	P60GF008	400/6"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 6" DIA, 1,040 GPM @ 60' HEAD (ADD HOSES)	72 HP	D-off	\$23,100	14.13	1.59	2.28	0.45	7.00	31

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>P60</b>	<b>GRIFFIN DEWATERING CORP. (continued)</b>										
	P60GF004	400/6"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 6" DIA, 2,000 GPM @ 60' HEAD (ADD HOSES)	72 HP	D-off	\$23,100	14.13	1.59	2.28	0.45	7.00	31
	P60GF005	600/8"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 8" DIA, 3,410 GPM @ 60' HEAD (ADD HOSES)	113 HP	D-off	\$26,580	19.67	1.83	2.62	0.52	10.98	39
	P60GF006	825/12"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 12" DIA, 4,410 GPM @ 60' HEAD (ADD HOSES)	140 HP	D-off	\$41,478	26.59	2.87	4.11	0.81	13.61	39
	<b>GORMAN-RUPP COMPANY</b>											
	P60GR001	14C2-F3L	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 4" DIA, 600 GPM @ 80' HEAD (ADD HOSES)	47 HP	D-off	\$21,363	10.83	1.47	2.10	0.42	4.57	20
	P60GR002	86A2-F4L	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 6" DIA, 1,825 GPM @ 40' HEAD (ADD HOSES)	101 HP	G	\$23,459	34.40	1.62	2.31	0.46	24.79	20
<b>P65</b>	<b>PUMPS, WATER, DIAPHRAGM</b>											
	<b>SUBCATEGORY 0.11 SKID MOUNTED, ENGINE DRIVE</b>											
	<b>HOMELITE, INC. (DEERE &amp; COMPANY)</b>											
	P65HO001	DP2B	PUMP, WATER, DIAPHRAGM, SKID MTD, 2" DIA, 33 GPM @ 25' HEAD (ADD HOSES)	4 HP	G	\$1,515	1.37	0.11	0.15	0.03	0.86	1
	P65HO002	DP3B	PUMP, WATER, DIAPHRAGM, SKID MTD, 3" DIA, 80 GPM @ 25' HEAD (ADD HOSES)	4 HP	G	\$1,604	1.39	0.11	0.16	0.03	0.86	2
	<b>SUBCATEGORY 0.21 WHEEL MOUNTED, ENGINE DRIVE</b>											
	<b>GORMAN-RUPP COMPANY</b>											
	P65GR001	3D-13	PUMP, WATER, DIAPHRAGM, WHEEL, 2" DIA SUCTION X 3" DIA DISCHARGE, 56 GPM @ 25' HEAD (ADD HOSES)	5 HP	G	\$2,503	2.04	0.15	0.19	0.05	1.23	2
	P65GR002	3D-B	PUMP, WATER, DIAPHRAGM, WHEEL, 3" DIA, 560 GPM @ 25' HEAD (ADD HOSES)	2 HP	G	\$3,180	1.22	0.19	0.26	0.06	0.37	2

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>P65</b>	<b>GORMAN-RUPP COMPANY (continued)</b>											
	P65GR003	4D-B	PUMP, WATER, DIAPHRAGM, WHEEL, 4" DIA, 74 GPM @ 25' HEAD (ADD HOSES)	3 HP	G	\$8,132	2.85	0.53	0.74	0.16	0.74	3
	<b>WACKER CORPORATION</b>											
	P65WC001	PDT 2A	PUMP, WATER, DIAPHRAGM, WHEEL, 2" DIA, 50 GPM @ 25' HEAD (ADD HOSES)	4 HP	G	\$1,789	1.55	0.12	0.18	0.03	0.98	1
	P65WC002	PDT 3A	PUMP, WATER, DIAPHRAGM, WHEEL, 3" DIA, 88 GPM @ 25' HEAD (ADD HOSES)	4 HP	G	\$1,876	1.58	0.14	0.19	0.04	0.98	2
<b>P70</b>	<b>PUMPS, WATER (For core drills)</b>											
	<b>SUBCATEGORY 0.01 ENGINE DRIVE</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	P70XX001	75-7.6	PUMP, WATER, FOR CORE DRILLS, 7.6 GPM, 75 PSI, MANUAL, SKID (ADD HOSES)	2 HP	G	\$3,023	1.27	0.20	0.28	0.06	0.49	1
	P70XX002	225-17.5	PUMP, WATER, FOR CORE DRILLS, 17.5 GPM, 225 PSI, MANUAL, SKID (ADD HOSES)	6 HP	G	\$7,897	3.54	0.53	0.74	0.16	1.47	1
<b>R10</b>	<b>RIPPERS &amp; HYDRAULIC BANK SLOPERS (Add cost for point wear)</b>											
	<b>SUBCATEGORY 0.00 RIPPERS &amp; HYDRAULIC BANK SLOPERS (Add cost for point wear)</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	R10CA006	D-5C111	RIPPER, SHANK, EACH (ADD D-5 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$245	0.05	0.01	0.02	0.00	0.00	1
	R10CA022	D6R11-174-9198	RIPPER SHANK, EACH (ADD D6R11 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$1,000	0.25	0.07	0.10	0.02	0.00	2
	R10CA023	D6R II - 9J-8926	RIPPER, SHANK, EACH (ADD D-6 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$1,009	0.25	0.07	0.10	0.02	0.00	2
	R10CA010	D-7R	RIPPER, SHANK, EACH (ADD D-7 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$1,647	0.41	0.11	0.16	0.03	0.00	2



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R10</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	R10CA013	D-8R	RIPPER, SHANK, EACH (ADD D-8 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$3,635	0.91	0.25	0.36	0.07	0.00	7
	R10CA016	D-9R	RIPPER, SHANK, EACH (ADD D-9 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$3,642	0.92	0.25	0.36	0.07	0.00	8
	R10CA019	D-10R	RIPPER, SHANK, EACH (ADD D-10 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$5,941	1.74	0.42	0.59	0.12	0.00	12
	R10CA001	D-3	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-3 TRACTOR DOZER & COST FOR POINT WEAR)			\$9,625	2.51	0.67	0.96	0.19	0.00	13
	R10CA003	D-4C SERIES III	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-4 TRACTOR DOZER & COST FOR POINT WEAR)			\$9,625	2.51	0.67	0.96	0.19	0.00	13
	R10CA005	D-5C SERIES III	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-5 TRACTOR DOZER & COST FOR POINT WEAR)			\$9,625	2.51	0.67	0.96	0.19	0.00	13
	R10CA007	D-6R II	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-6 TRACTOR DOZER & COST FOR POINT WEAR)			\$21,847	5.60	1.52	2.18	0.43	0.00	40
	R10CA009	D-7R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-7 TRACTOR DOZER & COST FOR POINT WEAR)			\$40,660	10.36	2.83	4.07	0.79	0.00	77
	R10CA011	D-8R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-8 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			\$44,129	11.26	3.07	4.41	0.86	0.00	91
	R10CA012	D-8R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-8 TRACTOR DOZER & COST FOR POINT WEAR)			\$52,126	13.28	3.63	5.21	1.02	0.00	102
	R10CA014	D-9R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-9 TRACTOR DOZER & COST FOR POINT WEAR)			\$56,888	14.55	3.96	5.69	1.11	0.00	102
	R10CA015	D-9R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-9 TRACTOR DOZER & COST FOR POINT WEAR)			\$64,997	16.60	4.52	6.50	1.27	0.00	91
	R10CA017	D-10R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-10 TRACTOR DOZER & COST FOR POINT WEAR)			\$86,608	22.11	6.02	8.66	1.69	0.00	161

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R10</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION) (continued)</b>											
	R10CA018	D-10R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-10 TRACTOR DOZER & COST FOR POINT WEAR)			\$103,462	26.39	7.20	10.35	2.02	0.00	179
	R10CA020	D-11R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-11 TRACTOR DOZER & COST FOR POINT WEAR)			\$105,763	26.98	7.35	10.58	2.06	0.00	72
	R10CA021	D-11R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-11 TRACTOR DOZER & COST FOR POINT WEAR)			\$108,938	27.79	7.57	10.89	2.12	0.00	103
<b>R15</b>	<b>ROLLERS, STATIC, TOWED, PNEUMATIC</b>											
	<b>SUBCATEGORY 0.00 ROLLERS, STATIC, TOWED, PNEUMATIC</b>											
	<b>SOUTHWEST CONSTRUCTION EQUIPMENT CO.</b>											
	R15SO001	C-50	ROLLER, STATIC, TOWED, PNEUMATIC, 60 TON, 9.8' WIDE, 4 TIRE (ADD TOWING UNIT)			\$120,583	22.13	6.61	8.61	2.30	0.00	309
	R15SO002	C-75	ROLLER, STATIC, TOWED, PNEUMATIC, 75 TON, 10.5' WIDE, 4 TIRE (ADD TOWING UNIT)			\$132,942	24.11	6.79	8.52	2.53	0.00	347
	R15SO003	C-100XL	ROLLER, STATIC, TOWED, PNEUMATIC, 100 TON, 10.5' WIDE, 4 TIRE (ADD TOWING UNIT)			\$186,898	34.20	9.98	12.84	3.56	0.00	551
<b>R20</b>	<b>ROLLERS, STATIC, TOWED, STEEL DRUM</b>											
	<b>SUBCATEGORY 0.00 ROLLERS, STATIC, TOWED, STEEL DRUM</b>											
	<b>REYNOLDS INTERNATIONAL, L.P.</b>											
	R20RI002	DD-48X60	ROLLER, STATIC, TOWED, 2 STEEL DRUMS, 10-15 TON, 48" WIDE X 60" DIA, PADFOOT (ADD TOWING UNIT)			\$29,286	5.95	1.73	2.34	0.56	0.00	177
	<b>SOUTHWEST CONSTRUCTION EQUIPMENT CO.</b>											
	R20SO001	2DH-RR	ROLLER, STATIC, TOWED, 2 STEEL DRUMS, 10-20 TON, 60" WIDE X 60" DIA, SHEEPSFOOT (ADD TOWING UNIT)			\$66,316	13.16	3.92	5.31	1.26	0.00	200

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>R30</b>	<b>ROLLERS, STATIC, SELF-PROPELLED</b>											
	<b>SUBCATEGORY 0.01</b>		<b>PNEUMATIC</b>									
	<b>COMPACTION AMERICA</b>											
R30BO004	BW11RH		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 13.50 TON, 68" WIDE, 9 TIRE, ASPHALT COMPACTOR	85 HP	D-off	\$78,639	26.38	5.55	8.12	1.49	7.30	100
R30BO003	BW24R		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 30.00 TON, 78" WIDE, 8 TIRE, ASPHALT COMPACTOR	110 HP	D-off	\$128,753	40.79	8.88	12.90	2.43	9.45	290
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
R30CA010	PS-150B		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 14.25 TON, 68" WIDE, 9 TIRE, ASPHALT COMPACTOR	70 HP	D-off	\$74,744	24.10	5.30	7.77	1.41	6.01	85
R30CA011	PS-200B		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 20.00 TON, 68" WIDE, 9 TIRE, ASPHALT COMPACTOR	105 HP	D-off	\$86,102	30.21	6.07	8.88	1.63	9.02	87
R30CA014	PS-360B		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 27.55 TON, 90" WIDE, 7 TIRE, ASPHALT COMPACTOR	105 HP	D-off	\$143,316	43.10	10.27	15.12	2.71	9.02	352
	<b>ROSCO, A LeeBoy COMPANY</b>											
R30RS003	TRU-PAC 915		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 6-15 TON, 68" WIDE, 9 TIRES, ASPHALT/SOIL COMPACTOR	80 HP	D-off	\$58,300	21.20	4.09	5.98	1.10	6.87	115
	<b>SAKAI AMERICA, INC.</b>											
R30SI002	TS200		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 16 TON, 81" WIDE, 9 TIRE, ASPHALT COMPACTOR	91 HP	D-off	\$97,392	31.72	6.67	9.66	1.84	7.82	187
R30SI003	TS600C		ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 16 TON, 81" WIDE, 9 TIRE, ASPHALT COMPACTOR	95 HP	D-off	\$121,192	37.57	8.39	12.19	2.29	8.16	187

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R30</b>	<b>SAKAI AMERICA, INC. (continued)</b>											
	R30SI004	TS650C	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 27 TON, 82" WIDE, 7 TIRE, ASPHALT COMPACTOR	108 HP	D-off	\$160,756	47.80	11.30	16.51	3.04	9.28	281
	<b>SUBCATEGORY 0.02 SMOOTH DRUM</b>											
	<b>COMPACTION AMERICA</b>											
	R30BO005	BW5AS	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 6 TON, 40" WIDE ASPHALT COMPACTOR	47 HP	D-off	\$69,849	18.39	4.26	5.94	1.29	4.04	130
	R30BO006	BW9AS	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 10 TON, 50" WIDE ASPHALT COMPACTOR	83 HP	D-off	\$82,870	24.40	5.05	7.04	1.53	7.13	162
	R30BO007	BW11AS	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 14 TON, 54" WIDE ASPHALT COMPACTOR	78 HP	D-off	\$97,553	26.85	5.95	8.29	1.80	6.70	215
	<b>ROSCO, A LeeBoy COMPANY</b>											
	R30RS001	300 B	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 1.5 TON, 34" WIDE, ASPHALT COMPACTOR	16 HP	G	\$13,130	6.49	0.80	1.12	0.24	3.49	26
	R30RS002	400	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 2 TON, 40" WIDE, ASPHALT COMPACTOR	40 HP	D-off	\$26,344	9.06	1.61	2.24	0.49	3.44	37
<b>SAKAI AMERICA, INC.</b>												
R30SI005	R2H	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, 3 DRUMS, 14 TON, 64" WIDE, ASPHALT COMPACTOR	75 HP	D-off	\$115,321	30.09	7.03	9.80	2.13	6.44	207	
<b>SUBCATEGORY 0.03 TAMPING FOOT, LANDFILL &amp; SOIL COMPACTORS</b>												
<b>COMPACTION AMERICA</b>												
R30BO009	BC672RB	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 35 TON, 63" DIA, 19.58' WIDTH PER 2-PASS, W/BLADE	442 HP	D-off	\$541,996	131.57	28.24	36.13	10.17	37.96	710	

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R30</b>	<b>COMPACTION AMERICA (continued)</b>											
	R30B0008	BC772RB	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 40 TON, 63" DIA, 19.58' WIDTH PER 2-PASS, W/BLADE	442 HP	D-off	\$575,279	137.07	29.98	38.35	10.80	37.96	812
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	R30CA003	815-F	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 23 TON, 56" DIA, 14.25' WIDTH PER 2-PASS, W/BLADE	240 HP	D-off	\$329,437	77.24	17.16	21.96	6.18	20.61	449
	R30CA012	816-F	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, TAMPING FOOT, CHOPPER, 4X4, 25.0 TON, 14.75' WIDTH PER 2- PASS, W/BLADE	220 HP	D-off	\$336,724	76.54	17.55	22.45	6.32	18.89	509
	R30CA006	825-G II	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 35 TON, 51" DIA, 16.00' WIDTH PER 2-PASS, W/BLADE	315 HP	D-off	\$500,953	112.70	26.10	33.40	9.40	27.05	734
	R30CA013	826-G II	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, TAMPING FOOT, CHOPPER, 4X4, 36.5 TON, 15.66' WIDTH PER 2- PASS, W/BLADE	315 HP	D-off	\$521,321	116.06	27.17	34.75	9.79	27.05	771
	R30CA009	836 G	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, TAMPING FOOT, CHOPPER, 4X4, 50.0 TON, 18.58' WIDTH PER 2- PASS, W/BLADE	473 HP	D-off	\$691,876	159.28	36.06	46.13	12.99	40.62	1,166
<b>R40</b>	<b>ROLLERS, VIBRATORY, TOWED</b>											
	<b>SUBCATEGORY 0.00 ROLLERS, VIBRATORY, TOWED</b>											
	<b>COMPACTION AMERICA</b>											
	R40B0001	BW6	ROLLER, VIBRATORY, TOWED, SINGLE DRUM, SMOOTH, 13,000 LB OPER. WT., 26,550 LB (13.3 TONS) CENTRIFUGAL FORCE, 67" WIDE (ADD 180 HP TOWING UNIT)	50 HP	D-off	\$72,385	22.87	5.03	7.24	1.41	4.86	128

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R40</b>	<b>COMPACTION AMERICA (continued)</b>											
	R40BO002	BW6S	ROLLER, VIBRATORY, TOWED, SINGLE DRUM, SHEEPSFOOT, 15,000 LB OPER. WT., 26,550 LB (13.3 TONS) CENTRIFUGAL FORCE, 67" WIDE (ADD 180 HP TOWING UNIT)	50 HP	D-off	\$80,882	24.91	5.63	8.09	1.58	4.86	148
<b>R45</b>	<b>ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM</b>											
	<b>SUBCATEGORY 0.00 ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM</b>											
	<b>COMPACTION AMERICA</b>											
	R45BO004	BW120AD-4	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.9 TON, 47.2" WIDE, 2X1, ASPHALT COMPACTOR	33 HP	D-off	\$48,937	17.56	3.40	4.89	0.95	3.21	57
	R45BO005	BW138AD	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 4.6 TON, 54.3" WIDE, 2X1, ASPHALT COMPACTOR	46 HP	D-off	\$59,684	22.06	4.15	5.97	1.16	4.47	92
	R45BO006	BW151AD-4	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 7.8 TON, 66.1" WIDE, 2X1, ASPHALT COMPACTOR	108 HP	D-off	\$124,100	47.25	8.63	12.41	2.42	10.50	158
	R45BO007	BW161AD-4 HF	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 10.4 TON, 66.1" WIDE, 2X1, ASPHALT COMPACTOR	131 HP	D-off	\$143,204	55.23	9.95	14.32	2.79	12.73	209
	R45BO008	BW190AD-4 HF	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 12.6 TON, 79.0" WIDE, 2X1, ASPHALT COMPACTOR	205 HP	D-off	\$149,420	65.22	10.38	14.94	2.91	19.92	252
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	R45CA001	CB-214D	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.5 TON, 39.4" WIDE, 2X1, ASPHALT COMPACTOR	32 HP	D-off	\$42,039	15.49	2.92	4.20	0.82	3.11	81
	R45CA002	CB-224D	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.7 TON, 47.2" WIDE, 2X1, ASPHALT COMPACTOR	32 HP	D-off	\$48,391	17.29	3.36	4.84	0.94	3.11	58
	R45CA005	CB-434C	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 6.6 TON, 56" WIDE, 2X1, ASPHALT COMPACTOR	70 HP	D-off	\$117,093	41.03	8.14	11.71	2.28	6.80	137

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>R45</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION) (continued)</b>										
	R45CA007	CB-534C	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 10.0 TON, 67" WIDE, 2X1, ASPHALT COMPACTOR	105 HP	D-off	\$142,378	52.10	9.90	14.24	2.78	10.20	233
	R45CA010	CB-634D	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 13.2 TON, 84" WIDE, 2X1, ASPHALT COMPACTOR	145 HP	D-off	\$177,443	66.50	12.33	17.74	3.46	14.09	283
	<b>ROSCO, A LeeBoy COMPANY</b>											
	R45RS001	300B	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.0 TON, 36" WIDE, ASPHALT COMPACTOR	20 HP	D-off	\$16,896	7.02	1.18	1.69	0.33	1.94	26
	<b>SAKAI AMERICA, INC.</b>											
	R45SI008	SW320	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 3.0 TON, 47" WIDE, 2X1, ASPHALT COMPACTOR	34 HP	D-off	\$41,811	15.65	2.91	4.18	0.82	3.30	28
	R45SI009	SW650	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 7.8 TON, 58" WIDE, 2X1, ASPHALT COMPACTOR	37 HP	D-off	\$95,620	31.26	6.64	9.56	1.86	3.60	157
	R45SI010	SW850	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 14.0 TON, 79" WIDE, 2X1, ASPHALT COMPACTOR	121 HP	D-off	\$133,723	51.43	9.30	13.37	2.61	11.76	124
<b>R50</b>	<b>ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM</b>											
	<b>SUBCATEGORY 0.00 ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM</b>											
	<b>COMPACTION AMERICA</b>											
	R50BO005	BW124DH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 2.9 TON, 47.2" WIDE, 3X2, SOIL COMPACTOR	50 HP	D-off	\$60,401	20.40	3.83	5.24	1.21	3.50	60
	R50BO010	BW124PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 2.9 TON, 47.2" WIDE, 3X2, SOIL COMPACTOR	50 HP	D-off	\$62,267	20.52	4.12	5.73	1.25	3.50	60
	R50BO006	BW145D-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 5.5 TON, 56.1" WIDE, 3X2, SOIL COMPACTOR	75 HP	D-off	\$81,529	27.53	5.44	7.60	1.64	5.25	110

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R50</b>	<b>COMPACTION AMERICA (continued)</b>											
	R50BO011	BW145PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 5.8 TON, 56.1" WIDE, 3X2, SOIL COMPACTOR	75 HP	D-off	\$87,688	29.15	5.85	8.18	1.76	5.25	118
	R50BO007	BW177D-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 7.9 TON, 66.4" WIDE, 3X2, SOIL COMPACTOR	75 HP	D-off	\$112,400	35.78	7.46	10.39	2.26	5.25	159
	R50BO012	BW177PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 8.3 TON, 66.4" WIDE, 3X2, SOIL COMPACTOR	101 HP	D-off	\$126,920	41.70	8.43	11.75	2.55	7.08	166
	R50BO008	BW213DH-4	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 11.5 TON, 83.9" WIDE, 3X2, SOIL COMPACTOR	155 HP	D-off	\$148,237	51.95	9.72	13.47	2.98	10.86	269
	R50BO013	BW213PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 14.1 TON, 83.9" WIDE, 3X2, SOIL COMPACTOR	131 HP	D-off	\$158,995	52.84	10.43	14.48	3.19	9.18	283
	R50BO009	BW219DH-4	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 20.6 TON, 83.9" WIDE, 3X2, SOIL COMPACTOR	195 HP	D-off	\$210,410	71.50	13.87	19.30	4.22	13.66	412
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	R50CA001	CS-323C	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.6 TON, 50" WIDE, 3X2, SOIL COMPACTOR	70 HP	D-off	\$77,555	26.15	5.15	7.17	1.56	4.90	97
	R50CA003	CS-431C	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 6.9 TON, 66" WIDE, 3X2, SOIL COMPACTOR	97 HP	D-off	\$104,525	35.47	6.93	9.66	2.10	6.80	138
	R50CA005	CS-433E	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 7.1 TON, 66" WIDE, 3X2, SOIL COMPACTOR	100 HP	D-off	\$113,443	38.05	7.53	10.49	2.28	7.01	147
	R50CA009	CS-563E	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 12.2 TON, 84" WIDE, 3X2, SOIL COMPACTOR	150 HP	D-off	\$143,442	50.27	9.40	13.04	2.88	10.51	253
	R50CA011	CS-583E	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 16.5 TON, 84" WIDE, 3X2, SOIL COMPACTOR	150 HP	D-off	\$176,348	58.92	11.60	16.12	3.54	10.51	340
	R50CA002	CP-323C (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 4.6 TON, 50" WIDE, 3X2, SOIL COMPACTOR	70 HP	D-off	\$90,406	29.52	6.00	8.37	1.81	4.90	105



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R50</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	<i>(continued)</i>											
R50CA010	CP-563E (PADS)		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 12.5 TON, 84" WIDE, 3X2 SOIL COMPACTOR	150 HP	D-off	\$171,947	57.76	11.31	15.71	3.45	10.51	262
R50CA004	CP-433E (PADS)		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 7.1 TON, 66" WIDE, 3X2, SOIL COMPACTOR	100 HP	D-off	\$125,189	41.14	8.31	11.59	2.51	7.01	150
R50CA012	CP-563E (PADS)		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 12.5 TON, 84" WIDE, 3X2, SOIL COMPACTOR	150 HP	D-off	\$172,042	57.79	11.31	15.72	3.45	10.51	275
	<b>INGERSOLL RAND ROAD MACHINERY DIV</b>											
R50IP001	SD-40D		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.9 TON, 54" WIDE, SOIL COMPACTOR	76 HP	D-off	\$84,673	28.58	5.58	7.76	1.70	5.32	91
	<b>SAKAI AMERICA, INC.</b>											
R50SI024	TW350 Combo		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 1.5 TON, 39.5" WIDE, 2X1, ASPHALT COMPACTOR	28 HP	D-off	\$51,732	15.96	3.42	4.75	1.04	1.96	25
R50SI025	TW500 Combo		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 3.9 TON, 51" WIDE, 2X1, ASPHALT COMPACTOR	30 HP	D-off	\$63,816	19.31	4.23	5.89	1.28	2.10	36
R50SI006	SV201D		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.8 TON, 54" WIDE, 3X2, SOIL COMPACTOR	60 HP	D-off	\$71,276	23.74	4.70	6.54	1.43	4.20	41
R50SI007	SV201T (PADS)		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.9 TON, 54" WIDE, 3X2, SOIL COMPACTOR	60 HP	D-off	\$77,858	25.47	5.14	7.16	1.56	4.20	43
R50SI022	SV400D		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 7.7 TON, 67" WIDE, 3X2, SOIL COMPACTOR	138 HP	D-off	\$98,560	37.21	6.51	9.06	1.98	9.67	156
R50SI026	TW750 Combo		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 8.7 TON, 66" WIDE, 2X1, ASPHALT COMPACTOR	104 HP	D-off	\$126,745	41.82	8.44	11.79	2.54	7.29	100
R50SI023	SV400TB (PADS)		ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 9.6 TON, 67" WIDE, 3X2, SOIL COMPACTOR	82 HP	D-off	\$111,121	36.02	7.35	10.24	2.23	5.74	72

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R50</b>	<b>SAKAI AMERICA, INC. (continued)</b>											
	R50SI013	SV510D-1	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 11.5 TON, 84" WIDE, 3X2, SOIL COMPACTOR	138 HP	D-off	\$116,952	42.34	7.62	10.54	2.35	9.67	507
	R50SI016	SV510T (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 11.9 TON, 60" WIDE, 3X2, SOIL COMPACTOR	118 HP	D-off	\$126,613	43.29	8.27	11.45	2.54	8.27	110
	R50SI017	SV510TF (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 14.3 TON, 85" WIDE, 3X2, SOIL COMPACTOR	118 HP	D-off	\$144,678	48.04	9.47	13.14	2.90	8.27	131
<b>R55</b>	<b>ROOFING EQUIPMENT</b>											
	<b>SUBCATEGORY 0.00 ROOFING EQUIPMENT</b>											
	<b>AEROIL PRODUCTS COMPANY, INC.</b>											
	R55AE001	EZ LOAD 270	ROOFING EQUIPMENT, KETTLE, 270 GAL, W/PUMP, TRAILER MTD	8 HP	G	\$6,838	6.92	0.59	0.92	0.13	1.31	20
	R55AE002	EZ LOAD 410	ROOFING EQUIPMENT, KETTLE, 410 GAL, W/PUMP, TRAILER MTD	8 HP	G	\$8,309	9.10	0.73	1.13	0.16	1.31	25
	R55AE003	EZ LOAD 680	ROOFING EQUIPMENT, KETTLE, 680 GAL, W/PUMP, TRAILER MTD	8 HP	G	\$11,186	11.60	0.97	1.49	0.22	1.31	39
	R55AE004	EZ LOAD 1000	ROOFING EQUIPMENT, KETTLE, 1,000 GAL, W/PUMP, TRAILER MTD	8 HP	G	\$14,791	13.08	1.23	1.88	0.29	1.31	54
	R55AE008	RHINO S PEELER	ROOFING EQUIPMENT, ROOF PEELER, 16" WIDE, WALK BEHIND, POWERED WHEEL 2X2	8 HP	G	\$4,957	3.04	0.43	0.66	0.10	1.31	6
	R55AE009	MKI9	ROOFING EQUIPMENT, 1-BLADE CUTTER, 3.75" DEEP, WALK BEHIND (ADD BLADE COST)	9 HP	G	\$1,799	2.21	0.17	0.25	0.04	1.47	2
	R55AE010	MK216R	ROOFING EQUIPMENT, 2-BLADE CUTTER, 20" WIDE, 3.75" DEEP, WALK BEHIND (ADD BLADE COST)	16 HP	G	\$3,308	3.96	0.30	0.47	0.06	2.62	3
	R55AE011	BUFFALO 800	ROOFING EQUIPMENT, MATERIAL BUGGY, 36" WIDE, WALK BEHIND GRAVEL SPREADER, HOPPER 800 LBS, 8 CF, 4X2	5 HP	G	\$3,381	1.96	0.27	0.39	0.07	0.82	4
	<b>GARLOCK EQUIPMENT CO.</b>											
	R55GL017	SUPER MINI SAW	ROOFING EQUIPMENT, 1-BLADE CUTTER, 18" HEIGHT & 2" WALL CLEARANCE	5 HP	G	\$1,852	1.51	0.17	0.26	0.04	0.82	2

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>R55</b>	<i>GARLOCK EQUIPMENT CO. (continued)</i>											
	R55GL016	DUST MASTER ULTRA CU	ROOFING EQUIPMENT, 1-BLADE CUTTER, W/WATER DAMPENING SYSTEM AND H.E.P.A. VACUUM SYSTEM	9 HP	G	\$5,248	3.32	0.47	0.74	0.10	1.47	3
	R55GL011	ENFORCER TWIN CUTTER	ROOFING EQUIPMENT, 2-BLADE CUTTER, 30" WIDE, SELF PROPELLED (ADD BLADE COST)	16 HP	G	\$5,594	4.70	0.51	0.79	0.11	2.62	4
	R55GL018	NO.12	ROOFING EQUIPMENT, SCRATCHER, 4.5" WIDE	5 HP	G	\$1,928	1.53	0.18	0.27	0.04	0.82	1
	R55GL019	NO. 30	ROOFING EQUIPMENT, SCRATCHER, 13" WIDE	8 HP	G	\$3,724	2.65	0.34	0.53	0.07	1.31	3
	R55GL009	ROTARY PLANER	ROOFING EQUIPMENT, ROTARY PLANER, 12" WIDE	11 HP	G	\$2,288	2.64	0.20	0.32	0.04	1.72	2
	R55GL008	ROCK MASTER SWEEPER	ROOFING EQUIPMENT, POWER SWEEPER, 48" WIDE	11 HP	G	\$4,864	3.53	0.40	0.59	0.10	1.80	2
	R55GL015	MODEL 1000	ROOFING EQUIPMENT, HYDRAULIC HOIST, W/175' CABLE, 1,000 LB CAP	9 HP	G	\$9,410	4.66	0.85	1.33	0.18	1.47	8
	R55GL007	SUPER MAX HYDR HOIST	ROOFING EQUIPMENT, HYDRAULIC SWING HOIST, W/275' CABLE, 1,400 LB CAP	18 HP	G	\$11,484	6.98	1.05	1.63	0.23	2.95	10
	R55GL013	MODEL 30	ROOFING EQUIPMENT, KETTLE, 30 GAL, WHEEL MTD			\$1,264	0.59	0.06	0.08	0.02	0.00	3
	R55GL014	MODEL 90	ROOFING EQUIPMENT, KETTLE, 90 GAL, SKID MTD			\$2,875	1.28	0.27	0.41	0.06	0.00	7
	R55GL001	MODEL 115	ROOFING EQUIPMENT, KETTLE, 115 GAL, TRAILER MTD			\$3,312	1.55	0.29	0.44	0.07	0.00	8
	R55GL002	MODEL 175	ROOFING EQUIPMENT, KETTLE, 175 GAL, W/PUMP, TRAILER MTD	5 HP	G	\$6,453	3.47	0.57	0.87	0.13	0.82	17
	R55GL012	MODEL 300	ROOFING EQUIPMENT, KETTLE, 300 GAL, W/PUMP, TRAILER MTD	9 HP	G	\$10,224	5.65	0.90	1.40	0.20	1.47	23
	R55GL003	MODEL 412	ROOFING EQUIPMENT, KETTLE, 412 GAL, W/PUMP, TRAILER MTD	9 HP	G	\$12,996	6.54	1.15	1.78	0.26	1.47	30
	R55GL004	MODEL 612	ROOFING EQUIPMENT, KETTLE, 612 GAL, W/PUMP, TRAILER MTD	9 HP	G	\$15,554	7.62	1.39	2.15	0.31	1.47	40

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>S10 SCRAPERS, ELEVATING</b>												
	<b>SUBCATEGORY 0.01 0 THRU 200 HP</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
S10CA001	613-C	SERIES II	SCRAPER, ELEVATING LOADING, 11 CY, 13 TON, 7.7' CUT WIDTH, 4X2 - SINGLE POWERED	175 HP	D-off	\$256,242	69.11	14.80	19.84	4.88	12.26	336
	<b>SUBCATEGORY 0.02 OVER 200 HP</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
S10CA002	615-C	SERIES II	SCRAPER, ELEVATING LOADING, 17 CY, 19 TON, 9.5' CUT WIDTH, 4X2 - SINGLE POWERED	265 HP	D-off	\$398,238	95.65	18.32	21.26	7.69	18.57	526
S10CA003	623-G		SCRAPER, ELEVATING LOADING, 23 CY, 25 TON, 11.5' CUT WIDTH, 4X2 - SINGLE POWERED	365 HP	D-off	\$593,748	133.81	27.91	32.87	11.47	25.57	810
<b>S15 SCRAPERS, CONVENTIONAL</b>												
	<b>SUBCATEGORY 0.00 SCRAPERS, CONVENTIONAL</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
S15CA001	621-G		SCRAPER, CONVENTIONAL, STANDARD LOADING, 21 CY, 24 TON, 9.1' CUT WIDTH, 4X2 - SINGLE POWERED	365 HP	D-off	\$518,788	105.52	22.84	26.47	9.60	23.92	714
S15CA002	631-G		SCRAPER, CONVENTIONAL, STANDARD LOADING, 34 CY, 37.5 TON, 11.5' CUT WIDTH, 4X2 - SINGLE POWERED	450 HP	D-off	\$786,491	152.73	34.59	40.05	14.56	29.49	1,020
S15CA003	651-E		SCRAPER, CONVENTIONAL, STANDARD LOADING, 44 CY, 52 TON, 12.6' CUT WIDTH, 4X2 - SINGLE POWERED	550 HP	D-off	\$975,125	187.17	43.00	49.89	18.05	36.05	1,323

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT	
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL		
			<b>ATI-Bell</b>										
	S15JU001	4206DTIS28	SCRAPER, CONVENTIONAL, STANDARD LOADING, 28 CY, 32 TON, 14' CUT WIDTH, 4X4 - SINGLE POWERED, TRACTOR EQUIPPED WITH ATI RUBBER TRACKS	422 HP	D-off	\$521,850	104.17	23.29	27.26	9.66	27.66	940	
	S15JU002	4206DTIS33	SCRAPER, CONVENTIONAL, STANDARD LOADING, 33 CY, 37 TON, 14' CUT WIDTH, 4X4 - SINGLE POWERED, TRACTOR EQUIPPED WITH ATI RUBBER TRACKS	422 HP	D-off	\$540,079	106.62	24.12	28.23	10.00	27.66	953	
<b>S20</b>	<b>SCRAPERS, TANDEM POWERED</b>												
	<b>SUBCATEGORY 0.00 SCRAPERS, TANDEM POWERED</b>												
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
	S20CA001	627-G	SCRAPER, TANDEM POWERED, STANDARD LOADING, 21 CY, 24 TON, 9.1' CUT WIDTH, 4X4, D-9 ASSISTED LOADING	330 HP	D-off	225 HP D-off	\$589,201	134.64	26.02	30.22	10.91	37.63	791
	S20CA002	627-G PP	SCRAPER, TANDEM POWERED, STANDARD LOADING, 20 CY, 24 TON, 9.1' CUT WIDTH, 4X4, PUSH-PULL	330 HP	D-off	225 HP D-off	\$621,148	139.07	27.46	31.92	11.50	37.63	824
	S20CA003	637-G	SCRAPER, TANDEM POWERED, STANDARD LOADING, 34 CY, 37.5 TON, 11.5' CUT WIDTH, 4X4, D-10 ASSISTED LOADING	450 HP	D-off	250 HP D-off	\$995,558	208.26	44.03	51.20	18.43	47.46	1,084
	S20CA004	637-G PP	SCRAPER, TANDEM POWERED, STANDARD LOADING, 34 CY, 37.5 TON, 11.5' CUT WIDTH, 4X4, PUSH-PULL	450 HP	D-off	250 HP D-off	\$1,036,438	213.92	45.87	53.38	19.18	47.46	1,117
	S20CA005	657-E	SCRAPER, TANDEM POWERED, STANDARD LOADING, 44 CY, 52 TON, 12.6' CUT WIDTH, 4X4, D-11 ASSISTED LOADING	550 HP	D-off	400 HP D-off	\$1,178,460	263.28	51.70	59.77	21.81	64.41	1,516
	S20CA006	657-E PP	SCRAPER, TANDEM POWERED, STANDARD LOADING, 44 CY, 52 TON, 12.6' CUT WIDTH, 4X4, PUSH-PULL	550 HP	D-off	400 HP D-off	\$1,296,598	270.97	57.52	67.03	24.00	64.41	1,550

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>S25 SCRAPERS, TRACTOR DRAWN</b>												
	<b>SUBCATEGORY 0.00 SCRAPERS, TRACTOR DRAWN</b>											
	<b>DEERE &amp; COMPANY</b>											
	S25JD001	1510C	SCRAPER, TOWED, STANDARD LOADING, 11 CY, 17 TON, 10' CUT WIDTH (ADD 225 HP TRACTOR)			\$41,259	8.82	1.97	2.40	0.77	0.00	168
	S25JD002	1814C	SCRAPER, TOWED, STANDARD LOADING, 14 CY, 23 TON, 14' CUT WIDTH (ADD 360HP TRACTOR)			\$52,512	11.04	2.48	2.97	0.99	0.00	213
	<b>REYNOLDS INTERNATIONAL, L.P.</b>											
	S25RI001	14CS10	SCRAPER, TOWED, PIVOT DUMP, 10.7-14 CY, 15 TON, 10' CUT WIDTH (ADD 250 - 300 HP TRACTOR)			\$39,729	7.94	2.02	2.53	0.75	0.00	138
	S25RI002	17C12 (RG)	SCRAPER, TOWED, PIVOT DUMP, 13-17 CY, 17 TON, 12' CUT WIDTH (ADD 350 - 400 HP TRACTOR)			\$45,313	8.97	2.28	2.85	0.85	0.00	170
	<b>ROME PLOW CO.</b>											
	S25RM003	R56H	SCRAPER, TOWED, 9-12 CY, 12.5 TON, 8.5' CUT WIDTH (ADD 120-165 HP TRACTOR)			\$89,509	18.34	4.26	5.15	1.68	0.00	203
	S25RM001	R67H	SCRAPER, TOWED, 12-17 CY, 17 TON, 9.9' CUT WIDTH (ADD 165-215 HP TRACTOR)			\$113,730	22.07	5.51	6.76	2.13	0.00	238
	S25RM002	R89H	SCRAPER, TOWED, 18-26 CY, 25 TON, 10.8' CUT WIDTH (ADD 285-370 HP TRACTOR)			\$154,743	29.39	7.50	9.20	2.90	0.00	382
<b>S30 SCREENING &amp; CRUSHING PLANTS</b>												
	<b>SUBCATEGORY 0.10 CONVEYORS</b>											
	<b>KOLBERG - PIONEER, INC</b>											
	S30KB034	12-3050	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 30" WIDE X 50' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 500 TPH	15 HP	E	\$42,907	9.62	2.52	3.51	0.76	0.87	15

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>S30</b>	<i>KOLBERG - PIONEER, INC (continued)</i>											
	S30KB035	12-3070	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 30" WIDE X 70' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 500 TPH	20 HP	E	\$49,279	11.30	2.90	4.03	0.88	1.16	18
	S30KB036	12-3650	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 36" WIDE X 50' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 750 TPH	20 HP	E	\$46,084	10.67	2.71	3.77	0.82	1.16	16
	S30KB041	12-3670	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 36" WIDE X 70' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 750 TPH	20 HP	E	\$53,093	12.04	3.12	4.34	0.95	1.16	19
	S30KB001	13-2480	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 24" WIDE X 80' LONG, PORTABLE, 250 TPH	10 HP	E	\$31,128	6.88	1.81	2.52	0.55	0.58	14
	S30KB002	13-24100	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 24" WIDE X 100' LONG, PORTABLE, 250 TPH	15 HP	E	\$36,915	8.45	2.16	2.99	0.66	0.87	18
	S30KB003	13-3080	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 30" WIDE X 80' LONG, PORTABLE, 500 TPH	20 HP	E	\$32,935	8.11	1.99	2.79	0.59	1.16	20
	S30KB004	13-30100	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 30" WIDE X 100' LONG, PORTABLE, 500 TPH	25 HP	E	\$45,961	11.11	2.60	3.56	0.82	1.45	25
	S30KB005	13-3680	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 36" WIDE X 80' LONG, PORTABLE, 750 TPH	25 HP	E	\$38,440	9.64	2.23	3.10	0.68	1.45	30
	S30KB006	13-36100	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 36" WIDE X 100' LONG, PORTABLE, 750 TPH	30 HP	E	\$49,986	12.31	2.84	3.89	0.89	1.74	38
	S30KB007	31-2480	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 24" WIDE X 80' LONG, WHEEL MTD, 750 TPH	10 HP	E	\$33,260	7.31	1.95	2.72	0.59	0.58	22
	S30KB008	31-24100	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 24" WIDE X 100' LONG, PORTABLE, 250 TPH	15 HP	E	\$41,140	9.27	2.44	3.41	0.73	0.87	27
	S30KB009	31-24125	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 24" WIDE X 125' LONG, PORTABLE, 250 TPH	15 HP	E	\$57,094	12.37	3.30	4.55	1.02	0.87	33
	S30KB010	31-3080	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 30" WIDE X 80' LONG, PORTABLE, 500 TPH	20 HP	E	\$35,097	8.56	2.04	2.82	0.63	1.16	32

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>S30</b>	<i>KOLBERG - PIONEER, INC (continued)</i>											
	S30KB011	31-30100	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 30" WIDE X 100' LONG, PORTABLE, 550 TPH	25 HP	E	\$50,217	11.90	2.97	4.15	0.89	1.45	39
	S30KB012	31-30125	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 30" WIDE X 125' LONG, PORTABLE, 500 TPH	25 HP	E	\$60,682	13.94	3.50	4.84	1.08	1.45	47
	S30KB013	31-3680	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 36" WIDE X 80' LONG, PORTABLE, 750 TPH	25 HP	E	\$40,607	10.06	2.37	3.29	0.72	1.45	42
	S30KB014	31-36100	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 36" WIDE X 100' LONG, PORTABLE, 750 TPH	30 HP	E	\$54,293	13.14	3.22	4.49	0.97	1.74	59
	S30KB015	31-36125	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 36" WIDE X 125' LONG, PORTABLE, 750 TPH	40 HP	E	\$73,468	17.72	4.29	5.96	1.31	2.31	70
	S30KB018	35-24150	SCREENING & CRUSHING PLANTS, CONVEYOR, FIXED HEIGHT STACKER, 24" WIDE X 150' LONG, PORTABLE, 750 TPH	25 HP	E	\$89,213	19.41	5.42	7.65	1.59	1.45	39
	S30KB021	35-30150	SCREENING & CRUSHING PLANTS, CONVEYOR, FIXED HEIGHT STACKER, 30" WIDE X 150' LONG, PORTABLE, 1,500 TPH	40 HP	E	\$104,845	23.74	6.38	9.02	1.87	2.31	56
	S30KB024	35-36150	SCREENING & CRUSHING PLANTS, CONVEYOR, FIXED HEIGHT STACKER, 36" WIDE X 150' LONG, PORTABLE, 2,000 TPH	60 HP	E	\$122,933	28.99	7.50	10.61	2.19	3.47	84
	S30KB025	36-24100	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 24" WIDE X 100' LONG, PORTABLE, 750 TPH	20 HP	E	\$63,272	13.98	3.82	5.37	1.13	1.16	52
	S30KB026	36-24125	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 24" WIDE X 120' LONG, PORTABLE, 750 TPH	20 HP	E	\$75,300	16.29	4.56	6.43	1.34	1.16	57
	S30KB027	36-24150	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 24" WIDE X 150' LONG, PORTABLE, 750 TPH	25 HP	E	\$95,254	20.58	5.80	8.19	1.70	1.45	65
	S30KB028	36-30100	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 30" WIDE X 100' LONG, PORTABLE, 1,500 TPH	30 HP	E	\$71,998	16.55	4.35	6.13	1.28	1.74	64
	S30KB029	36-30125	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 30" WIDE X 120' LONG, PORTABLE, 1,500 TPH	30 HP	E	\$88,560	19.73	5.38	7.59	1.58	1.74	71



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>S30</b>	<b>KOLBERG - PIONEER, INC (continued)</b>										
	S30KB030	36-30150	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 30" WIDE X 150' LONG, PORTABLE, 1,500 TPH	40 HP	E	\$112,247	25.17	6.85	9.69	2.00	2.31	82
	S30KB031	36-36100	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 36" WIDE X 100' LONG, PORTABLE, 2,000 TPH	50 HP	E	\$93,574	22.43	5.69	8.04	1.67	2.89	82
	S30KB032	36-36125	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 36" WIDE X 120' LONG, PORTABLE, 2,000 TPH	50 HP	E	\$112,694	26.14	6.87	9.72	2.01	2.89	93
	S30KB033	36-36150	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 36" WIDE X 150' LONG, PORTABLE, 2,000 TPH	60 HP	E	\$131,643	30.67	8.05	11.39	2.35	3.47	110
	S30KB042	1430-15	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 30" WIDE X 40' LONG CONVEYOR, PORTABLE, 1,500 TPH	25 HP	E	\$64,068	14.57	3.86	5.44	1.14	1.45	18
	S30KB054	1936-2	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 30" WIDE X 40' LONG CONVEYOR, PORTABLE, 1,500 TPH	15 HP	E	\$76,559	16.08	4.64	6.56	1.36	0.87	18
	S30KB053	1436-25	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 36" WIDE X 40' LONG CONVEYOR, PORTABLE, 2,000 TPH	35 HP	E	\$70,433	16.65	4.25	5.99	1.25	2.02	20
	S30KB043	1936-3	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 36" WIDE X 40' LONG CONVEYOR, PORTABLE, 2,000 TPH	15 HP	E	\$110,601	22.65	6.78	9.61	1.97	0.87	20
	S30KB044	1936-4	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 36" WIDE X 40' LONG CONVEYOR, PORTABLE, 2,000 TPH	15 HP	E	\$135,827	27.51	8.36	11.88	2.42	0.87	20
	<b>PUTZMEISTER INC.</b>											
	S30PU001	TELEBELT TB 50	SCREENING & CRUSHING PLANTS, CONVEYOR, 16" WIDE X 50' LONG, 1 CY HOPPER & TREMIE, 2X4, TRUCK MTD, 80 CY/HR	215 HP	D-off	\$221,636	59.86	13.76	19.61	3.95	15.06	201
	S30PU002	TELEBELT TB 80	SCREENING & CRUSHING PLANTS, CONVEYOR, 18" WIDE X 80' LONG, 3 CY HOPPER & TREMIE, 4X6, TRUCK MTD, 360 CY/HR	350 HP	D-off	\$418,679	108.67	26.02	37.12	7.46	24.52	332
	S30PU003	TELEBELT TB 105	SCREENING & CRUSHING PLANTS, CONVEYOR, 18" WIDE X 105' LONG, 3 CY HOPPER & TREMIE, 4X8, TRUCK MTD, 360 CY/HR	350 HP	D-off	\$583,397	140.39	36.33	51.88	10.39	24.52	592

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>TELSMITH INC.</b>											
	S30TS001	PTC 24IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 24" WIDE X 50' LONG, WHEEL MTD, 300 TPH	12 HP	E	\$28,655	6.58	1.70	2.38	0.51	0.69	10
	S30TS002	PTC 24IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 24" WIDE X 70' LONG, WHEEL MTD, 300 TPH	17 HP	E	\$49,967	11.15	3.02	4.26	0.89	0.98	13
	S30TS003	PTC 30IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 30" WIDE X 50' LONG, WHEEL MTD, 500 TPH	17 HP	E	\$30,056	7.31	1.78	2.48	0.54	0.98	12
	S30TS004	PTC 30IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 30" WIDE X 70' LONG, WHEEL MTD, 1,500 TPH	22 HP	E	\$51,831	11.95	3.12	4.39	0.92	1.27	17
	S30TS005	PTC 36IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 36" WIDE X 50' LONG, WHEEL MTD, 750 TPH	22 HP	E	\$31,932	8.11	1.88	2.62	0.57	1.27	19
	S30TS006	PTC 36IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 36" WIDE X 70' LONG, WHEEL MTD, 2,000 TPH	27 HP	E	\$54,014	12.82	3.24	4.55	0.96	1.56	26
	S30TS007	PTC 42IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 42" WIDE X 50' LONG, WHEEL MTD, 1,200 TPH	32 HP	E	\$36,855	9.94	2.18	3.04	0.66	1.85	25
	S30TS008	PTC 42IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 42" WIDE X 70' LONG, WHEEL MTD, 1,200 TPH	42 HP	E	\$73,542	17.90	4.45	6.27	1.31	2.43	25
	<b>SUBCATEGORY 0.20</b>	<b>CRUSHERS - VERTICAL &amp; HORIZONTAL SHAFT IMPACTOR</b>										
	<b>HEWITT-ROBINS</b>											
	S30HW001	MODEL 13654V	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 36"X54", SINGLE ROTOR, 250 TPH, W/3' X 16' FEEDER/ 4' GRIZZLY/ 24" X 8' REJECTION CONVEYOR/ & 36" X 37' DISCHARGE END DELIVERY CONVEYOR, TRAILER MTD (ADD 250 KW GENERATOR)	250 HP	E	\$293,723	52.39	10.03	10.25	4.90	14.46	804

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>S30</b>	<b>HEWITT-ROBINS (continued)</b>										
	S30HW002	MODEL 14866V	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 48"X66" SINGLE ROTOR, 350 TPH, W/4'X16' FEEDER/ 6' GRIZZLY/ 30" X 9.5' REJECTION CONVEYOR/ & 48" X43' DISCHARGE END DELIVERY CONVEYOR, TRAILER MTD (ADD 350 KW GENERATOR)	350 HP	E	\$396,046	71.64	13.55	13.88	6.61	20.25	1,280
	S30HW013	MODEL H4832S	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, SECONDARY, 48"X32" HAMMERMILL, 500 TPH, W/3' X 37' FEED CONVEYOR/ 5' X 16' VIBRATORY HORIZONTAL TRIPLE DECK SCREEN/ 36"X30' RETURN CONVEYOR/ & ROTOR LIFT, TRAILER MTD (ADD 450 KW GENERATOR)	450 HP	E	\$353,214	75.86	12.09	12.40	5.89	26.03	600
	<b>KOLBERG - PIONEER, INC</b>											
	S30KB045	CS-4250	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 42" X 52", 500 TPH, W/18" X 42" VIBRATORY FEEDER/ ADJUSTABLE GRIZZLY/ & BYPASS FEED, TRAILER MTD	360 HP	D-off	\$447,496	74.37	15.39	15.84	7.47	25.22	548
	<b>TELSMITH INC.</b>											
	S30TS009	4246	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 46" X 59", 600 TPH	300 HP	E	\$249,195	54.42	8.65	8.97	4.16	17.36	595
	S30TS010	4856	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 56" X 85", 1,100 TPH	400 HP	E	\$363,678	75.73	12.62	13.09	6.07	23.14	942
	S30TS011	6071	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 71" X 100", 2,100 TPH	800 HP	E	\$602,120	138.80	20.89	21.68	10.05	46.28	1,950
	<b>SUBCATEGORY 0.21 CRUSHERS - CONE</b>											
	<b>KOLBERG - PIONEER, INC</b>											
	S30KB046	1200 LS	SCREENING & CRUSHING PLANTS, CRUSHERS - CONE, SECONDARY, 120 TPH @ 3/8" -> 250 TPH @ 1", 42" X 50" IMPACT CRUSHER, W/HOPPER/ & 36" X 32' END DELIVERY CONVEYOR, TRAILER MTD (ADD 210KW GENERATOR)	272 HP	E	\$443,906	73.66	15.25	15.67	7.41	15.74	810

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>S30</b>	<b>KOLBERG - PIONEER, INC (continued)</b>										
	S30KB047	1400 LS	SCREENING & CRUSHING PLANTS, CRUSHERS - CONE, SECONDARY PLANT, 630 TPH @ 1" ->1,050 TPH @ 2.5", 42" X 50" IMPACT CRUSHER, W/HOPPER/ & 42" X 32' END DELIVERY CONVEYOR, TRAILER MTD (INCLUDES GENERATOR)	315 HP	E	\$389,094	71.16	13.38	13.78	6.49	18.22	741
	<b>SUBCATEGORY 0.22</b>		<b>CRUSHERS - JAW</b>									
	<b>HEWITT-ROBINS</b>											
	S30HW005	MODEL J1524PF	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15"X24", 21 TPH @ 1" -> 54 TPH @ 3", W/2.5' X 8' FEEDER/ 2' GRIZZLY/ & 24" X 20' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	40 HP	E	\$158,629	17.45	5.41	5.51	2.65	2.31	86
	S30HW006	MODEL J1536V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15"X36", 45 TPH @1.5" -> 150 TPH @ 6", W/3' X 14' FEEDER/ 4' GRIZZLY/ & 30" X 31' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	100 HP	E	\$264,153	31.63	9.06	9.30	4.41	5.79	128
	S30HW007	MODEL J2036V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 20" X 36", 65 TPH @ 2" -> 223 TPH @ 7", W/3' X 14' FEEDER/ 4' GRIZZLY/ & 30" X 31' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	125 HP	E	\$287,125	35.72	9.85	10.12	4.79	7.23	128
	S30HW009	MODEL J2142V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 21" X 42", 183 TPH @ 4" -> 345 TPH @ 8", W/3.5' X 16' FEEDER/ 4' GRIZZLY/ & 36" X 34' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	150 HP	E	\$311,033	40.22	10.63	10.88	5.19	8.68	152
	S30HW011	MODEL J2248V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 22" X 48", 115 TPH @ 2.5" -> 240 TPH @ 6", W/4' X 16' FEEDER/ 4' GRIZZLY/ & 48" X 37' END DELIVERY CONVEYOR (ADD 40 KW GENERATOR)	200 HP	E	\$371,686	49.82	12.72	13.03	6.20	11.57	168
	S30HW008	MODEL J2436V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 24" X 36", 95 TPH @ 2.5" -> 230 TPH @ 6", W/3' X 14' FEEDER/ 4' GRIZZLY/ & 30" X 31' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	125 HP	E	\$300,019	36.82	10.31	10.59	5.01	7.23	128

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>S30</b>	<b>HEWITT-ROBINS (continued)</b>											
	S30HW010	MODEL J3042V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 30" X 42", 200 TPH @ 4" -> 390 TPH @ 8", W/3.5' X 16' FEEDER/ 6' GRIZZLY/ & 36" X 55' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	200 HP	E	\$379,191	50.41	12.99	13.31	6.33	11.57	156
	S30HW012	MODEL J3048V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 30" X 48", 340 TPH @ 5" -> 615 TPH @ 10", W/4' X 16' FEEDER/ 4' GRIZZLY/ & 48" X 37' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	200 HP	E	\$439,485	55.62	15.05	15.44	7.33	11.57	168
	<b>KOLBERG - PIONEER, INC</b>											
	S30KB055	CS-1536	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15" X 36", 45 TPH @ 1.5" -> 150 TPH @ 6", W/36" X 14' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 36" X 22' END DELIVERY CONVEYOR, TRAILER MTD, INCLUDES GENERATOR	245 HP	D-off	\$289,468	44.35	9.94	10.21	4.83	17.16	548
	S30KB058	1524-2416 DUPLEX PL	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15" X 36", 200 TPH @ 1/4" -> 250 TPH @ 6", W/36" X 14' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ SCREEN CONVEYOR/ & TRIPLE VIBRATORY SCREENS, TRAILER MTD	130 HP	E	\$311,158	38.10	10.71	11.03	5.19	7.52	391
	S30KB056	CS-2036	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 20" X 36", 65 TPH @ 2" -> 223 TPH @ 7", W/36" X 14' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 36" X 22' END DELIVERY CONVEYOR, TRAILER MTD, INCLUDES GENERATOR	245 HP	D-off	\$296,660	44.95	10.19	10.47	4.95	17.16	590
	S30KB059	2036-3024 DUPLEX PL	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 20" X 36", 270 TPH @ 1/4" -> 320 TPH @ 7", W/36" X 14' RECIPROCATING PLATE FEEDER/ 12' LONG ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 18" X 15' SCREEN CONVEYOR, TRAILER MTD (ADD 300KW GENERATOR)	300 HP	E	\$489,118	68.21	16.84	17.35	8.16	17.36	415

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>S30</b>	<b>KOLBERG - PIONEER, INC (continued)</b>											
	S30KB057	CS-2436	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 24" X 36", 95 TPH @ 2.5" -> 230 TPH @ 6", W/36" X 16' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 36" X 22' END DELIVERY CONVEYOR, TRAILER MTD, INCLUDES GENERATOR	245 HP	D-off	\$331,205	47.86	11.39	11.71	5.53	17.16	701
	<b>SUBCATEGORY 0.30</b>		<b>SCREENING PLANT</b>									
	<b>HEWITT-ROBINS</b>											
	S30HW014	V-11 6X16FT, DD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 16' VIBRATORY SLOPE DOUBLE DECK SCREENS, W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	15 HP	E	\$114,968	24.84	7.07	10.04	2.05	0.87	101
	S30HW016	V-11 6X20FT, DD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 20' VIBRATORY SLOPE DOUBLE DECK SCREENS, W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	20 HP	E	\$119,499	26.21	7.36	10.45	2.13	1.16	115
	S30HW015	V-11 6X16FT, TD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 16' VIBRATORY SLOPE TRIPLE DECK SCREENS W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	25 HP	E	\$126,120	28.01	7.78	11.05	2.25	1.45	138
	S30HW017	V-11 6X20FT, TD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 20' VIBRATORY SLOPE TRIPLE DECK SCREENS W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD,	25 HP	E	\$128,159	28.42	7.90	11.23	2.28	1.45	167
	S30HW018	V-11 8X20FT, TD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 8' X 20' VIBRATORY SLOPE TRIPLE DECK SCREENS, W/48" X 15.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	40 HP	E	\$152,616	34.71	9.30	13.16	2.72	2.31	243

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>KOLBERG - PIONEER, INC</b>											
	S30KB048	616 E-3	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 16', VIBRATORY SLOPE TRIPLE DECK SCREENS, W/HOPPER/ 36" X 28.5' FEEDER CONVEYOR/ 48" X27' UNDER SCREEN CONVEYOR/ & 24" X 20' SIDE DELIVERY CONVEYOR, TRAILER MTD	85 HP	E	\$128,659	33.76	7.88	11.18	2.29	4.92	280
	S30KB049	620 E-3	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 20' VIBRATORY SLOPE TRIPLE DECK SCREENS, W/HOPPER/ 42" X 34' FEEDER CONVEYOR/ 60" X 25' UNDER SCREEN CONVEYOR/ & 30" X 15' SIDE DELIVERY CONVEYOR, TRAILER MTD	90 HP	E	\$151,042	38.90	8.90	12.41	2.69	5.21	355
	S30KB050	1822	SCREENING & CRUSHING PLANTS, WASHING/SCREENING PLANT, 6' X 16' VIBRATORY SLOPE TRIPLE DECK SCREENS, W/HOPPER / 3 PRODUCT CHUTES/ ONE FINES CHUTE TO 8' X 32' CLASSIFYING TANK/ 36" DIA X 32' SLOPED SCREW & CHUTE, TRAILER MTD (ADD WATER & FEEDER)	250 HP	E	\$199,798	62.71	12.33	17.53	3.56	14.46	416
	S30KB051	1830	SCREENING & CRUSHING PLANTS, WASHING/SCREENING PLANT, 6' X 20' VIBRATORY SLOPED TRIPLE DECK SCREENS, W/HOPPER/ 3 PRODUCT CHUTES/ ONE FINES CHUTE/ 8' X 32' CLASSIFYING TANK/ & 44" DIA X 32' SLOPED SCREW & CHUTE, TRAILER MTD (ADD WATER & FEEDER)	250 HP	E	\$254,219	73.83	15.63	22.20	4.53	14.46	420
	S30KB052	7208-32 S/P	SCREENING & CRUSHING PLANTS, CLASSIFYING PLANT (SAND SORT) 8'W X 32'L TANK & 44" DIA SCREW	250 HP	E	\$240,516	71.06	14.99	21.42	4.28	14.46	450
	<b>METSO MINERALS</b>											
	S30RA002	CV 50D	SCREENING & CRUSHING PLANTS, GRIZZLY-SINGLE SCREEN, 120 CY/HR, TRAILER MTD	25 HP	D-off	\$54,837	13.19	3.39	4.81	0.98	1.75	130
	S30RA003	CV 90D	SCREENING & CRUSHING PLANTS, GRIZZLY-SINGLE SCREEN, 200 CY/HR, TRAILER MTD	49 HP	D-off	\$102,453	24.83	6.32	8.98	1.83	3.43	195

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>S35 SNOW REMOVAL EQUIPMENT</b>												
	<b>SUBCATEGORY 0.00 SNOW REMOVAL EQUIPMENT</b>											
	<b>AMERICAN ROAD MACHINERY, INC.</b>											
	S35AR001	112	SNOW REMOVAL EQUIPMENT, SNOW PLOW, REVERSIBLE (ADD DUMP TRUCK)			\$2,879	0.70	0.21	0.29	0.06	0.00	15
	S35AR002	713	SNOW REMOVAL EQUIPMENT, SNOW PLOW, 1-WAY TRIP (ADD DUMP TRUCK)			\$4,376	1.06	0.31	0.44	0.09	0.00	20
<b>S40 SOIL &amp; ROAD STABILIZERS</b>												
	<b>SUBCATEGORY 0.00 SOIL &amp; ROAD STABILIZERS</b>											
	<b>COMPACTION AMERICA</b>											
	S40BO002	MPH-362 R-2 RECYCLER	SOIL & ROAD STABILIZER, 12" DEEP X 79" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	360 HP	D-off	\$369,167	105.58	21.58	29.07	7.04	27.66	390
	S40BO003	MPH-362 S-2	SOIL & ROAD STABILIZER, 14" DEEP X 79" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	360 HP	D-off	\$361,478	104.04	21.12	28.46	6.89	27.66	390
	S40BO004	MPH-362 SDM-2	SOIL & ROAD STABILIZER, 21" DEEP X 79" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	360 HP	D-off	\$354,695	102.69	20.72	27.92	6.76	27.66	390
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	S40CA001	RR-250B	SOIL & ROAD STABILIZER, 12" DEEP X 96" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	309 HP	D-off	\$335,983	94.93	19.62	26.44	6.40	23.74	370
	S40CA002	SS-250B	SOIL & ROAD STABILIZER, 18" DEEP X 96" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	309 HP	D-off	\$322,571	91.62	18.78	25.25	6.15	23.74	308
	S40CA003	RM-300	SOIL & ROAD STABILIZER, 18" DEEP X 96" WIDE, HYDROSTATIC ROAD RECLAIMER/ SOIL STABILIZER, 4X4	350 HP	D-off	\$272,943	91.20	15.28	20.16	5.20	26.89	518



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>S40</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>										
	S40CA004	RM-500	SOIL & ROAD STABILIZER, 16" DEEP X 96" WIDE, HYDROSTATIC ROAD RECLAIMER/ SOIL STABILIZER, 4X4	540 HP	D-off	\$453,964	142.07	26.17	35.03	8.65	41.49	599
<b>S45</b>	<b>SPLITTERS, ROCK &amp; CONCRETE</b>											
	<b>SUBCATEGORY 0.00 SPLITTERS, ROCK &amp; CONCRETE</b>											
	<b>ELCO INTERNATIONAL INC.</b>											
	S45DA004	02-2	SPLITTER, ROCK & CONCRETE, 220 TON SFORCE, 1.75" DIA, SIZE 2, 5 GAL, 12" DEEP HOLE REQ'D (ADD 80 CFM COMPRESSOR)	80 CFM	A	\$11,600	4.37	1.01	1.55	0.23	0.00	1
	S45DA005	02-9	SPLITTER, ROCK & CONCRETE, 220 TON SFORCE, 1.75" DIA, SIZE 9, 5 GAL, 18" DEEP HOLE REQ'D (ADD 80 CFM COMPRESSOR)	80 CFM	A	\$13,870	5.18	1.21	1.85	0.28	0.00	1
	S45DA007	02-12	SPLITTER, ROCK & CONCRETE, 385 TON SFORCE, 1.75" DIA, SIZE 12, 5 GAL, 26" DEEP HOLE REQ'D (ADD 80 CFM COMPRESSOR)	80 CFM	A	\$14,620	5.45	1.28	1.95	0.30	0.00	1
<b>T10</b>	<b>TRACTOR BLADES &amp; ATTACHMENTS (including agricultural)</b>											
	<b>SUBCATEGORY 0.00 TRACTOR BLADES &amp; ATTACHMENTS (including agricultural)</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	T10CA001	D3-61-9722	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D3, 1.65 CY (ADD D3 TRACTOR)			\$12,197	2.45	0.72	0.98	0.23	0.00	22
	T10CA002	D3-PA 30B	TRACTOR ATTACHMENTS, POWER WINCH, W/250' CABLE, FOR D3 (ADD D3 TRACTOR)			\$18,388	3.64	1.09	1.47	0.35	0.00	21
	T10CA004	D4-104-5683	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D4, 2.17 CY (ADD D4 TRACTOR)			\$13,503	2.70	0.80	1.08	0.26	0.00	24

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T10</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION) (continued)</b>											
	T10CA005	D4-PA 30B	TRACTOR ATTACHMENTS, POWER WINCH, W/250' CABLE, FOR D4 (ADD D4 TRACTOR)			\$18,388	3.64	1.09	1.47	0.35	0.00	21
	T10CA007	D5 N - ANGLE BLADE	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D5, 2.53 CY (ADD D5 TRACTOR)			\$20,521	4.06	1.21	1.64	0.39	0.00	26
	T10CA008	D5-PA 55	TRACTOR ATTACHMENTS, POWER WINCH, FOR D5 (ADD D5 TRACTOR)			\$27,494	5.41	1.62	2.20	0.52	0.00	26
	T10CA009	D6-108-3970	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D6, 5.09 CY (ADD D6 TRACTOR)			\$24,843	4.90	1.47	1.99	0.47	0.00	57
	T10CA010	D6-108-3982	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D6, 4.16 CY (ADD D6 TRACTOR)			\$27,114	5.34	1.61	2.17	0.52	0.00	69
	T10CA011	D6-PA56 WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D6 (ADD D6 TRACTOR)			\$38,363	7.52	2.27	3.07	0.73	0.00	27
	T10CA012	D7-S	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D7, 6.75 CY (ADD D7 TRACTOR)			\$36,646	7.18	2.17	2.93	0.70	0.00	77
	T10CA013	D7-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D7, 10.09 CY (ADD D7 TRACTOR)			\$40,230	7.88	2.38	3.22	0.77	0.00	86
	T10CA014	D7-A	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D7, 5.08 CY (ADD D7 TRACTOR)			\$33,418	6.56	1.98	2.67	0.64	0.00	78
	T10CA015	D7-PA57 WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D7 (ADD D7 TRACTOR)			\$50,359	9.86	2.98	4.03	0.96	0.00	45
	T10CA016	D8-SU	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D8, 6.09 CY (ADD D8 TRACTOR)			\$48,775	9.57	2.88	3.90	0.93	0.00	107
	T10CA017	D8-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D8, 15.30 CY (ADD D8 TRACTOR)			\$52,873	10.38	3.13	4.23	1.01	0.00	124
	T10CA018	D8-A	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D8, 6.09 CY (ADD D8 TRACTOR)			\$46,668	9.17	2.76	3.73	0.89	0.00	123
	T10CA019	D8-PP	TRACTOR ATTACHMENTS, BLADE, PUSH PLATE, FOR D8 (ADD D8 TRACTOR)			\$1,330	0.32	0.09	0.11	0.03	0.00	5

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T10</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	T10CA020	D8, PA58VS WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D8 (ADD D8 TRACTOR)			\$50,148	9.87	2.97	4.01	0.96	0.00	50
	T10CA021	D9-SU	TRACTOR ATTACHMENTS, BLADE, SEMI-U, HYDRAULIC, FOR D9, 17.70 CY (ADD D9 TRACTOR)			\$66,287	13.03	3.91	5.30	1.26	0.00	143
	T10CA022	D9-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D9, 21.40 CY (ADD D9 TRACTOR)			\$72,026	14.15	4.25	5.76	1.37	0.00	137
	T10CA023	D9, PA59VS WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D9 (ADD D9 TRACTOR)			\$67,280	13.24	3.97	5.38	1.28	0.00	86
	T10CA024	D10-SU ABRASION	TRACTOR ATTACHMENTS, BLADE, SEMI-U, HYDRAULIC, FOR D10, 24.20 CY (ADD D10 TRACTOR)			\$98,344	19.34	5.81	7.87	1.87	0.00	357
	T10CA025	D10-U ABRASION	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D10, 28.70 CY (ADD D10 TRACTOR)			\$105,285	20.70	6.22	8.42	2.01	0.00	251
	T10CA026	D11-SU	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D11, 35.50 CY (ADD D11 TRACTOR)			\$143,687	28.25	8.49	11.49	2.74	0.00	367
	T10CA027	D11-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D11, 45.00 CY (ADD D11 TRACTOR)			\$155,320	30.53	9.18	12.43	2.96	0.00	423
	<b>DEERE &amp; COMPANY</b>											
	T10JD001	915 V-RIPPER	TRACTOR ATTACHMENTS, DEEP TILLER, 5x7 V SHAPED, 175" WIDE, 7 SHANKS (ADD 200HP TRACTOR W/PTO)			\$12,114	2.61	0.70	0.93	0.23	0.00	17
<b>T15</b>	<b>TRACTORS, CRAWLER (DOZER) (includes blade)</b>											
	<b>SUBCATEGORY 0.01 0 THRU 225 HP</b>											
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	T15CA002	D-3G LGP	TRACTOR, CRAWLER (DOZER), 70 HP, LOW GROUND PRESSURE, W/2.0 CY SEMI-U BLADE (ADD ATTACHMENTS)	70 HP	D-off	\$84,750	24.96	4.69	5.93	1.72	5.38	175

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T15</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	T15CA020	D-4G XL	TRACTOR, CRAWLER (DOZER), 80 HP, POWERSHIFT, W/2.18 CY SEMI-U BLADE (ADD ATTACHMENTS)	80 HP	D-off	\$107,211	30.82	5.93	7.50	2.18	6.15	181
	T15CA005	D-4G LGP	TRACTOR, CRAWLER (DOZER), 80 HP, LOW GROUND PRESSURE, W/2.39 CY SEMI-U BLADE (ADD ATTACHMENTS)	80 HP	D-off	\$104,985	30.33	5.81	7.35	2.13	6.15	184
	T15CA021	D-5G XL	TRACTOR, CRAWLER (DOZER), 90 HP, POWERSHIFT, W/2.85 CY POWER ANGLE BLADE (ADD ATTACHMENTS)	90 HP	D-off	\$110,916	32.52	6.13	7.76	2.25	6.92	195
	T15CA022	D-5G LGP	TRACTOR, CRAWLER (DOZER), 90 HP, LOW GROUND PRESSURE, W/3.04 CY POWER ANGLE BLADE (ADD ATTACHMENTS)	90 HP	D-off	\$117,466	33.98	6.50	8.22	2.39	6.92	203
	T15CA024	D-5M XL	TRACTOR, CRAWLER (DOZER), 110 HP, POWERSHIFT, W/3.37 CY SEMI-U BLADE (ADD ATTACHMENTS)	110 HP	D-off	\$150,279	43.00	8.31	10.52	3.05	8.45	277
	T15CA008	D-6N PS XL FTC	TRACTOR, CRAWLER (DOZER), 145 HP, POWERSHIFT, W/5.60 CY SEMI-U BLADE (ADD ATTACHMENTS)	145 HP	D-off	\$210,435	59.40	11.64	14.73	4.27	11.14	321
	T15CA023	D-6R	TRACTOR, CRAWLER (DOZER), 165 HP, LOW GROUND PRESSURE, POWERSHIFT, W/5.09 CY SEMI-U BLADE (ADD ATTACHMENTS)	165 HP	D-off	\$302,987	81.63	16.76	21.21	6.15	12.68	519
	T15CA009	D-6R WHA	TRACTOR, CRAWLER (DOZER), 165 HP, W/14.3 CY BLADE, TRASH/WASTE HANDLING ARRANGEMENT	165 HP	D-off	\$302,987	81.63	16.76	21.21	6.15	12.68	519
	T15CA011	D-6R LGP	TRACTOR, CRAWLER (DOZER), 165 HP, LOW GROUND PRESSURE, W/5.09 CY SEMI-U BLADE (ADD ATTACHMENTS)	185 HP	D-off	\$293,842	81.41	16.26	20.57	5.97	14.22	461
	<b>CASE CORPORATION</b>											
	T15CS004	550H WT	TRACTOR, CRAWLER (DOZER), 67 HP, POWERSHIFT, W/1.90 CY UNIVERSAL BLADE (ADD ATTACHMENTS)	67 HP	D-off	\$95,814	27.14	5.31	6.71	1.95	5.15	146
	T15CS007	1150H WT	TRACTOR, CRAWLER (DOZER), 119 HP, POWERSHIFT, W/3.90 CY UNIVERSAL BLADE (ADD ATTACHMENTS)	119 HP	D-off	\$167,467	47.60	9.26	11.72	3.40	9.14	263

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>DEERE &amp; COMPANY</b>												
	T15JD005	450H LT	TRACTOR, CRAWLER (DOZER), 70 HP, POWERSHIFT, W/2.00 CY ANGLE BLADE (ADD ATTACHMENTS)	70 HP	D-off	\$76,308	23.10	4.22	5.34	1.55	5.38	155
	T15JD006	450H LGP	TRACTOR, CRAWLER (DOZER), 74 HP, LOW GROUND PRESSURE, W/2.15 CY ANGLE BLADE (ADD ATTACHMENTS)	74 HP	D-off	\$90,914	26.69	5.03	6.36	1.85	5.69	165
	T15JD007	650H	TRACTOR, CRAWLER (DOZER), 90 HP, POWERSHIFT, W/2.60 CY ANGLE BLADE (ADD ATTACHMENTS)	90 HP	D-off	\$104,493	31.11	5.78	7.31	2.12	6.92	185
	T15JD008	750C-II LT	TRACTOR, CRAWLER (DOZER), 140 HP, POWERSHIFT, W/5.60 CY ANGLE BLADE (ADD ATTACHMENTS)	140 HP	D-off	\$185,281	53.41	10.25	12.97	3.76	10.76	317
	T15JD009	750C-II LGP	TRACTOR, CRAWLER (DOZER), 140 HP, LOW GROUND PRESSURE, W/4.84 CY ANGLE BLADE (ADD ATTACHMENTS)	140 HP	D-off	\$194,754	55.50	10.77	13.63	3.95	10.76	365
	T15JD010	850C	TRACTOR, CRAWLER (DOZER), 185 HP, POWERSHIFT, W/7.44 CY SEMI-U BLADE (ADD ATTACHMENTS)	185 HP	D-off	\$242,223	70.02	13.40	16.96	4.92	14.22	404
	T15JD011	850C LGP	TRACTOR, CRAWLER (DOZER), 185 HP, LOW GROUND PRESSURE, W/7.14 CY SEMI-U BLADE (ADD ATTACHMENTS)	185 HP	D-off	\$262,298	74.44	14.51	18.36	5.33	14.22	420
<b>SUBCATEGORY 0.02 226 HP THRU 425 HP</b>												
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
	T15CA012	D-7R SERIES II	TRACTOR, CRAWLER (DOZER), 240 HP, POWERSHIFT, W/8.98 CY SEMI-U BLADE (ADD ATTACHMENTS)	240 HP	D-off	\$351,476	88.70	17.36	21.09	6.81	18.44	563
	T15CA014	D-7R II LGP	TRACTOR, CRAWLER (DOZER), 240 HP, LOW GROUND PRESSURE, W/7.70 CY STRAIGHT BLADE (ADD ATTACHMENTS)	240 HP	D-off	\$417,116	101.38	20.60	25.03	8.08	18.44	530
	T15CA016	D-8R II	TRACTOR, CRAWLER (DOZER), 310 HP, POWERSHIFT, W/15.3 CY SEMI-U BLADE (ADD ATTACHMENTS)	310 HP	D-off	\$462,237	116.16	22.83	27.73	8.96	23.82	898
	T15CA017	D-9R	TRACTOR, CRAWLER (DOZER), 410 HP, POWERSHIFT, W/17.7 CY SEMI-U BLADE (ADD ATTACHMENTS)	410 HP	D-off	\$614,904	154.32	30.37	36.89	11.92	31.50	1,033

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
	<b>Komatsu America International Company</b>											
	T15KM008	D155AX-5	TRACTOR, CRAWLER (DOZER), 310 HP, POWERSHIFT, W/11.5 CY SEMI-U BLADE	310 HP	D-off	\$529,019	129.06	26.12	31.74	10.25	23.82	803
	<b>SUBCATEGORY 0.03</b>		<b>OVER 425 HP</b>									
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	T15CA018	D-10R	TRACTOR, CRAWLER (DOZER), 580 HP, POWERSHIFT, W/28.7 CY SEMI-U BLADE (ADD ATTACHMENTS)	580 HP	D-off	\$873,528	186.32	39.47	46.59	16.17	38.01	1,421
	T15CA019	D-11R	TRACTOR, CRAWLER (DOZER), 850 HP, POWERSHIFT, W/44.0 CY SEMI-U BLADE (ADD ATTACHMENTS)	850 HP	D-off	\$1,356,475	285.78	61.29	72.35	25.11	55.71	2,029
<b>T20</b>	<b>TRACTORS, WHEEL TYPE (DOZER)</b>											
	<b>SUBCATEGORY 0.00</b>		<b>TRACTORS, WHEEL TYPE (DOZER)</b>									
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	T20CA001	814-F	TRACTOR, WHEEL (DOZER), 240 HP, ARTICULATING, 4X4, W/3.77 CY STRAIGHT BLADE	240 HP	D-off	\$316,787	62.19	15.03	18.69	5.68	15.73	479
	T20CA002	824-G II	TRACTOR, WHEEL (DOZER), 339 HP, ARTICULATING, 4X4, W/6.70 CY STRAIGHT BLADE	339 HP	D-off	\$463,043	93.04	21.72	26.83	8.30	22.22	633
	T20CA003	834-G	TRACTOR, WHEEL (DOZER), 481 HP, ARTICULATING, 4X4, W/10.33 CY STRAIGHT BLADE	481 HP	D-off	\$696,642	132.98	32.59	40.19	12.49	31.52	902
<b>T25</b>	<b>TRACTORS, AGRICULTURAL</b>											
	<b>SUBCATEGORY 0.10</b>		<b>CRAWLER</b>									
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	T25CA006	CH 65E	TRACTOR, AGRICULTURAL, CRAWLER-RUBBER TRACK, 267 HP, 3 POINT HITCH	267 HP	D-off	\$182,624	58.53	11.13	15.52	3.37	18.71	331

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T25</b>	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b> <i>(continued)</i>											
	T25CA007	CH 75E	TRACTOR, AGRICULTURAL, CRAWLER-RUBBER TRACK, 292 HP, 3 POINT HITCH	292 HP	D-off	\$200,520	64.18	12.22	17.04	3.70	20.46	341
	T25CA008	CH 85E	TRACTOR, AGRICULTURAL, CRAWLER-RUBBER TRACK, 353 HP, 3 POINT HITCH	353 HP	D-off	\$217,337	72.44	13.25	18.47	4.01	24.73	350
	<b>SUBCATEGORY 0.20</b>		<b>WHEEL</b>									
	<b>DEERE &amp; COMPANY</b>											
	T25JD015	5105	TRACTOR, AGRICULTURAL, WHEEL, 50 HP, 4X2, PTO, 3 POINT HITCH	50 HP	D-off	\$16,981	7.95	1.13	1.61	0.32	3.50	39
	T25JD016	5205	TRACTOR, AGRICULTURAL, WHEEL, 56 HP, 4X2, PTO, 3 POINT HITCH	56 HP	D-off	\$20,078	9.13	1.35	1.94	0.38	3.92	39
	T25JD017	5205 W/609 MOWER	TRACTOR, AGRICULTURAL, WHEEL, 56 HP, 4X2, PTO, 3 POINT HITCH, WITH 60" HEAVY DUTY ROTARY MOWER	56 HP	D-off	\$23,584	9.95	1.61	2.32	0.45	3.92	51
	T25JD018	5325	TRACTOR, AGRICULTURAL, WHEEL, 67 HP, 4X2, PTO, 3 POINT HITCH	67 HP	D-off	\$31,111	12.54	2.15	3.11	0.59	4.69	49
	T25JD019	5425	TRACTOR, AGRICULTURAL, WHEEL, 81 HP, 4X2, PTO, 3 POINT HITCH	81 HP	D-off	\$34,061	14.34	2.33	3.38	0.64	5.67	54
	T25JD008	7320	TRACTOR, AGRICULTURAL, WHEEL, 105 HP, 4X4, PTO, 3 POINT HITCH	105 HP	D-off	\$71,859	24.96	5.05	7.37	1.36	7.36	115
	T25JD020	5525	TRACTOR, AGRICULTURAL, WHEEL, 91 HP, 4X2, PTO, 3 POINT HITCH	91 HP	D-off	\$37,284	16.10	2.41	3.41	0.70	6.38	59
	T25JD009	7720	TRACTOR, AGRICULTURAL, WHEEL, 140 HP, 4X4, PTO, 3 POINT HITCH	140 HP	D-off	\$94,611	32.95	6.69	9.79	1.79	9.81	155
	T25JD010	8130	TRACTOR, AGRICULTURAL, WHEEL, 170 HP, 4X4, PTO, 3 POINT HITCH	170 HP	D-off	\$108,262	38.58	7.48	10.88	2.04	11.91	208
	T25JD012	9220	TRACTOR, AGRICULTURAL, WHEEL, 325 HP, 4X4, PTO, 3 POINT HITCH	325 HP	D-off	\$159,455	63.02	10.45	14.88	3.01	22.77	329
	T25JD013	9420	TRACTOR, AGRICULTURAL, WHEEL, 425 HP, 4X4, PTO, 3 POINT HITCH	425 HP	D-off	\$209,935	82.51	14.08	20.24	3.96	29.78	349
	T25JD014	8330	TRACTOR, AGRICULTURAL, WHEEL, 215 HP, 4X4, PTO, 3 POINT HITCH	215 HP	D-off	\$143,720	50.27	10.03	14.64	2.71	15.06	211

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T30</b>	<b>TRENCHERS, CHAIN TYPE CUTTER</b>											
	<b>SUBCATEGORY 0.00 TRENCHERS, CHAIN TYPE CUTTER</b>											
	<b>DITCH WITCH(The Charles Machine Works)I</b>											
	T30DW012	1230	TRENCHER, CHAIN TYPE CUTTER, 36" DEEP X 6" WIDE, WALK BEHIND	13 HP	G	\$8,269	4.70	0.57	0.81	0.16	2.32	8
	T30DW013	1820	TRENCHER, CHAIN TYPE CUTTER, 48" DEEP X 16" WIDE, WALK BEHIND	18 HP	G	\$11,631	6.59	0.78	1.10	0.23	3.22	13
	T30DW014	3610	TRENCHER, CHAIN TYPE CUTTER, 60" DEEP X 16" WIDE, 4X4 (W/BLADE)	35 HP	D-off	\$30,438	10.52	2.00	2.82	0.59	2.45	39
	T30DW005	3700	TRENCHER, CHAIN TYPE CUTTER, 63" DEEP X 12" WIDE, 4X4 (W/DBL PIVOT)	44 HP	D-off	\$32,314	11.70	2.16	3.06	0.63	3.08	42
	T30DW016	5700	TRENCHER, CHAIN TYPE CUTTER, 52" DEEP X 12" WIDE, 4X4 (W/BLADE)	57 HP	D-off	\$52,337	17.82	3.56	5.07	1.02	3.99	95
	T30DW017	RT 70 M	TRENCHER, CHAIN TYPE CUTTER, 96" DEEP X 24" WIDE, 4X4 (W/BLADE)	70 HP	D-off	\$66,121	22.35	4.49	6.39	1.29	4.90	69
	T30DW018	RT 90 M	TRENCHER, CHAIN TYPE CUTTER, 96" DEEP X 24" WIDE, 4X4 (W/BLADE)	78 HP	D-off	\$74,030	24.98	5.03	7.18	1.44	5.46	77
	T30DW011	HT185 (H1812)	TRENCHER, CHAIN TYPE CUTTER, 84" DEEP X 9"-24" WIDE, CRAWLER (W/BLADE)	185 HP	D-off	\$183,707	61.27	12.77	18.37	3.58	12.96	195
	<b>TESMEC USA, INC.</b>											
	T30TM001	TRS 900-A	TRENCHER, CHAIN TYPE CUTTER, 3' DEEP X 4'-8" WIDE, CRAWLER (W/CRUMBSHOE)	185 HP	D-off	\$277,985	85.22	19.32	27.80	5.42	12.96	375
	T30TM004	TRS 900-A-SL	TRENCHER, CHAIN TYPE CUTTER, 3' DEEP X 4'-8" WIDE, CRAWLER (W/CRUMBSHOE) SELF LEVEL	185 HP	D-off	\$300,215	90.86	20.86	30.02	5.85	12.96	400
	T30TM009	TRS 1000-A	TRENCHER, CHAIN TYPE CUTTER, 4' DEEP X 5'-12" WIDE, CRAWLER (W/CRUMBSHOE)	270 HP	D-off	\$392,301	120.97	27.27	39.23	7.65	18.92	550
	T30TM007	TRS 900-SLO	TRENCHER, CHAIN TYPE CUTTER, 4' DEEP X 12" WIDE, CRAWLER (W/CRUMBSHOE) SELF LEVEL, OFFSET	240 HP	D-off	\$379,697	115.39	26.39	37.97	7.40	16.81	450
	T30TM008	TRS 900-SLO	TRENCHER, CHAIN TYPE CUTTER, 6' DEEP X 18" WIDE, CRAWLER (W/CRUMBSHOE) SELF LEVEL, OFFSET	240 HP	D-off	\$394,381	119.12	27.41	39.44	7.69	16.81	470
	T30TM012	TRS 1100	TRENCHER, CHAIN TYPE CUTTER, 8' DEEP X 26" WIDE, CRAWLER (W/CRUMBSHOE)	350 HP	D-off	\$518,406	159.32	36.03	51.84	10.11	24.52	850



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>T30</b>	<b>TESMEC USA, INC. (continued)</b>										
	T30TM014	TRS 1300	TRENCHER, CHAIN TYPE CUTTER, 10' DEEP X 26" WIDE, CRAWLER (W/CRUMBSHOE)	503 HP	D-off	\$791,835	240.84	55.03	79.18	15.44	35.24	1,550
	T30TM013	TRS 1300	TRENCHER, CHAIN TYPE CUTTER, 14' DEEP X 42" WIDE, CRAWLER (W/CRUMBSHOE)	402 HP	D-off	\$808,641	237.12	56.19	80.86	15.76	28.16	1,550
	T30TM015	TRS 1300	TRENCHER, CHAIN TYPE CUTTER, 16' DEEP X 42" WIDE, CRAWLER (W/CRUMBSHOE)	503 HP	D-off	\$837,771	252.51	58.22	83.78	16.33	35.24	1,550
	<b>VERMEER MANUFACTURING CO.</b>											
	T30VE007	T-455	TRENCHER, CHAIN TYPE CUTTER, 6' DEEP X 7.5"-24" WIDE, CRAWLER, HYDROSTATIC	125 HP	D-off	\$142,497	46.07	9.91	14.25	2.78	8.76	195
	T30VE008	T-555 II	TRENCHER, CHAIN TYPE CUTTER, 8' DEEP X 8"-24" WIDE, CRAWLER, HYDROSTATIC	185 HP	D-off	\$290,364	88.36	20.18	29.04	5.66	12.96	225
	T30VE009	T-655 II	TRENCHER, CHAIN TYPE CUTTER, 8' DEEP X 10"-24" WIDE, CRAWLER, HYDROSTATIC	250 HP	D-off	\$313,153	99.29	21.76	31.32	6.10	17.52	425
	T30VE010	T-755	TRENCHER, CHAIN TYPE CUTTER, 10' DEEP X 14"-36" WIDE, CRAWLER, HYDROSTATIC	250 HP	D-off	\$402,608	122.01	27.98	40.26	7.85	17.52	660
<b>T35</b>	<b>TRENCHERS, WHEEL TYPE CUTTER</b>											
	<b>SUBCATEGORY 0.00 TRENCHERS, WHEEL TYPE CUTTER</b>											
	<b>CLEVELAND TRENCHER</b>											
	T35CT001	9624	TRENCHER, WHEEL TYPE CUTTER, 72" DEEP X 21.5" WIDE, ROUND BUCKET, CRAWLER	140 HP	D-off	\$209,203	64.20	14.54	20.92	4.08	9.81	170
	T35CT002	9600-S	TRENCHER, WHEEL TYPE CUTTER, 72" DEEP X 24" WIDE, ROUND BUCKET, CRAWLER	140 HP	D-off	\$257,509	76.46	17.90	25.75	5.02	9.81	228
	T35CT003	246-FD	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 24" WIDE, ROUND BUCKET, CRAWLER	185 HP	D-off	\$289,429	88.12	20.11	28.94	5.64	12.96	320
	T35CT005	7036	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off	\$257,778	73.54	17.92	25.78	5.03	7.15	263
	T35CT006	7036	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off	\$257,778	73.54	17.92	25.78	5.03	7.15	263
	T35CT004	7036-HD	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off	\$272,468	77.27	18.94	27.25	5.31	7.15	286
	T35CT007	7036-SD	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off	\$285,219	80.50	19.82	28.52	5.56	7.15	340

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T35</b>	<b>CLEVELAND TRENCHER (continued)</b>											
	T35CT008	8700	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	150 HP	D-off	\$366,025	104.82	25.44	36.60	7.14	10.51	424
	T35CT009	7648-SD	TRENCHER, WHEEL TYPE CUTTER, 90" DEEP X 48" WIDE, ROUND BUCKET, CRAWLER	150 HP	D-off	\$426,213	120.11	29.62	42.62	8.31	10.51	445
	T35CT010	7648	TRENCHER, WHEEL TYPE CUTTER, 90" DEEP X 48" WIDE, ROUND BUCKET, CRAWLER	150 HP	D-off	\$417,475	117.89	29.02	41.75	8.14	10.51	445
	T35CT011	400W-HD	TRENCHER, WHEEL TYPE CUTTER, 108" DEEP X 72" WIDE, ROUND BUCKET, CRAWLER	175 HP	D-off	\$502,147	141.36	34.90	50.21	9.79	12.26	700
<b>T40</b>	<b>TRUCK OPTIONS</b>											
	<b>SUBCATEGORY 0.10</b>	<b>CRANES / HOISTS, PERSONNEL &amp; MATERIAL HANDLING</b>										
		<b>AUTO CRANE CO.</b>										
	T40AH001	A50A	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 3.5 TON, 32' BOOM (ADD 21,000 GVW TRUCK & FLATBED)			\$21,980	5.54	1.53	2.20	0.43	0.00	34
	T40AH002	A72A	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 5.0 TON, 32' BOOM (ADD 26,000 GVW TRUCK & FLATBED)			\$26,287	6.57	1.83	2.63	0.51	0.00	44
	T40AH003	A95	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 6.6 TON, 36' BOOM (ADD 32,500 GVW TRUCK & FLATBED)			\$34,123	8.46	2.38	3.41	0.67	0.00	63
	T40AH004	A125	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 8.6 TON, 41' BOOM (ADD 46,000 GVW TRUCK & FLATBED)			\$38,099	9.41	2.65	3.81	0.74	0.00	71
		<b>PALFINGER INC.</b>										
	T40PA001	PC 2300	TRUCK OPTIONS, CRANE, HYDRAULIC, 2-ARM ARTICULATING, 2.4 TON, 21' BOOM (ADD 25,000 GVW TRUCK & FLATBED)			\$6,979	1.93	0.49	0.70	0.14	0.00	9
	T40PA002	PK 12502	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 5.3 TON, 61' BOOM (ADD 28,000 GVW TRUCK & FLATBED)			\$38,551	9.52	2.68	3.86	0.75	0.00	35
	T40PA003	PK 20002	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 8.3 TON, 70' BOOM (ADD 30,000 GVW TRUCK & FLATBED)			\$47,816	11.76	3.32	4.78	0.93	0.00	51

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T40</b>	<b>PALFINGER INC. (continued)</b>											
	T40PA004	PK 26502	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 9.0 TON, 69' BOOM (ADD 52,000 GVW TRUCK & FLATBED)			\$55,825	13.69	3.88	5.58	1.09	0.00	61
	T40PA005	PK 50002	TRUCK OPTIONS, CRANE, HYDRAULIC, 2-ARM ARTICULATING, 12.5 TON, 82' BOOM (ADD 60,000 GVW TRUCK & FLATBED)			\$104,160	25.34	7.24	10.42	2.03	0.00	1,072
	T40PA006	PK 65002	TRUCK OPTIONS, CRANE, HYDRAULIC, 2-ARM ARTICULATING, 14.9 TON, 82' BOOM (ADD 62,000 GVW TRUCK & FLATBED)			\$109,424	26.59	7.60	10.94	2.13	0.00	126
	<b>SUBCATEGORY 0.20</b>		<b>DUMP BODY, REAR</b>									
	<b>GALION DUMP BODIES, INC.</b>											
	T40GN001	PACKAGE 89-F	TRUCK OPTIONS, DUMP BODY, REAR, 16-23.5 CY (W/HOIST) (ADD 36,000 GVW TRUCK)			\$13,560	3.22	1.02	1.53	0.25	0.00	42
	<b>MIDLAND MANUFACTURING INC.</b>											
	T40MY002	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 7.5 CY, AIR GATE (W/HOIST) (ADD 30,000 GVW TRUCK)			\$4,452	1.05	0.33	0.50	0.08	0.00	21
	T40MY003	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 8.9 CY, AIR GATE (W/HOIST) (ADD 27,000 GVW TRUCK)			\$5,532	1.31	0.41	0.62	0.10	0.00	26
	T40MY004	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 10.0 CY, AIR GATE (W/HOIST) (ADD 35,000 GVW TRUCK)			\$6,399	1.52	0.48	0.72	0.12	0.00	31
	T40MY005	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 13.6 CY, AIR GATE (W/HOIST) (ADD 35,000 GVW TRUCK)			\$9,090	2.15	0.68	1.02	0.17	0.00	33
	T40MY006	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 20.0 CY, AIR GATE (W/HOIST) (ADD 50,000 GVW TRUCK)			\$10,339	2.45	0.77	1.16	0.19	0.00	40
	<b>SUBCATEGORY 0.30</b>		<b>FLATBEDS, WITH SIDES</b>									
	<b>KNAPHEIDE MANUFACTURING CO.</b>											
	T40KF011	8' X 8'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 8'			\$2,318	0.49	0.17	0.23	0.05	0.00	11

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T40</b>	<b>KNAPHEIDE MANUFACTURING CO. (continued)</b>											
	T40KF013	8' X 10'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 10'			\$3,472	0.74	0.25	0.35	0.07	0.00	14
	T40KF014	8' X 12'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 12'			\$3,063	0.65	0.22	0.31	0.06	0.00	16
	T40KF016	8' X 16'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 16'			\$4,474	0.95	0.32	0.45	0.09	0.00	16
	T40KF018	8' X 20'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 20'			\$5,398	1.14	0.38	0.54	0.11	0.00	18
	T40KF020	8' X 24'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 24'			\$6,280	1.32	0.44	0.63	0.12	0.00	20
	<b>SUBCATEGORY 0.41 HOIST, ELECTRIC DRIVE</b>											
	<b>KNAPHEIDE MANUFACTURING CO.</b>											
	T40KF021	KH-1416L	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, PTO, 10' TO 14', 7-16 TON			\$2,585	0.68	0.18	0.26	0.05	0.00	6
	T40KF023	KH-1416L-EE	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, 10' TO 14', 7-16 TON			\$3,482	0.84	0.25	0.35	0.07	0.00	6
	T40KF024	KH-1627L-EE	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, 15' TO 20', 14-37 TON			\$4,076	0.97	0.29	0.41	0.08	0.00	10
	T40KF022	KH-2538L	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, PTO, 20' TO 24', 20-45 TON			\$5,109	1.25	0.36	0.51	0.10	0.00	15
	<b>SUBCATEGORY 0.50 TRANSIT MIXERS</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	T40XX034	RDTM-8	TRUCK OPTIONS, TRANSIT MIXER, 8 CY, HYDROSTATIC, 100 GAL, (ADD 60,000 GVW TRUCK)	235 HP	D-on	\$129,596	52.99	9.34	13.77	2.45	20.11	266
	T40XX035	RDTM-9	TRUCK OPTIONS, TRANSIT MIXER, 9 CY, HYDROSTATIC, 100 GAL, (ADD 66,000 GVW TRUCK)	250 HP	D-on	\$131,668	54.93	9.49	13.99	2.49	21.39	270
	T40XX036	RDTM-10	TRUCK OPTIONS, TRANSIT MIXER, 10 CY, HYDROSTATIC, 100 GAL, (ADD 66,000 GVW TRUCK)	285 HP	D-on	\$158,248	64.49	11.40	16.81	2.99	24.38	274

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>T40</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>										
	T40XX037	RDTM-11	TRUCK OPTIONS, TRANSIT MIXER, 11 CY, HYDROSTATIC, 100 GAL, (ADD 70,000 GVW TRUCK)	285 HP	D-on	\$155,236	63.80	11.18	16.49	2.93	24.38	285
	T40XX038	RDTM-12	TRUCK OPTIONS, TRANSIT MIXER, 12 CY, HYDROSTATIC, 100 GAL, (ADD 75,000 GVW TRUCK)	285 HP	D-on	\$162,487	65.47	11.70	17.26	3.07	24.38	295
	<b>SUBCATEGORY 0.60</b>		<b>WATER TANKS</b>									
	<b>ROSCO, A LeeBoy COMPANY</b>											
	T40RS001	DS 2000	TRUCK OPTIONS, WATER TANK, 2,000 GAL (ADD 28,000 GVW TRUCK)			\$25,611	5.24	1.71	2.40	0.51	0.00	38
	T40RS002	DS 3000	TRUCK OPTIONS, WATER TANK, 3,000 GAL (ADD 40,000 GVW TRUCK)			\$26,408	5.41	1.77	2.48	0.53	0.00	45
	T40RS003	DS 4000	TRUCK OPTIONS, WATER TANK, 4,000 GAL (ADD 50,000 GVW TRUCK)			\$28,344	5.81	1.90	2.66	0.57	0.00	55
	<b>SUBCATEGORY 0.70</b>		<b>ALL OTHER OPTIONS</b>									
	<b>ARROW-MASTER, INC.</b>											
	T40AG001	1350	TRUCK OPTIONS, GUILLOTINE CONCRETE BREAKER, W/8" DIA BREAKING TOOL AND CAB	80 HP	D-off	\$72,757	22.85	4.95	7.06	1.42	5.60	96
<b>T45</b>	<b>TRUCK TRAILERS</b>											
	<b>SUBCATEGORY 0.10</b>		<b>BOTTOM DUMP</b>									
	<b>MIDLAND MANUFACTURING INC.</b>											
	T45MY004	40' MC 2000	TRUCK TRAILER, BOTTOM DUMP, 21 CY, 28 TON, 40' - 2 AXLE, CLAMSHELL (ADD TOWING TRUCK)			\$26,613	6.04	1.43	1.91	0.47	0.00	152
	T45MY005	40' TC 3000	TRUCK TRAILER, BOTTOM DUMP, 21 CY, 30 TON, 40' - 3 AXLE, CLAMSHELL (ADD TOWING TRUCK)			\$36,428	8.23	1.92	2.54	0.65	0.00	138

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T45</b>	<b>MIDLAND MANUFACTURING INC.</b> <i>(continued)</i>											
	T45MY006	38' MC 3000	TRUCK TRAILER, BOTTOM DUMP, 23 CY, 30 TON, 38' - 3 AXLE, CLAMSHELL (ADD TOWING TRUCK)			\$37,386	8.42	1.99	2.63	0.67	0.00	145
	T45MY007	40' MC 3000	TRUCK TRAILER, BOTTOM DUMP, 23 CY, 30 TON, 40' - 3 AXLE, CLAMSHELL (ADD TOWING TRUCK)			\$36,166	8.17	1.90	2.52	0.64	0.00	152
	<b>NO SPECIFIC MANUFACTURER</b>											
	T45XX001		TRUCK TRAILER, BOTTOM DUMP, 27 TON (ADD TOWING TRUCK)			\$33,347	7.29	1.91	2.64	0.59	0.00	122
	T45XX003		TRUCK TRAILER, BOTTOM DUMP, 30 TON (ADD TOWING TRUCK)			\$44,629	9.46	2.63	3.65	0.80	0.00	160
	<b>SUBCATEGORY 0.20 END DUMP</b>											
	<b>MIDLAND MANUFACTURING INC.</b>											
	T45MY015	28' SK2000	TRUCK TRAILER, END DUMP, 28 CY, 36 TON, 28' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			\$28,806	6.41	1.56	2.10	0.51	0.00	115
	T45MY016	32' ST 2400	TRUCK TRAILER, END DUMP, 28 CY, 36 TON, 32' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			\$29,264	6.50	1.59	2.14	0.52	0.00	130
	T45MY017	39' SK 2300	TRUCK TRAILER, END DUMP, 39 CY, 50 TON, 39' - 3 AXLE (W/HOIST) (ADD TOWING TRUCK)			\$32,264	7.37	1.66	2.17	0.57	0.00	170
	<b>NO SPECIFIC MANUFACTURER</b>											
	T45XX008		TRUCK TRAILER, END DUMP, 20 CY, 24 TON (ADD TOWING TRUCK)			\$27,972	6.10	1.58	2.15	0.50	0.00	110
	<b>SUBCATEGORY 0.30 PUP TRAILER</b>											
	<b>MIDLAND MANUFACTURING INC.</b>											
	T45MY018	14' SK 2100	TRUCK TRAILER, PUP TRAILER, 10 CY, 13 TON, 14' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			\$19,362	5.16	1.14	1.57	0.35	0.00	80

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T45</b>	<b>MIDLAND MANUFACTURING INC. (continued)</b>											
	T45MY019	14' SL 2100	TRUCK TRAILER, PUP TRAILER, 12 CY, 15 TON, 14' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			\$19,202	5.12	1.13	1.55	0.35	0.00	80
	<b>NO SPECIFIC MANUFACTURER</b>											
	T45XX009		TRUCK TRAILER, PUP TRAILER, 8 CY, LONG TONGUE (ADD TOWING TRUCK)			\$28,609	7.09	1.90	2.76	0.52	0.00	86
	T45XX010		TRUCK TRAILER, PUP TRAILER, 10 CY, LONG TONGUE (ADD TOWING TRUCK)			\$28,708	7.12	1.92	2.77	0.53	0.00	86
	T45XX032		TRUCK TRAILER, PUP TRAILER, 13 CY, 14.5 TON, 3 AXLE (ADD TOWING TRUCK)			\$36,082	8.76	2.52	3.72	0.66	0.00	92
	T45XX033		TRUCK TRAILER, PUP TRAILER, 16 CY, 18.0 TON, 4 AXLE (ADD TOWING TRUCK)			\$42,571	10.39	2.95	4.33	0.78	0.00	100
	<b>SUBCATEGORY 0.41</b>	<b>LOWBOY, RIGID NECK, DROP DECK</b>										
	<b>EAGER BEAVER</b>											
	T45EA006	35GSL-BR	TRUCK TRAILER, LOWBOY, 35 TON, 2 AXLE, DETACHABLE GOOSENECK (ADD TOWING TRUCK)			\$33,832	7.21	1.79	2.37	0.60	0.00	150
	T45EA007	50GSL/3	TRUCK TRAILER, LOWBOY, 50 TON, 3 AXLE , DETACHABLE GOOSENECK (ADD TOWING TRUCK)			\$47,520	10.01	2.48	3.26	0.85	0.00	205
	<b>NO SPECIFIC MANUFACTURER</b>											
	T45XX011		TRUCK TRAILER, LOWBOY, 25 TON, 2 AXLE (ADD TOWING TRUCK)			\$28,267	5.65	1.61	2.22	0.50	0.00	95
	T45XX012		TRUCK TRAILER, LOWBOY, 30 TON, 2 AXLE (ADD TOWING TRUCK)			\$29,931	5.93	1.72	2.37	0.53	0.00	115
	T45XX013		TRUCK TRAILER, LOWBOY, 35 TON, 2 AXLE (ADD TOWING TRUCK)			\$31,463	6.25	1.80	2.47	0.56	0.00	110
	T45XX014		TRUCK TRAILER, LOWBOY, 35 TON, 3 AXLE (ADD TOWING TRUCK)			\$38,468	7.72	2.18	2.98	0.69	0.00	127
	T45XX015		TRUCK TRAILER, LOWBOY, 40 TON, 3 AXLE (ADD TOWING TRUCK)			\$39,344	7.85	2.23	3.05	0.70	0.00	136
	T45XX016		TRUCK TRAILER, LOWBOY, 50 TON, 3 AXLE (ADD TOWING TRUCK)			\$44,064	8.75	2.49	3.42	0.78	0.00	145

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>T45</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>											
	T45XX017		TRUCK TRAILER, LOWBOY, 60 TON, 3 AXLE (ADD TOWING TRUCK)			\$46,712	9.31	2.61	3.56	0.83	0.00	175
	T45XX018		TRUCK TRAILER, LOWBOY, 70 TON, 3 AXLE (ADD TOWING TRUCK)			\$46,888	9.35	2.63	3.58	0.84	0.00	213
	T45XX019		TRUCK TRAILER, LOWBOY, 75 TON, 3 AXLE (ADD TOWING TRUCK)			\$53,719	10.51	3.06	4.20	0.96	0.00	220
	T45XX020		TRUCK TRAILER, LOWBOY, 80 TON, 4 AXLE (ADD TOWING TRUCK)			\$52,251	10.48	2.92	3.97	0.93	0.00	268
	T45XX021		TRUCK TRAILER, LOWBOY, 90 TON, 4 AXLE (ADD TOWING TRUCK)			\$56,735	11.23	3.20	4.37	1.01	0.00	293
	T45XX022		TRUCK TRAILER, LOWBOY, 100 TON, 4 AXLE (ADD TOWING TRUCK)			\$64,252	12.70	3.61	4.93	1.14	0.00	312
	T45XX023		TRUCK TRAILER, LOWBOY, 120 TON, 4 AXLE (ADD TOWING TRUCK)			\$76,979	15.12	4.32	5.89	1.37	0.00	350
	<b>SUBCATEGORY 0.50 FLATBED TRAILER</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	T45XX025		TRUCK TRAILER, FLATBED, 25 TON, 2 AXLE (ADD TOWING TRUCK)			\$26,660	5.13	1.49	2.03	0.47	0.00	110
	T45XX034	32	TRUCK TRAILER, FLATBED, 40 TON, 2 AXLE (ADD TOWING TRUCK)			\$26,226	5.37	1.47	1.99	0.47	0.00	103
	T45XX035	40	TRUCK TRAILER, FLATBED, 40 TON, 2 AXLE (ADD TOWING TRUCK)			\$27,871	5.65	1.57	2.14	0.50	0.00	110
	<b>SUBCATEGORY 0.60 MISCELLANEOUS / UTILITY</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	T45XX026		TRUCK TRAILER, MISCELLANEOUS/UTILITY, TILT BED, 12 TON, 2 AXLE (ADD TOWING TRUCK)			\$15,079	3.23	0.85	1.16	0.27	0.00	62
	T45XX027		TRUCK TRAILER, MISCELLANEOUS/UTILITY, TILT BED, 16 TON, 2 AXLE (ADD TOWING TRUCK)			\$17,084	3.67	0.94	1.28	0.30	0.00	65
	T45XX028		TRUCK TRAILER, MISCELLANEOUS/UTILITY, TILT BED, 20 TON, 2 AXLE (ADD TOWING TRUCK)			\$19,735	4.23	1.07	1.43	0.35	0.00	67



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T45</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>											
	T45XX024		TRUCK TRAILER, MISCELLANEOUS/UTILITY, ATTACHMENT, HELPER DOLLY, 60 TON TRAILER MAX (ADD TOWING TRUCK)			\$24,910	4.84	1.38	1.88	0.44	0.00	62
	<b>SUBCATEGORY 0.70</b>		<b>WATER TANKER TRAILER</b>									
	<b>NO SPECIFIC MANUFACTURER</b>											
	T45XX029		TRUCK TRAILER, WATER TANKER, 4,000 GAL, W/PUMP (ADD TOWING TRUCK)	63 HP	D-off	\$70,434	16.94	3.94	5.10	1.39	4.41	170
	T45XX030		TRUCK TRAILER, WATER TANKER, 5,000 GAL, W/PUMP (ADD TOWING TRUCK)	63 HP	D-off	\$69,817	17.08	3.81	4.87	1.37	4.41	240
	T45XX031		TRUCK TRAILER, WATER TANKER, 6,000 GAL, W/PUMP (ADD TOWING TRUCK)	63 HP	D-off	\$85,309	19.68	4.70	6.03	1.68	4.41	250
<b>T50</b>	<b>TRUCKS, HIGHWAY (Add attachments as required)</b>											
	<b>SUBCATEGORY 0.01</b>		<b>0 THRU 10,000 GVW</b>									
	<b>GMC AND CHEVROLET</b>											
	T50GM001	S10	TRUCK, HIGHWAY, 3,500 GVW, 4X2 (COMPACT)	120 HP	G	\$14,149	9.00	0.96	1.35	0.28	5.09	26
	T50GM004	R26	TRUCK, HIGHWAY, 8,600 GVW, 4X2 (SUBURBAN)	285 HP	G	\$35,131	21.57	2.41	3.45	0.68	12.09	50
	T50GM005	V26	TRUCK, HIGHWAY, 8,600 GVW, 4X4 (SUBURBAN)	285 HP	G	\$37,770	22.18	2.60	3.71	0.74	12.09	52
	<b>NO SPECIFIC MANUFACTURER</b>											
	T50XX001	4X2 1/2 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X2	130 HP	G	\$14,098	9.52	0.92	1.29	0.27	5.51	45
	T50XX002	4X2 3/4 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X2	130 HP	G	\$16,931	10.09	1.14	1.61	0.33	5.51	40
	T50XX003	4X2 1 180 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X2	180 HP	G	\$19,279	13.02	1.31	1.85	0.38	7.64	41
	T50XX004	4X4 1/2 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X4	130 HP	G	\$16,997	10.18	1.12	1.58	0.33	5.51	43
	T50XX005	4X4 3/4 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	130 HP	G	\$19,980	10.79	1.35	1.92	0.39	5.51	45

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T50</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>											
	T50XX006	4X4 1 180 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X4	180 HP	G	\$20,677	13.35	1.40	1.99	0.40	7.64	41
	T50XX007	4X2 1/2 130 CREW GAS	TRUCK, HIGHWAY, CREW, 1/2 TON PICKUP, 4X2	130 HP	G	\$14,895	9.70	0.98	1.37	0.29	5.51	45
	T50XX008	4X2 3/4 130 CREW GAS	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP, 4X2	130 HP	G	\$17,951	10.32	1.21	1.72	0.35	5.51	47
	T50XX009	4X2 1 180 CREW GAS	TRUCK, HIGHWAY, CREW, 1 TON PICKUP, 4X2	180 HP	G	\$22,091	13.65	1.50	2.13	0.43	7.64	45
	T50XX010	4X4 1/2 130 CREW GAS	TRUCK, HIGHWAY, CREW, 1/2 TON PICKUP, 4X4	130 HP	G	\$20,196	10.89	1.34	1.90	0.39	5.51	48
	T50XX011	4X4 3/4 180 CREW GAS	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP, 4X4	180 HP	G	\$21,677	13.57	1.47	2.09	0.42	7.64	55
	T50XX012	4X4 1 180 CREW GAS	TRUCK, HIGHWAY, CREW, 1 TON PICKUP, 4X4	180 HP	G	\$22,740	13.81	1.54	2.20	0.44	7.64	45
	T50XX013	4X2 1/2 75 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X2	75 HP	D-on	\$18,348	5.87	1.22	1.71	0.36	1.45	39
	T50XX014	4X2 3/4 75 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X2	75 HP	D-on	\$20,352	6.26	1.38	1.96	0.40	1.45	40
	T50XX015	4X2 1 130 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X2	130 HP	D-on	\$23,469	8.13	1.60	2.27	0.46	2.51	43
	T50XX016	4X4 1/2 130 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X4	130 HP	D-on	\$21,868	7.85	1.47	2.07	0.43	2.51	43
	T50XX017	4X4 3/4 130 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	130 HP	D-on	\$22,071	7.83	1.50	2.13	0.43	2.51	45
	T50XX018	CONV DSL 4X4 1 130	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X4	130 HP	D-on	\$26,418	8.80	1.79	2.56	0.51	2.51	49
	T50XX019	4X2 3/4 130 CREW DSL	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP, 4X2	130 HP	D-on	\$21,089	7.59	1.43	2.03	0.41	2.51	47
	T50XX020	4X4 3/4 130 CREW DSL	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP 4X4	130 HP	D-on	\$25,508	8.60	1.74	2.47	0.50	2.51	55
	T50XX021	4X2 1 130 CREW DSL	TRUCK, HIGHWAY, CREW, 1 TON PICKUP, 4X2	130 HP	D-on	\$23,164	8.06	1.57	2.24	0.45	2.51	48
	<b>SUBCATEGORY 0.02 OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	T50XX023	4X2 20KGVW GAS	TRUCK, HIGHWAY, 20,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	210 HP	G	\$36,417	29.79	2.07	2.75	0.69	20.36	70

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T50</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>											
	T50XX024	4X2 25KGVW GAS	TRUCK, HIGHWAY, 25,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	210 HP	G	\$31,629	28.95	1.79	2.37	0.60	20.36	72
	T50XX022	4X2 25KGVW DSL	TRUCK, HIGHWAY, 25,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	180 HP	D-on	\$46,218	17.85	2.65	3.54	0.88	8.45	88
	T50XX025	4X4 30KGVW DSL	TRUCK, HIGHWAY, 30,000 LBS GVW, 2 AXLE, 4X4 (CHASSIS ONLY-ADD OPTIONS)	170 HP	D-on	\$60,974	20.09	3.47	4.62	1.16	7.98	97
	T50XX026	4X2 30KGVW DSL	TRUCK, HIGHWAY, 30,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	210 HP	D-on	\$61,953	22.33	3.53	4.70	1.18	9.85	105
	T50XX035	4X2 30KGVW DSL	TRUCK, HIGHWAY, 30,000 LBS GVW, 2 AXLE, 4X2, WITH 3-ARM ARTICULATING CRANE, 3.5 TON, 32' BOOM, WITH 8' X 20' FLATBED	210 HP	D-on	\$86,048	26.58	4.96	6.63	1.64	9.85	135
	<b>SUBCATEGORY 0.03 OVER 30,000 GVW (Chassis only - Add options)</b>											
	<b>NO SPECIFIC MANUFACTURER</b>											
	T50XX027	4X2 35KGVW DSL	TRUCK, HIGHWAY, 35,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	265 HP	D-on	\$98,581	34.96	5.03	6.36	1.85	17.55	126
	T50XX032	4X2 35KGVW DSL	DUMP TRUCK, HIGHWAY, 35,000 LBS GVW, 2 AXLE, 4X2 WITH REAR 10 - 13 CY DUMP BODY	265 HP	D-on	\$106,861	36.20	5.47	6.91	2.01	17.55	160
	T50XX028	6X4 45KGVW DSL	TRUCK, HIGHWAY, 45,000 LBS GVW, 2 AXLE, 6X4 (CHASSIS ONLY-ADD OPTIONS)	230 HP	D-on	\$98,737	32.58	4.98	6.26	1.85	15.24	135
	T50XX029	6X4 55KGVW DSL	TRUCK, HIGHWAY, 50,000 LBS GVW, 2 AXLE, 6X4 (CHASSIS ONLY-ADD OPTIONS)	310 HP	D-on	\$90,936	37.38	4.58	5.74	1.71	20.53	144
	T50XX030	6X6 70KGVW DSL	TRUCK, HIGHWAY, 70,000 LBS GVW, 2 AXLE, 6X6 (CHASSIS ONLY-ADD OPTIONS)	350 HP	D-on	\$115,842	44.10	5.87	7.40	2.17	23.18	180
	T50XX031	6X4 75KGVW DSL	TRUCK, HIGHWAY, 75,000 LBS GVW, 2 AXLE, 6X4 (CHASSIS ONLY-ADD OPTIONS)	400 HP	D-on	\$106,500	46.42	5.40	6.79	2.00	26.50	197
	T50XX033	6X4 75KGVW DSL	DUMP TRUCK, HIGHWAY, 75,000 LBS GVW, 2 AXLE, 6X4 WITH REAR 16 - 20 CY DUMP BODY	400 HP	D-on	\$115,932	47.84	5.89	7.42	2.18	26.50	240

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>T55 TRUCKS, OFF-HIGHWAY</b>											
<b>SUBCATEGORY 0.10 RIGID FRAME</b>												
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
T55CA007	769D		TRUCK, OFF-HIGHWAY, RIGID FRAME, 31.7 CY, 41.6 TON, 4X4, REAR DUMP	487 HP	D-off	\$565,451	96.14	21.42	22.98	9.93	18.71	668
T55CA002	773D		TRUCK, OFF-HIGHWAY, RIGID FRAME, 46.9 CY, 57.7 TON, 4X4, REAR DUMP	650 HP	D-off	\$759,569	123.33	28.63	30.60	13.33	24.97	872
T55CA003	777D		TRUCK, OFF-HIGHWAY, RIGID FRAME, 78.6 CY, 100 TON, 4X4, REAR DUMP	938 HP	D-off	\$1,049,375	173.25	39.42	41.99	18.42	36.04	1,419
<b>Komatsu America International Company</b>												
T55KM009	HD325-6		TRUCK, OFF-HIGHWAY, RIGID FRAME, 31.4 CY, 44 TON, 4X4, REAR DUMP	488 HP	D-off	\$566,987	96.35	21.47	23.04	9.95	18.75	707
T55KM012	HD785-5		TRUCK, OFF-HIGHWAY, RIGID FRAME, 78.7 CY, 100 TON, 4X4, REAR DUMP	1,042 HP	D-off	\$830,758	152.49	30.93	32.70	14.58	40.03	1,542
T55KM013	HD1500-5		TRUCK, OFF-HIGHWAY, RIGID FRAME, 102 CY, 165 TON, 4X4, REAR DUMP	1,486 HP	D-off	\$1,916,981	304.34	72.28	77.25	33.65	57.09	5,500
T55KM014	730E		TRUCK, OFF-HIGHWAY, RIGID FRAME, 145 CY, 205 TON, 4X4, REAR DUMP	2,000 HP	D-off	\$2,263,654	384.34	83.49	87.52	39.73	76.84	7,150
<b>SUBCATEGORY 0.20 ARTICULATED FRAME</b>												
<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>												
T55CA008	D25D		TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 18 CY, 25 TON, 4X4, REAR DUMP	260 HP	D-off	\$355,569	78.19	17.40	21.98	6.41	14.10	429
T55CA009	D30D		TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 22 CY, 30 TON, 4X4, REAR DUMP	285 HP	D-off	\$421,351	90.68	20.68	26.17	7.59	15.46	473
T55CA010	D250D SERIES II		TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 18 CY, 25 TON, 6X6, REAR DUMP	214 HP	D-off	\$354,358	72.97	17.59	22.41	6.38	11.61	424
T55CA011	D300E SERIES II		TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 22 CY, 30 TON, 6X6, REAR DUMP	260 HP	D-off	\$418,942	87.37	20.73	26.36	7.55	14.10	488
T55CA012	D350E SERIES II		TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 25 CY, 35 TON, 6X6, REAR DUMP	355 HP	D-off	\$516,646	112.86	25.25	31.88	9.31	19.26	666
T55CA013	D400E SERIES II		TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 28 CY, 40 TON, 6X6, REAR DUMP	405 HP	D-off	\$568,953	126.45	27.68	34.85	10.25	21.97	698

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	CWT
<b>DEERE &amp; COMPANY</b>												
	T55JD001	250D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 18 CY, 25 TON, 6X6, REAR DUMP	265 HP	D-off	\$276,866	64.93	13.53	17.07	4.99	14.37	355
	T55JD002	300D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 22 CY, 29 TON, 6X6, REAR DUMP	285 HP	D-off	\$319,518	72.94	15.69	19.86	5.76	15.46	401
	T55JD003	350D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 25 CY, 35 TON, 6X6, REAR DUMP	380 HP	D-off	\$414,213	97.67	20.08	25.23	7.46	20.61	571
	T55JD004	400D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 29 CY, 40 TON, 6X6, REAR DUMP	413 HP	D-off	\$464,908	109.66	22.46	28.15	8.38	22.40	635
<b>Komatsu America International Company</b>												
	T55KM015	HM350-1	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 19.1-25.9 CY, 35.7 TON, 6 X 6 X 2, REAR DUMP	389 HP	D-off	\$505,331	112.78	24.70	31.19	9.10	21.10	630
	T55KM016	HM400-1	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 21.6-29.2 CY, 40.3 TON, 6 X 6 X 2, REAR DUMP	430 HP	D-off	\$577,417	128.65	28.16	35.51	10.40	23.32	668
<b>VOLVO CONSTRUCTION EQUIPMENT GROUP</b>												
	T55VO002	A-25D 4X4	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 14-18 CY, 25 TON, 4X4, REAR DUMP	251 HP	D-off	\$287,199	66.72	13.95	17.55	5.17	13.61	348
	T55VO003	A-25D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 14-18 CY, 25 TON, 6X6, REAR DUMP	251 HP	D-off	\$303,089	68.64	14.82	18.71	5.46	13.61	392
	T55VO005	A-30D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 17-22 CY, 30 TON, 6X6, REAR DUMP	296 HP	D-off	\$355,289	77.33	17.63	22.46	6.40	16.06	461
	T55VO004	A-35D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 19-25 CY, 35 TON, 6X6, REAR DUMP	322 HP	D-off	\$422,100	95.78	20.45	25.69	7.60	17.47	567
	T55VO006	A-40D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 21-29 CY, 40 TON, 6X6, REAR DUMP	395 HP	D-off	\$474,884	111.75	22.80	28.48	8.56	21.42	660
<b>T56</b>	<b>TRUCKS, OFF-HIGHWAY/PRIME MOVER TRACTORS &amp; WAGONS</b>											
	<b>SUBCATEGORY 0.10</b>		<b>PRIME MOVER TRACTORS</b>									
	<b>CATERPILLAR INC. ( MACHINE DIVISION)</b>											
	T56CA006	776D	TRUCK, OFF-HIGHWAY, RIGID FRAME, PRIME MOVER TRACTOR, 4X4	938 HP	D-off	\$1,168,149	193.44	44.02	47.04	20.50	40.28	1,164

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>T57 TRUCKS, VACUUM</b>												
<b>SUBCATEGORY 0.00 TRUCKS, VACUUM</b>												
<b>CUSCO INDUSTRIES</b>												
T57CU001	INDUSTRIAL VAC 130		TRUCK, VACUUM, 5,500 GAL, 750 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	76 HP	D-off	\$85,565	23.15	5.03	6.79	1.63	5.32	76
T57CU002	SS INDUST. VAC 130		TRUCK, VACUUM, 5,500 GAL, 750 CFM, STAINLESS STEEL, REAR DOOR & HYDRAULIC DUMP SYSTEM	76 HP	D-off	\$104,692	26.90	6.16	8.32	2.00	5.32	76
T57CU003	2527		TRUCK, VACUUM, 5,500 GAL, 2,100 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	115 HP	D-off	\$154,921	39.82	9.12	12.34	2.95	8.06	115
T57CU004	3827		TRUCK, VACUUM, 5,500 GAL, 3,170 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	177 HP	D-off	\$176,627	48.98	10.41	14.08	3.37	12.40	177
T57CU005	5327		TRUCK, VACUUM, 5,500 GAL, 4,550 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	335 HP	D-off	\$191,264	64.32	11.28	15.25	3.65	23.47	335
<b>T60 TRUCKS, WATER, OFF-HIGHWAY</b>												
<b>SUBCATEGORY 0.00 TRUCKS, WATER, OFF-HIGHWAY</b>												
<b>KLEIN PRODUCTS, INC.</b>												
T60KI001	KT-50		TRUCK, WATER, OFF-HIGHWAY, 5,000 GAL, W/CAT 613C TRACTOR	175 HP	D-off	\$229,563	52.60	11.64	14.65	4.31	12.26	320
T60KI002	KT-60		TRUCK, WATER, OFF-HIGHWAY, 6,000 GAL, W/CAT 621E TRACTOR	330 HP	D-off	\$357,606	89.49	17.83	22.23	6.71	23.12	580
T60KI003	KT-80		TRUCK, WATER, OFF-HIGHWAY, 8,000 GAL, W/CAT 631E TRACTOR	450 HP	D-off	\$577,829	134.90	29.19	36.67	10.85	31.53	751
T60KI004	KT-100		TRUCK, WATER, OFF-HIGHWAY, 10,000 GAL, W/CAT 631E TRACTOR	450 HP	D-off	\$123,230	63.09	5.49	6.36	2.31	31.53	811
T60KI006	KT-120		TRUCK, WATER, OFF-HIGHWAY, 12,000 GAL, W/CAT 651E TRACTOR	550 HP	D-off	\$703,330	170.88	34.72	43.03	13.20	38.53	1,097
<b>SOUTHWEST CONSTRUCTION EQUIPMENT CO.</b>												
T60SO001	STT-60		TRUCK, WATER, OFF-HIGHWAY, 6,000 GAL, W/CAT 621E TRACTOR	330 HP	D-off	\$414,263	98.44	20.79	26.01	7.78	23.12	610

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT		
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL			
	<b>T60</b>	<b>SOUTHWEST CONSTRUCTION EQUIPMENT CO. (continued)</b>												
	T60SO002	STT-80	TRUCK, WATER, OFF-HIGHWAY, 8,000 GAL, W/CAT 631E TRACTOR	450 HP	D-off	\$575,776	139.72	28.44	35.26	10.81	31.53	812		
	T60SO003	STT-100	TRUCK, WATER, OFF-HIGHWAY, 10,000 GAL, W/CAT 631E TRACTOR	450 HP	D-off	\$584,553	141.11	28.90	35.85	10.97	31.53	897		
	T60SO004	STT-120	TRUCK, WATER, OFF-HIGHWAY, 12,000 GAL, W/CAT 651E TRACTOR	550 HP	D-off	\$726,490	169.63	36.53	45.78	13.64	38.53	1,149		
	T60SO005	STT-140	TRUCK, WATER, OFF-HIGHWAY, 14,000 GAL, W/CAT 651E TRACTOR	550 HP	D-off	\$738,671	171.55	37.16	46.60	13.86	38.53	1,184		
<b>T65</b>	<b>TUNNEL/MINING EQUIPMENT</b>													
	<b>SUBCATEGORY 0.10 DRIFTING &amp; TUNNELING DRILLS</b>													
	<b>ATLAS COPCO WAGNER</b>													
	T65WG012	L2C	TUNNELING DRILL, 2 BOOM, 560-1,120 SF CROSS SECTION, RUBBER TIRED (ADD DRILL BITS AND DRILL STEEL COST)	158 HP	E	156 HP	D-off	\$1,417,755	250.30	68.24	85.64	25.42	13.37	520
	T65WG013	WL2C	TUNNELING DRILL, 4 BOOM, 700-1,600 SF CROSS SECTION, RUBBER TIRED (ADD DRILL BITS AND DRILL STEEL COST)	158 HP	E	156 HP	D-off	\$2,132,182	365.68	102.74	129.01	38.23	13.37	728
	T65WG014	WL4C	TUNNELING DRILL, 4 BOOM, 700-1,650 SF CROSS SECTION, RUBBER TIRED (ADD DRILL BITS AND DRILL STEEL COST)	380 HP	E	224 HP	D-off	\$2,325,063	422.65	112.05	140.72	41.69	30.10	1,058
<b>W25</b>	<b>WATER &amp; CO2 BLASTERS</b>													
	<b>SUBCATEGORY 0.10 LOW PRESSURE, (&lt; 5,000 PSI)</b>													
	<b>SIOUX STEAM CLEANER CORPORATION</b>													
	W25SD006	S1.7 D250	WATER BLASTER, LOW PRESSURE, STEAM CLEANER, 100 GPH, 250 PSI, 1.7 GPM	1 HP	E		D-off	\$3,981	6.34	0.49	0.80	0.09	0.08	4
	W25SD007	S2 D250	WATER BLASTER, LOW PRESSURE, STEAM CLEANER, 120 GPH, 250 PS, 2.0 GPM	1 HP	E		D-off	\$4,205	7.45	0.51	0.84	0.09	0.08	5
	W25SD008	S2.7 D250	WATER BLASTER, LOW PRESSURE, STEAM CLEANER, 160 GPH, 250 PSI, 2.7 GPM	1 HP	E		D-off	\$4,488	8.61	0.55	0.90	0.10	0.08	6
	W25SD001	513-5-E	WATER BLASTER, LOW PRESSURE, COLD WATER, 1,440 PSI, 5 GPM	5 HP	E			\$5,639	3.74	0.69	1.13	0.12	0.42	4

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>W25</b>	<b>SIoux STEAM CLEANER CORPORATION (continued)</b>											
	W25SD005	514-4-G	WATER BLASTER, LOW PRESSURE, COLD WATER, 2,500 PSI, 4 GPM	11 HP	G	\$7,965	7.59	0.97	1.59	0.17	2.87	4
	W25SD003	515-5-G	WATER BLASTER, LOW PRESSURE, COLD WATER, 3,000 PSI, 5 GPM	14 HP	G	\$9,426	9.28	1.15	1.89	0.20	3.65	5
	W25SD004	H3.5*3000	WATER BLASTER, LOW PRESSURE, HOT WATER, 3,000 PSI, 3.5 GPM, TRAILER MTD	8 HP	G	\$7,636	6.46	0.90	1.47	0.16	2.08	6
	W25SD009	SF11	WATER BLASTER, LOW PRESSURE, STEAM GENERATOR, 15 PSI, 355 LB/HR STEAM, 55 GAL BOILER	11 HP	E	\$10,516	13.18	1.28	2.10	0.23	0.93	9
	W25SD002	EN-140-H4-1800	WATER BLASTER, LOW PRESSURE, HOT WATER, 1,800 PSI, 2.3 GPM	3 HP	E	\$10,787	6.34	1.31	2.16	0.23	0.25	7
	<b>NO SPECIFIC MANUFACTURER</b>											
	W25XX005	COLD 3/1000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 700 PSI, 3 GPM	5 HP	G	\$1,707	2.39	0.21	0.34	0.04	1.30	4
	W25XX006	COLD 4/1000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 1,200 PSI, 3 GPM	5 HP	G	\$2,398	2.77	0.29	0.48	0.05	1.30	4
	W25XX007	COLD 4/2000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 2,000 PSI, 4 GPM	8 HP	G	\$3,237	4.11	0.40	0.65	0.07	2.08	2
	W25XX008	COLD 4/3000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 3,000 PSI, 4 GPM	11 HP	G	\$3,341	5.03	0.41	0.67	0.07	2.87	6
	W25XX009	HOT 4/1000G	WATER BLASTER, LOW PRESSURE, HOT WATER/STEAM, 1,000 PSI, 4 GPM	8 HP	G	\$6,755	6.06	0.83	1.35	0.15	2.08	6
	W25XX010	HOT 6/3000G	WATER BLASTER, LOW PRESSURE, HOT WATER/STEAM, 3,000 PSI, 6 GPM	24 HP	G	\$10,341	12.66	1.26	2.07	0.22	6.25	10
	<b>SUBCATEGORY 0.20 HIGH PRESSURE, (&gt;= 5,000 PSI)</b>											
	<b>NLB CORPORATION</b>											
	W25NL001	6200E	WATER BLASTER, HIGH PRESSURE, 6,000 PSI, 50 GPM, SKID MTD, W/MODEL 10200 PUMP	200 HP	E	\$62,911	61.37	7.65	12.58	1.36	16.91	118
	W25NL003	201536D	WATER BLASTER, HIGH PRESSURE, 20,000 PSI, 13.2 GPM, SKID MTD, W/50 LF HOSE & CLEANING LANCE	150 HP	D-off	\$68,266	57.12	8.30	13.65	1.47	15.26	78
	W25NL002	20253D	WATER BLASTER, HIGH PRESSURE, 20,000 PSI, 22 GPM, SKID MTD (ADD TRUCK, FLATBED TRAILER & WATER TANKER)	335 HP	D-off	\$106,387	100.63	12.94	21.28	2.30	34.07	140



**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>W25</b>	<b>NLB CORPORATION (continued)</b>											
	W25NL005	20600D	WATER BLASTER, HIGH PRESSURE, 20,000 PSI, 53 GPM, SKID MTD (ADD TRUCK, FLATBED TRAILER & WATER TANKER)	700 HP	D-off	\$262,132	233.55	31.88	52.43	5.66	71.19	200
	W25NL004	4400	WATER BLASTER, HIGH PRESSURE, HYDRODEMOLITION UNIT, CONCRETE BUSTER, SELF PROPELLED (ADD MODEL 20600D WATER BLASTER)	34 HP	D-off	\$140,642	85.32	16.79	27.52	3.03	3.46	80
	<b>SUBCATEGORY 0.30 STEAM CLEANERS</b>											
	<b>ALKOTA CLEANING SYSTEMS, INC.</b>											
	W25AO002	122	WATER BLASTER, STEAM CLEANER, 400 PSI, 1.7 GPM	1 HP	E	\$3,604	2.87	0.44	0.72	0.08	0.08	4
	W25AO003	181	WATER BLASTER, STEAM CLEANER, 250 PSI, 3.0 GPM	1 HP	E	\$5,202	3.75	0.63	1.04	0.11	0.08	6
	W25AO004	240	WATER BLASTER, STEAM CLEANER, 350 PSI, 4.0 GPM	2 HP	E	\$5,051	4.05	0.62	1.01	0.11	0.17	7
	W25AO005	301	WATER BLASTER, STEAM CLEANER, 400 PSI, 5.0 GPM	4 HP	E	\$10,346	7.73	1.26	2.07	0.22	0.34	14
	W25AO006	246	WATER BLASTER, STEAM GENERATOR, 100 PSI, 1.0 GPM	1 HP	E	\$7,967	5.28	0.97	1.59	0.17	0.08	7
	<b>SUBCATEGORY 0.40 CO2 BLASTERS</b>											
	<b>COLD JET</b>											
	W25CJ001	P750B	CARBON DIOXIDE (CO2) BLASTER, 600 LBS/HR, SINGLE HOSE DELIVERY (ADD 65-100 CFM COMPRESSOR)	20 HP	E	\$61,767	23.92	5.37	8.24	1.25	1.25	34
	W25CJ002	P1500B	CARBON DIOXIDE (CO2) BLASTER, 1,200 LBS/HR, SINGLE HOSE DELIVERY (ADD 65-150 CFM COMPRESSOR)	24 HP	E	\$97,639	37.05	8.48	13.02	1.97	1.50	37
	W25CJ003	P3000B	CARBON DIOXIDE (CO2) BLASTER, 1,200 LBS/HR, DUAL HOSE DELIVERY (ADD 65-200 CFM COMPRESSOR)	24 HP	E	\$152,969	56.71	13.29	20.40	3.09	1.50	66

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>SUBCATEGORY 0.50</b>		<b>WET ABRASIVE BLASTING SYSTEM (TORBO)</b>									
			<b>KEIZER TECHNOLOGIES AMERICAS, INC</b>									
	W25KZ001	TORBO M120	WATER BLASTER, WET ABRASIVE BLASTER, 4.2 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 350 CFM AIR COMPRESSOR)	350 CFM	A	\$18,419	2.48	0.99	1.20	0.39	0.00	4
	W25KZ002	TORBO M120	WATER BLASTER, WET ABRASIVE BLASTER, 4.2 CF TANK CAP, 170 PSI, W/MIX RUST INHIBITOR INJECTOR (INCLUDES HOSES & NOZZLE, ADD 350 CFM AIR COMPRESSOR)	350 CFM	A	\$20,394	2.75	1.10	1.33	0.43	0.00	4
	W25KZ003	LOC RESTORATION UNIT	WATER BLASTER, WET ABRASIVE BLASTER, 4.2 CF TANK CAP, 170 PSI, W/LOC RESTORATION UNIT (INCLUDES HOSES & NOZZLE, ADD 350 CFM AIR COMPRESSOR)	350 CFM	A	\$20,850	2.81	1.12	1.36	0.44	0.00	4
	W25KZ004	TORBO M320	WATER BLASTER, WET ABRASIVE BLASTER, 13.0 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM	A	\$29,644	3.98	1.59	1.93	0.62	0.00	8
	W25KZ005	TORBO XL320	WATER BLASTER, WET ABRASIVE BLASTER, 13.0 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM	A	\$35,014	4.70	1.87	2.28	0.73	0.00	8
	W25KZ006	TORBO XL320	WATER BLASTER, WET ABRASIVE BLASTER, 19.0 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM	A	\$35,680	4.80	1.91	2.32	0.75	0.00	9
	W25KZ007	TORBO XL320	WATER BLASTER, WET ABRASIVE BLASTER, 19.0 CF TANK CAP, 170 PSI, W/MIX RUST INHIBATOR INJECTOR, (INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM	A	\$38,061	5.11	2.04	2.47	0.80	0.00	9

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER	2004 (\$)	AVERAGE	STANDBY	DEPR	FCCM	FUEL	
<b>W30 WATER TANKS</b>												
	<b>SUBCATEGORY 0.10</b>		<b>PORTABLE WITH WHEELS</b>									
	<b>SOUTHWEST CONSTRUCTION EQUIPMENT CO.</b>											
	W30SO001	EWT-8C	WATER TANK, PORTABLE, TRAILER MTD, SELF ELEVATING, 8,000 GAL, 10" PIPE	8 HP	G	\$45,512	8.58	2.30	2.90	0.85	1.43	130
	W30SO002	EWT-10C	WATER TANK, PORTABLE, TRAILER MTD, SELF ELEVATING, 10,000 GAL, 10" PIPE	8 HP	G	\$54,202	9.87	2.76	3.48	1.02	1.43	170
	W30SO003	EWT-12C	WATER TANK, PORTABLE, TRAILER MTD, SELF ELEVATING, 12,000 GAL, 10" PIPE	8 HP	G	\$58,984	10.58	3.01	3.80	1.11	1.43	185
	<b>SUBCATEGORY 0.20</b>		<b>SKID MOUNTED</b>									
	<b>SOUTHWEST CONSTRUCTION EQUIPMENT CO.</b>											
	W30SO004	WST-8	WATER TANK, PORTABLE, SKID MTD, 8,000 GAL, 10" PIPE			\$28,955	3.98	1.51	1.93	0.54	0.00	107
	W30SO005	WST-10	WATER TANK, PORTABLE, SKID MTD, 10,000 GAL, 10" PIPE			\$32,315	4.44	1.69	2.15	0.61	0.00	122
	W30SO006	WST-12	WATER TANK, PORTABLE, SKID MTD, 12,000 GAL, 10" PIPE			\$37,269	5.12	1.94	2.48	0.70	0.00	142
<b>W35 WELDERS</b>												
	<b>SUBCATEGORY 0.10</b>		<b>ENGINE DRIVEN</b>									
	<b>NO SPECIFIC MANUFACTURER</b>											
	W35XX020	GAS 150 AC	WELDER, ENGINE DRIVEN, GAS, AC, 150 AMP, 4.5 KW, PORTABLE, SKID MTD	11 HP	G	\$2,140	3.14	0.14	0.20	0.04	2.40	2
	W35XX021	GAS 225 AC/DC-CC	WELDER, ENGINE DRIVEN, GAS, AC/DC-CC, 225 AMP, 5-8 KW, TRAILER MTD	17 HP	G	\$5,649	5.38	0.37	0.51	0.11	3.71	6
	W35XX022	GAS 250 AC/DC-CC/CV	WELDER, ENGINE DRIVEN, GAS, AC/DC-CC/CV, 250 AMP, 9 KW, TRAILER MTD	18 HP	G	\$5,822	5.68	0.39	0.53	0.12	3.93	6
	W35XX023	GAS 300 DC-CC	WELDER, ENGINE DRIVEN, GAS, DC-CC, 300 AMP, 3 KW, TRAILER MTD	45 HP	G	\$10,037	13.16	0.66	0.92	0.20	9.82	14
	W35XX024	DIESEL 400 DC-CC/CV	WELDER, ENGINE DRIVEN, DIESEL, DC-CC/CV, 400 AMP, 2-10 KW, TRAILER MTD	48 HP	D-off	\$14,820	7.93	0.99	1.37	0.30	4.12	21

**Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE**

CAT	REGION 2			ENGINE HORSEPOWER FUEL TYPE		VALUE (TEV) 2004 (\$)	TOTAL HOURLY RATES (\$/HR)		ADJUSTABLE ELEMENTS			CWT
	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	MAIN	CARRIER		AVERAGE	STANDBY	DEPR	FCCM	FUEL	
	<b>W35</b>	<b>NO SPECIFIC MANUFACTURER (continued)</b>										
	W35XX025	DIESEL 500 DC- CC/CV	WELDER, ENGINE DRIVEN, DIESEL, DC-CC/CV, 500 AMP, 4 KW, TRAILER MTD	42 HP	D-off	\$14,230	7.23	0.95	1.31	0.29	3.61	18
	<b>SUBCATEGORY 0.20</b>		<b>ELECTRIC DRIVEN</b>									
	<b>LINCOLN ELECTRIC COMPANY</b>											
	W35LC018	SP-175T	WELDER, ELECTRIC DRIVEN, 170 AMP, WIRE FEEDER	5 HP	E	\$909	0.42	0.08	0.12	0.02	0.13	1
	W35LC010	LINCWELD 225/125	WELDER, ELECTRIC DRIVEN, 225 AMP, STICK	15 HP	E	\$489	0.71	0.05	0.07	0.01	0.40	1
	W35LC011	IDEAL ARC R3R- 300	WELDER, ELECTRIC DRIVEN, 300 AMP, STICK	27 HP	E	\$2,719	1.73	0.23	0.36	0.05	0.72	4
	W35LC012	IDEAL ARC R3R- 400	WELDER, ELECTRIC DRIVEN, 400 AMP, STICK	35 HP	E	\$3,128	2.15	0.27	0.42	0.06	0.93	5
	W35LC013	IDEAL ARC R3R- 500	WELDER, ELECTRIC DRIVEN, 500 AMP, STICK	41 HP	E	\$3,128	2.38	0.27	0.42	0.06	1.09	5
	W35LC020	PROCUT 80	WELDER, ELECTRIC DRIVEN, 85 AMP, PLASMA CUTTING TORCH	26 HP	E	\$3,543	1.90	0.31	0.47	0.07	0.69	1

**Table 2-2. Hourly Rate Elements**

This Table Contains All Hourly Rate Elements as  
Described in Chapter 2  
For  
Average and Severe Operating Conditions.

Refer to Chapter 2, Section II. Operating Condition

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>A10</b>	A10AR001	0.50	0.08	0.00	0.00	0.00	0.00	0.45	1.03								
	A10AR002	1.25	0.19	0.00	0.20	0.00	0.00	1.13	2.77								
	A10RS003	9.40	1.89	11.68	1.27	0.61	0.10	10.73	35.68								
	A10RS004	9.46	1.90	11.68	1.27	0.61	0.10	10.79	35.81								
	A10RS005	9.51	1.91	11.68	1.27	0.61	0.10	10.84	35.92								
	A10RS006	9.53	1.91	11.68	1.27	0.61	0.10	10.87	35.97								
	A10RS007	9.65	1.94	11.68	1.27	0.61	0.10	11.00	36.25								
	A10RS008	18.85	3.76	15.75	1.71	0.92	0.15	21.47	62.61								
	A10SE001	1.57	0.24	0.00	0.00	0.00	0.00	1.43	3.24								
	A10SE002	1.85	0.28	0.00	0.00	0.00	0.00	1.68	3.81								
<b>A15</b>	A15IA001	1.61	0.39	4.56	0.58	0.07	0.01	1.78	9.00								
	A15IA002	3.50	0.84	8.95	1.14	0.07	0.01	3.87	18.38								
	A15IA003	4.16	1.01	14.16	1.80	0.17	0.03	4.61	25.94								
	A15IA004	4.16	1.01	14.16	1.80	0.17	0.03	4.61	25.94								
	A15IA005	4.16	1.01	14.16	1.80	0.17	0.03	4.61	25.94								
	A15IA006	9.18	2.22	24.41	3.10	0.35	0.06	10.18	49.50								
	A15IA007	9.64	2.33	24.41	3.10	0.35	0.06	10.68	50.57								
	A15IA008	7.25	1.76	27.26	3.47	0.35	0.06	8.04	48.19								
	A15IA009	7.26	1.76	25.22	3.21	0.35	0.06	8.05	45.91								
	A15IA010	13.05	3.14	32.54	4.14	0.35	0.06	14.45	67.73								
	A15SR002	11.29	2.74	35.80	4.55	0.52	0.08	12.51	67.49								
	A15SR004	1.14	0.28	6.35	0.81	0.07	0.01	1.26	9.92								
	A15SR005	1.52	0.37	6.51	0.83	0.07	0.01	1.69	11.00								
	A15SR006	1.04	0.25	6.18	0.79	0.07	0.01	1.15	9.49								
	A15SR007	1.04	0.25	6.26	0.80	0.07	0.01	1.16	9.59								
	A15SR008	2.41	0.59	10.01	1.27	0.17	0.03	2.68	17.16								
	A15SR009	2.41	0.59	10.09	1.28	0.17	0.03	2.68	17.25								
	A15SR010	4.39	1.08	18.71	2.38	0.35	0.06	4.88	31.85								
	A15SR011	5.04	1.23	24.41	3.10	0.35	0.06	5.60	39.79								
	A15SR012	4.96	1.21	24.41	3.10	0.35	0.06	5.51	39.60								
A15SR013	9.42	2.28	36.61	4.65	0.35	0.06	10.44	63.81									
A15SR014	9.93	2.43	36.61	4.65	0.68	0.11	11.03	65.44									
A15SR015	9.65	2.36	42.71	5.43	0.68	0.11	10.72	71.66									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>A15</b>	<i>cont.</i>																
	A15XX019	0.67	0.17	6.18	0.90	0.07	0.01	0.74	8.74								
	A15XX020	1.30	0.32	2.44	0.31	0.07	0.01	1.44	5.89								
	A15XX021	0.90	0.22	10.30	1.49	0.07	0.01	1.00	13.99								
	A15XX022	1.33	0.32	2.85	0.36	0.07	0.01	1.48	6.42								
	A15XX023	0.94	0.23	13.39	1.94	0.07	0.01	1.05	17.63								
	A15XX024	1.51	0.37	4.07	0.52	0.07	0.01	1.67	8.22								
	A15XX025	1.03	0.25	12.36	1.79	0.07	0.01	1.15	16.66								
	A15XX026	1.69	0.41	5.70	0.72	0.07	0.01	1.87	10.47								
	A15XX027	1.07	0.26	18.54	2.69	0.07	0.01	1.19	23.83								
	A15XX028	1.73	0.42	6.51	0.83	0.07	0.01	1.92	11.49								
	A15XX029	1.17	0.28	14.42	2.09	0.07	0.01	1.29	19.33								
	A15XX030	2.30	0.55	6.92	0.88	0.07	0.01	2.54	13.27								
	A15XX031	3.37	0.81	8.95	1.14	0.07	0.01	3.73	18.08								
	A15XX032	3.03	0.74	9.36	1.19	0.17	0.03	3.36	17.88								
	A15XX033	3.98	0.98	13.83	1.76	0.35	0.06	4.43	25.39								
	A15XX034	5.59	1.36	20.34	2.59	0.35	0.06	6.20	36.49								
	A15XX035	5.96	1.45	22.37	2.84	0.35	0.06	6.62	39.65								
	A15XX036	6.43	1.56	22.37	2.84	0.35	0.06	7.13	40.74								
	A15XX037	6.89	1.67	25.22	3.21	0.35	0.06	7.64	45.04								
	A15XX038	10.52	2.54	29.29	3.72	0.35	0.06	11.66	58.14								
	A15XX039	10.97	2.65	37.43	4.76	0.46	0.07	12.16	68.50								
	A15XX040	11.84	2.86	40.68	5.17	0.46	0.07	13.12	74.20								
	A15XX041	0.15	0.04	0.33	0.17	0.00	0.00	0.14	0.83								
	A15XX042	0.21	0.05	0.47	0.24	0.00	0.00	0.19	1.16								
	A15XX043	0.31	0.08	0.67	0.34	0.00	0.00	0.28	1.68								
A15XX044	0.37	0.09	1.00	0.51	0.00	0.00	0.33	2.30									
A15XX045	0.52	0.13	1.67	0.85	0.00	0.00	0.47	3.64									
A15XX046	0.64	0.16	2.00	1.02	0.00	0.00	0.58	4.40									
<b>A20</b>																	
	A20CK001	0.24	0.03	0.00	0.00	0.00	0.00	0.47	0.74								
	A20CK002	0.14	0.02	0.00	0.00	0.00	0.00	0.27	0.43								
	A20CK003	0.27	0.03	0.00	0.00	0.00	0.00	0.52	0.82								
	A20CK005	0.34	0.04	0.00	0.00	0.00	0.00	0.66	1.04								
	A20CK006	0.18	0.02	0.00	0.00	0.00	0.00	0.36	0.56								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>A20</b>	<i>cont.</i>																
	A20CK008	0.20	0.03	0.00	0.00	0.00	0.00	0.40	0.63								
	A20CK010	0.22	0.03	0.00	0.00	0.00	0.00	0.43	0.68								
	A20CM010	0.49	0.06	0.00	0.06	0.00	0.00	0.96	1.57								
	A20CM011	0.54	0.07	0.00	0.06	0.00	0.00	1.07	1.74								
	A20CM012	0.58	0.07	0.00	0.13	0.00	0.00	1.14	1.92								
	A20CM013	2.52	0.33	0.00	0.28	0.11	0.02	4.97	8.23								
	A20CM014	3.08	0.43	0.00	0.41	0.29	0.05	6.10	10.36								
	A20CM015	3.50	0.48	0.00	0.50	0.31	0.05	6.93	11.77								
	A20CM016	1.97	0.25	0.00	0.30	0.00	0.00	3.86	6.38								
	A20CM017	0.12	0.01	0.00	0.00	0.00	0.00	0.25	0.38								
	A20CM018	0.13	0.01	0.00	0.00	0.00	0.00	0.27	0.41								
	A20CM019	0.16	0.01	0.00	0.00	0.00	0.00	0.32	0.49								
	A20CM020	0.13	0.01	0.00	0.00	0.00	0.00	0.26	0.40								
	A20WC002	0.22	0.03	0.12	0.20	0.00	0.00	0.44	1.01								
	A20WC004	0.60	0.08	0.72	0.10	0.00	0.00	1.18	2.68								
	A20XX001	0.33	0.03	0.00	0.00	0.00	0.00	0.61	0.97								
	A20XX002	0.38	0.03	0.00	0.00	0.00	0.00	0.71	1.12								
	A20XX003	0.47	0.04	0.00	0.00	0.00	0.00	0.88	1.39								
	A20XX004	0.62	0.05	0.00	0.00	0.00	0.00	1.15	1.82								
	A20XX005	0.87	0.07	0.00	0.00	0.00	0.00	1.63	2.57								
	A20XX006	1.07	0.08	0.00	0.00	0.00	0.00	1.99	3.14								
	A20XX007	1.32	0.10	0.00	0.00	0.00	0.00	2.46	3.88								
	A20XX008	1.77	0.14	0.00	0.00	0.00	0.00	3.28	5.19								
	A20XX021	0.17	0.02	0.00	0.00	0.00	0.00	0.33	0.52								
A20XX022	0.20	0.02	0.00	0.00	0.00	0.00	0.38	0.60									
A20XX023	0.24	0.03	0.00	0.00	0.00	0.00	0.46	0.73									
A20XX024	0.24	0.03	0.00	0.00	0.00	0.00	0.48	0.75									
A20XX025	0.34	0.04	0.00	0.00	0.00	0.00	0.68	1.06									
<b>A25</b>																	
	A25RS006	8.00	1.02	0.00	1.16	0.00	0.00	9.13	19.31								
	A25RS008	9.15	1.16	0.00	1.80	0.00	0.00	10.45	22.56								
	A25XX001	6.75	0.86	0.00	0.64	0.00	0.00	7.71	15.96								
	A25XX002	7.84	1.00	0.00	1.51	0.00	0.00	8.95	19.30								
A25XX003	8.57	1.09	0.00	2.09	0.00	0.00	9.79	21.54									



**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>A30</b>	A30BG003	35.77	6.65	12.14	3.04	3.29	0.53	51.23	112.65								
	A30BG004	32.32	5.74	8.61	2.59	0.00	0.00	45.97	95.23								
	A30BG005	37.49	6.66	12.14	3.04	0.00	0.00	53.33	112.66								
	A30BG007	27.71	5.10	7.53	2.46	1.92	0.31	39.62	84.65								
	A30BG009	30.08	5.53	10.68	1.36	2.37	0.38	43.00	93.40								
	A30BK010	14.22	2.64	3.61	0.46	1.41	0.23	20.36	42.93								
	A30BK011	25.21	4.65	8.22	1.04	1.92	0.31	36.06	77.41								
	A30BK013	26.60	4.90	11.14	1.42	2.05	0.33	38.05	84.49								
	A30BK015	30.74	5.64	14.14	1.80	2.37	0.38	43.94	99.01								
	A30BK017	33.53	5.96	14.14	1.80	0.00	0.00	47.69	103.12								
	A30BK018	34.54	6.14	14.14	1.80	0.00	0.00	49.13	105.75								
	A30BK019	19.95	3.61	8.07	1.03	0.67	0.11	28.45	61.89								
	A30BK020	25.82	4.65	13.29	1.69	0.80	0.13	36.80	83.18								
	A30BK021	33.93	6.03	13.52	1.72	0.00	0.00	48.27	103.47								
	A30BK022	24.83	4.59	11.14	1.42	2.05	0.33	35.53	79.89								
	A30BK023	29.15	5.18	11.14	1.42	0.00	0.00	41.47	88.36								
	A30BK024	24.17	5.92	12.89	1.64	1.54	0.25	29.38	75.79								
	A30CA002	26.03	4.80	8.22	1.04	1.93	0.31	37.23	79.56								
	A30CA007	8.37	2.05	7.50	0.95	0.42	0.07	10.17	29.53								
	A30CA008	30.21	5.59	13.37	1.70	2.66	0.43	43.23	97.19								
	A30CA009	38.68	6.87	13.29	1.69	0.00	0.00	55.01	115.54								
	A30CA013	27.24	4.84	9.30	1.18	0.00	0.00	38.75	81.31								
	A30CA014	27.39	5.05	11.76	1.49	2.37	0.38	39.18	87.62								
	A30CA015	45.77	8.14	13.37	1.70	0.00	0.00	65.11	134.09								
	A30CA016	35.44	6.30	13.29	1.69	0.00	0.00	50.40	107.12								
	A30CH001	24.16	4.47	8.45	1.07	1.92	0.31	34.58	74.96								
	A30CH002	26.41	4.87	11.68	1.48	2.05	0.33	37.78	84.60								
	A30CH003	27.61	4.91	11.68	1.48	0.00	0.00	39.27	84.95								
	A30CH004	27.76	5.14	11.68	1.48	2.25	0.36	39.73	88.40								
	A30CH005	30.31	5.60	13.29	1.69	2.66	0.43	43.37	97.35								
	A30CH006	36.80	6.54	15.37	1.95	0.00	0.00	52.35	113.01								
	A30EJ001	20.29	3.76	9.99	1.27	1.62	0.26	29.04	66.23								
	A30EJ002	23.60	4.19	9.99	1.27	0.00	0.00	33.56	72.61								
A30EJ003	23.63	4.39	13.22	1.68	2.33	0.37	33.83	79.45									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>A30</b>	<i>cont.</i>																
	A30EJ004	27.23	4.84	13.22	1.68	0.00	0.00	38.74	85.71								
	A30EJ005	25.61	4.92	13.22	1.68	3.96	0.64	36.86	86.89								
	A30EJ006	30.21	5.37	13.22	1.68	0.00	0.00	42.97	93.45								
	A30GC002	3.51	0.64	1.92	0.24	0.18	0.03	5.01	11.53								
	A30GC004	5.18	0.92	3.15	0.40	0.00	0.00	7.37	17.02								
	A30LD001	9.43	2.35	7.71	0.98	1.01	0.16	11.50	33.14								
	A30MP001	9.43	2.25	5.60	0.71	0.00	0.00	11.39	29.38								
	A30MP002	12.25	2.92	7.01	0.89	0.00	0.00	14.81	37.88								
	A30RT001	35.90	8.56	19.27	2.45	0.05	0.01	43.40	109.64								
	A30RT002	37.61	8.98	19.27	2.45	0.17	0.03	45.48	113.99								
	A30XX001	8.46	2.43	7.21	0.77	0.75	0.12	7.06	26.80								
	A30XX002	10.56	2.97	7.21	0.77	0.00	0.00	8.77	30.28								
<b>A35</b>	A35AE001	1.14	0.18	0.89	2.08	0.07	0.01	1.39	5.76								
	A35AE002	1.18	0.19	0.89	2.78	0.07	0.01	1.44	6.56								
	A35AE003	1.29	0.20	0.89	3.13	0.04	0.01	1.57	7.13								
	A35AE004	1.41	0.22	0.89	4.03	0.04	0.01	1.72	8.32								
	A35AE005	1.52	0.24	0.89	6.23	0.09	0.01	1.85	10.83								
<b>A40</b>	A40CA008	57.51	8.71	50.85	6.46	0.00	0.00	86.91	210.44								
	A40CA009	80.91	12.25	63.56	8.08	0.00	0.00	122.27	287.07								
	A40CW001	102.24	15.48	81.36	10.34	0.00	0.00	154.51	363.93								
	A40RT001	37.54	5.91	23.39	2.97	1.84	0.30	57.19	129.14								
	A40RT002	51.09	7.74	25.43	3.23	0.00	0.00	77.21	164.70								
	A40RT003	63.05	9.55	46.78	5.95	0.00	0.00	95.28	220.61								
	A40RT004	81.14	12.29	81.36	10.34	0.00	0.00	122.62	307.75								
	A40RT005	86.37	13.08	81.36	10.34	0.00	0.00	130.52	321.67								
A40RT006	95.65	14.48	81.36	10.34	0.00	0.00	144.56	346.39									
<b>A45</b>	A45AE001	1.25	0.17	0.00	7.10	0.03	0.00	1.71	10.26								
	A45AE002	2.47	0.33	0.00	14.25	0.03	0.00	3.38	20.46								
	A45AE003	2.92	0.38	0.00	16.85	0.04	0.01	3.99	24.19								
	A45RS001	6.62	0.87	5.60	1.21	0.08	0.01	9.04	23.43								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>A45</b>	<i>cont.</i>																
	A45RS002	21.59	2.80	17.97	2.78	0.00	0.00	29.36	74.50								
	A45SE003	5.39	0.71	2.10	2.27	0.09	0.01	7.35	17.92								
	A45SE004	3.41	0.46	2.32	0.84	0.13	0.02	4.68	11.86								
<b>B10</b>	B10CC007	4.03	0.81	3.22	3.47	0.16	0.03	6.13	17.85								
	B10CC008	10.99	2.23	29.14	7.73	0.82	0.13	16.74	67.78								
	B10CC009	12.11	2.50	35.75	8.94	1.44	0.23	18.52	79.49								
	B10CC010	13.11	2.69	35.75	9.19	1.44	0.23	20.03	82.44								
	B10CC011	1.92	0.37	1.16	1.59	0.00	0.00	2.90	7.94								
	B10CC012	1.89	0.37	3.22	1.22	0.00	0.00	2.86	9.56								
	B10CC013	2.28	0.45	3.22	1.27	0.00	0.00	3.45	10.67								
	B10CC014	0.59	0.12	0.29	0.65	0.00	0.00	0.90	2.55								
	B10CL005	26.03	5.19	6.94	5.54	0.83	0.13	39.53	84.19								
	B10CL006	26.47	5.28	6.94	5.54	0.83	0.13	40.19	85.38								
	B10CL015	13.51	2.75	1.74	3.39	0.78	0.13	20.60	42.90								
	B10CL021	7.18	1.46	2.02	1.03	0.44	0.07	10.95	23.15								
	B10CL025	24.47	4.81	11.57	5.91	0.26	0.04	37.04	84.10								
	B10CL027	1.80	0.35	0.00	0.00	0.00	0.00	2.72	4.87								
	B10CL032	0.37	0.07	0.58	0.30	0.00	0.00	0.56	1.88								
	B10CL034	0.74	0.14	1.16	0.59	0.00	0.00	1.12	3.75								
	B10CL036	0.31	0.06	0.46	0.23	0.00	0.00	0.47	1.53								
	B10CL040	0.43	0.08	1.16	0.59	0.00	0.00	0.64	2.90								
	B10CL042	0.28	0.06	0.29	0.15	0.00	0.00	0.43	1.21								
	B10CL045	0.36	0.07	0.58	0.30	0.00	0.00	0.55	1.86								
	B10EM001	35.06	7.03	4.47	3.15	1.37	0.22	53.29	104.59								
	B10EM002	1.92	0.44	0.58	1.30	0.42	0.07	3.00	7.73								
	B10EM003	2.32	0.45	0.00	0.00	0.00	0.00	3.50	6.27								
	B10KB001	10.01	2.45	5.50	2.81	0.48	0.08	15.22	36.55								
	B10KB002	18.06	4.38	12.73	6.50	0.53	0.09	27.40	69.69								
	B10RC006	16.42	3.34	2.63	5.84	0.95	0.15	25.03	54.36								
	B10RC007	12.02	2.42	0.87	2.94	0.56	0.09	18.30	37.20								
B10RC008	13.98	2.81	1.74	3.39	0.56	0.09	21.25	43.82									
B10RC016	20.43	4.12	4.34	7.72	0.95	0.15	31.09	68.80									
B10RC027	13.17	2.57	2.31	3.18	0.00	0.00	19.91	41.14									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>B10</b>	<i>cont.</i>																
	B10RC028	14.79	2.88	3.47	4.02	0.00	0.00	22.36	47.52								
	B10RC029	16.71	3.26	4.63	4.86	0.00	0.00	25.26	54.72								
	B10RC030	18.20	3.55	5.79	6.71	0.00	0.00	27.51	61.76								
	B10RC031	19.21	3.74	6.94	7.54	0.00	0.00	29.03	66.46								
	B10RC032	17.96	3.64	2.89	5.98	0.95	0.15	27.36	58.93								
	B10SN031	3.57	0.84	0.87	1.79	0.99	0.16	5.63	13.85								
	B10SN032	9.47	1.99	1.74	2.64	1.00	0.16	14.54	31.54								
	B10SN033	7.84	1.67	1.74	2.39	0.98	0.16	12.08	26.86								
	B10SN034	9.15	1.93	1.16	2.09	1.00	0.16	14.06	29.55								
	B10SN035	10.18	2.13	1.16	2.24	1.00	0.16	15.62	32.49								
B10SN036	12.62	2.61	2.60	3.08	1.00	0.16	19.30	41.37									
<b>B15</b>	B15BM001	3.07	0.50	5.60	0.71	0.00	0.00	3.30	13.18								
	B15EC001	18.29	3.03	6.25	0.80	0.76	0.12	19.73	48.98								
	B15EC002	12.11	2.00	7.01	0.89	0.39	0.06	13.05	35.51								
	B15FS001	17.38	2.84	16.11	2.05	0.10	0.02	18.71	57.21								
	B15MB001	0.75	0.12	0.00	0.10	0.00	0.00	0.81	1.78								
	B15MB002	0.96	0.16	0.00	0.14	0.00	0.00	1.04	2.30								
	B15MB003	1.33	0.23	0.00	0.24	0.07	0.01	1.44	3.32								
	B15MB004	1.55	0.26	3.22	0.35	0.07	0.01	1.67	7.13								
	B15RS001	3.86	0.64	5.60	0.71	0.13	0.02	4.16	15.12								
	B15RS005	5.00	0.83	5.60	0.71	0.18	0.03	5.39	17.74								
	B15TB001	2.38	0.39	2.59	0.33	0.09	0.01	2.56	8.35								
	B15TB002	2.39	0.40	2.59	0.33	0.09	0.01	2.58	8.39								
	B15WD001	2.89	0.48	5.60	0.71	0.13	0.02	3.12	12.95								
	B15WD002	3.04	0.51	5.60	0.71	0.13	0.02	3.28	13.29								
	<b>B20</b>	B20BN001	1.09	0.18	4.47	0.65	0.03	0.00	1.32	7.74							
B20BN002		1.72	0.29	6.61	0.96	0.06	0.01	2.09	11.74								
B20BN003		2.17	0.36	12.69	1.84	0.07	0.01	2.63	19.77								
B20BN004		3.31	0.55	8.76	1.11	0.07	0.01	4.02	17.83								
B20BN005		1.86	0.31	12.51	1.82	0.07	0.01	2.26	18.84								
B20BN006		2.07	0.34	21.27	3.09	0.07	0.01	2.52	29.37								
B20BN007		3.70	0.63	8.76	1.11	0.26	0.04	4.50	19.00								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>B20</b>	<i>cont.</i>																
	B20MQ001	2.14	0.35	6.03	0.77	0.04	0.01	2.59	11.93								
	B20MQ003	2.96	0.49	8.76	1.11	0.07	0.01	3.59	16.99								
	B20MQ004	3.40	0.57	8.76	1.11	0.17	0.03	4.13	18.17								
	B20MQ005	37.89	6.23	45.54	7.29	0.69	0.11	45.93	143.68								
<b>B25</b>	B25HB001	1.83	0.30	0.00	0.00	0.00	0.00	1.73	3.86	2.25	0.31	0.00	0.00	0.00	0.00	2.43	4.99
	B25HB003	2.94	0.48	0.00	0.00	0.00	0.00	2.77	6.19	3.61	0.49	0.00	0.00	0.00	0.00	3.90	8.00
	B25HB005	3.81	0.62	0.00	0.00	0.00	0.00	3.60	8.03	4.69	0.64	0.00	0.00	0.00	0.00	5.07	10.40
	B25HB007	4.50	0.73	0.00	0.00	0.00	0.00	4.25	9.48	5.54	0.75	0.00	0.00	0.00	0.00	5.98	12.27
	B25HB008	5.24	0.85	0.00	0.00	0.00	0.00	4.95	11.04	6.45	0.88	0.00	0.00	0.00	0.00	6.97	14.30
	B25HB009	5.78	0.94	0.00	0.00	0.00	0.00	5.45	12.17	7.11	0.97	0.00	0.00	0.00	0.00	7.68	15.76
	B25HB010	6.06	0.99	0.00	0.00	0.00	0.00	5.73	12.78	7.46	1.01	0.00	0.00	0.00	0.00	8.06	16.53
	B25HB011	6.22	1.01	0.00	0.00	0.00	0.00	5.87	13.10	7.66	1.04	0.00	0.00	0.00	0.00	8.27	16.97
	B25HB012	6.57	1.07	0.00	0.00	0.00	0.00	6.21	13.85	8.09	1.10	0.00	0.00	0.00	0.00	8.73	17.92
	B25HB013	6.78	1.10	0.00	0.00	0.00	0.00	6.41	14.29	8.35	1.14	0.00	0.00	0.00	0.00	9.02	18.51
	B25HB014	7.09	1.15	0.00	0.00	0.00	0.00	6.70	14.94	8.72	1.19	0.00	0.00	0.00	0.00	9.42	19.33
	B25HB015	7.33	1.19	0.00	0.00	0.00	0.00	6.93	15.45	9.03	1.23	0.00	0.00	0.00	0.00	9.75	20.01
	B25XX001	0.83	0.13	0.00	0.00	0.00	0.00	0.78	1.74	1.02	0.14	0.00	0.00	0.00	0.00	1.10	2.26
	B25XX002	1.22	0.20	0.00	0.00	0.00	0.00	1.15	2.57	1.50	0.20	0.00	0.00	0.00	0.00	1.62	3.32
	B25XX003	1.50	0.24	0.00	0.00	0.00	0.00	1.42	3.16	1.85	0.25	0.00	0.00	0.00	0.00	2.00	4.10
	B25XX004	1.64	0.27	0.00	0.00	0.00	0.00	1.55	3.46	2.02	0.27	0.00	0.00	0.00	0.00	2.18	4.47
	B25XX005	1.91	0.31	0.00	0.00	0.00	0.00	1.81	4.03	2.35	0.32	0.00	0.00	0.00	0.00	2.54	5.21
	B25XX006	2.14	0.35	0.00	0.00	0.00	0.00	2.03	4.52	2.64	0.36	0.00	0.00	0.00	0.00	2.85	5.85
	B25XX007	2.29	0.37	0.00	0.00	0.00	0.00	2.16	4.82	2.82	0.38	0.00	0.00	0.00	0.00	3.05	6.25
	B25XX008	2.68	0.44	0.00	0.00	0.00	0.00	2.53	5.65	3.30	0.45	0.00	0.00	0.00	0.00	3.56	7.31
	B25XX009	2.80	0.46	0.00	0.00	0.00	0.00	2.65	5.91	3.45	0.47	0.00	0.00	0.00	0.00	3.73	7.65
	B25XX010	2.99	0.49	0.00	0.00	0.00	0.00	2.82	6.30	3.68	0.50	0.00	0.00	0.00	0.00	3.97	8.15
	B25XX011	3.13	0.51	0.00	0.00	0.00	0.00	2.95	6.59	3.85	0.52	0.00	0.00	0.00	0.00	4.16	8.53
B25XX012	3.49	0.57	0.00	0.00	0.00	0.00	3.30	7.36	4.30	0.58	0.00	0.00	0.00	0.00	4.64	9.52	
B25XX013	4.71	0.77	0.00	0.00	0.00	0.00	4.45	9.93	5.80	0.79	0.00	0.00	0.00	0.00	6.27	12.86	
B25XX014	5.03	0.82	0.00	0.00	0.00	0.00	4.75	10.60	6.19	0.84	0.00	0.00	0.00	0.00	6.69	13.72	
B25XX015	6.10	0.99	0.00	0.00	0.00	0.00	5.76	12.85	7.51	1.02	0.00	0.00	0.00	0.00	8.11	16.64	
B25XX016	6.15	1.00	0.00	0.00	0.00	0.00	5.81	12.96	7.56	1.03	0.00	0.00	0.00	0.00	8.17	16.76	
B25XX017	6.64	1.08	0.00	0.00	0.00	0.00	6.27	13.99	8.17	1.11	0.00	0.00	0.00	0.00	8.82	18.10	

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>B25</b>	<i>cont.</i>																
	B25XX018	6.29	1.02	0.00	0.00	0.00	0.00	5.94	13.25	7.74	1.05	0.00	0.00	0.00	0.00	8.36	17.15
	B25XX019	7.05	1.15	0.00	0.00	0.00	0.00	6.65	14.85	8.67	1.18	0.00	0.00	0.00	0.00	9.37	19.22
<b>B30</b>	B30CR001	0.50	0.07	0.00	0.00	0.00	0.00	0.51	1.08								
	B30CR002	0.53	0.08	0.00	0.00	0.00	0.00	0.55	1.16								
	B30CR003	0.58	0.09	0.00	0.00	0.00	0.00	0.59	1.26								
	B30CR004	0.59	0.09	0.00	0.00	0.00	0.00	0.61	1.29								
	B30CR005	0.70	0.10	0.00	0.00	0.00	0.00	0.71	1.51								
	B30CR006	0.82	0.12	0.00	0.00	0.00	0.00	0.84	1.78								
	B30CR009	0.74	0.11	0.00	0.00	0.00	0.00	0.75	1.60								
	B30CR010	0.86	0.13	0.00	0.00	0.00	0.00	0.88	1.87								
	B30CR011	1.02	0.15	0.00	0.00	0.00	0.00	1.04	2.21								
	B30CR012	1.18	0.18	0.00	0.00	0.00	0.00	1.20	2.56								
	B30GB001	0.44	0.07	0.00	0.00	0.00	0.00	0.39	0.90								
	B30GB002	0.57	0.09	0.00	0.00	0.00	0.00	0.51	1.17								
	B30GB003	0.71	0.11	0.00	0.00	0.00	0.00	0.63	1.45								
	B30GB004	1.02	0.15	0.00	0.00	0.00	0.00	0.91	2.08								
	B30GB005	1.22	0.18	0.00	0.00	0.00	0.00	1.09	2.49								
	B30GB006	2.26	0.34	0.00	0.00	0.00	0.00	2.16	4.76								
	B30GB007	2.43	0.36	0.00	0.00	0.00	0.00	2.33	5.12								
	B30GB008	2.70	0.40	0.00	0.00	0.00	0.00	2.59	5.69								
	B30GB009	3.07	0.46	0.00	0.00	0.00	0.00	2.95	6.48								
	B30GB010	3.79	0.57	0.00	0.00	0.00	0.00	3.64	8.00								
B30GB011	1.79	0.27	0.00	0.00	0.00	0.00	1.83	3.89									
B30GB012	1.85	0.28	0.00	0.00	0.00	0.00	1.89	4.02									
B30GB013	1.92	0.29	0.00	0.00	0.00	0.00	1.96	4.17									
B30GB014	2.50	0.37	0.00	0.00	0.00	0.00	2.56	5.43									
B30GB015	2.59	0.39	0.00	0.00	0.00	0.00	2.65	5.63									
B30GB016	3.72	0.55	0.00	0.00	0.00	0.00	3.81	8.08									
B30GB017	4.48	0.67	0.00	0.00	0.00	0.00	4.58	9.73									
B30GB018	0.35	0.05	0.00	0.00	0.00	0.00	0.31	0.71									
<b>B35</b>	B35HE001	0.85	0.14	0.00	0.00	0.00	0.00	0.80	1.79	1.04	0.14	0.00	0.00	0.00	0.00	1.12	2.30
	B35HE002	0.99	0.16	0.00	0.00	0.00	0.00	0.94	2.09	1.22	0.17	0.00	0.00	0.00	0.00	1.32	2.71

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>B35</b>	<i>cont.</i>																
	B35HE003	1.40	0.23	0.00	0.00	0.00	0.00	1.33	2.96	1.73	0.23	0.00	0.00	0.00	0.00	1.87	3.83
	B35HE004	1.69	0.28	0.00	0.00	0.00	0.00	1.60	3.57	2.08	0.28	0.00	0.00	0.00	0.00	2.25	4.61
	B35HE005	1.94	0.32	0.00	0.00	0.00	0.00	1.83	4.09	2.39	0.32	0.00	0.00	0.00	0.00	2.58	5.29
	B35HE006	2.42	0.39	0.00	0.00	0.00	0.00	2.28	5.09	2.98	0.40	0.00	0.00	0.00	0.00	3.21	6.59
	B35HE007	2.63	0.43	0.00	0.00	0.00	0.00	2.48	5.54	3.24	0.44	0.00	0.00	0.00	0.00	3.50	7.18
	B35HE008	3.45	0.56	0.00	0.00	0.00	0.00	3.26	7.27	4.25	0.58	0.00	0.00	0.00	0.00	4.59	9.42
	B35HE009	3.62	0.59	0.00	0.00	0.00	0.00	3.42	7.63	4.46	0.61	0.00	0.00	0.00	0.00	4.81	9.88
	B35HE010	4.18	0.68	0.00	0.00	0.00	0.00	3.95	8.81	5.15	0.70	0.00	0.00	0.00	0.00	5.56	11.41
	B35HE011	4.53	0.74	0.00	0.00	0.00	0.00	4.28	9.55	5.57	0.76	0.00	0.00	0.00	0.00	6.02	12.35
	B35HE012	4.95	0.81	0.00	0.00	0.00	0.00	4.68	10.44	6.10	0.83	0.00	0.00	0.00	0.00	6.58	13.51
	B35HE013	5.49	0.89	0.00	0.00	0.00	0.00	5.18	11.56	6.75	0.92	0.00	0.00	0.00	0.00	7.30	14.97
	B35HE014	6.28	1.02	0.00	0.00	0.00	0.00	5.93	13.23	7.73	1.05	0.00	0.00	0.00	0.00	8.35	17.13
	B35HE015	6.83	1.11	0.00	0.00	0.00	0.00	6.45	14.39	8.40	1.14	0.00	0.00	0.00	0.00	9.07	18.61
	B35HE016	8.15	1.33	0.00	0.00	0.00	0.00	7.70	17.18	10.04	1.36	0.00	0.00	0.00	0.00	10.84	22.24
	B35HE017	9.38	1.53	0.00	0.00	0.00	0.00	8.86	19.77	11.55	1.57	0.00	0.00	0.00	0.00	12.47	25.59
	B35HE018	0.81	0.15	0.00	0.00	0.00	0.00	0.77	1.73	1.04	0.15	0.00	0.00	0.00	0.00	1.13	2.32
	B35HE019	0.93	0.17	0.00	0.00	0.00	0.00	0.88	1.98	1.20	0.17	0.00	0.00	0.00	0.00	1.29	2.66
	B35HE020	1.33	0.24	0.00	0.00	0.00	0.00	1.25	2.82	1.71	0.25	0.00	0.00	0.00	0.00	1.84	3.80
	B35HE021	1.67	0.30	0.00	0.00	0.00	0.00	1.58	3.55	2.15	0.31	0.00	0.00	0.00	0.00	2.32	4.78
	B35HE022	1.93	0.35	0.00	0.00	0.00	0.00	1.82	4.10	2.48	0.36	0.00	0.00	0.00	0.00	2.68	5.52
	B35HE023	2.31	0.42	0.00	0.00	0.00	0.00	2.18	4.91	2.97	0.43	0.00	0.00	0.00	0.00	3.20	6.60
	B35HE024	2.55	0.46	0.00	0.00	0.00	0.00	2.40	5.41	3.27	0.47	0.00	0.00	0.00	0.00	3.53	7.27
	B35HE025	3.30	0.60	0.00	0.00	0.00	0.00	3.11	7.01	4.24	0.61	0.00	0.00	0.00	0.00	4.58	9.43
	B35HE026	3.37	0.61	0.00	0.00	0.00	0.00	3.18	7.16	4.33	0.63	0.00	0.00	0.00	0.00	4.68	9.64
	B35HE027	4.08	0.74	0.00	0.00	0.00	0.00	3.85	8.67	5.24	0.76	0.00	0.00	0.00	0.00	5.66	11.66
	B35HE028	4.21	0.76	0.00	0.00	0.00	0.00	3.98	8.95	5.42	0.78	0.00	0.00	0.00	0.00	5.85	12.05
	B35HE029	4.86	0.88	0.00	0.00	0.00	0.00	4.59	10.33	6.25	0.90	0.00	0.00	0.00	0.00	6.75	13.90
	B35HE030	5.35	0.97	0.00	0.00	0.00	0.00	5.06	11.38	6.88	1.00	0.00	0.00	0.00	0.00	7.43	15.31
	B35HE031	6.51	1.18	0.00	0.00	0.00	0.00	6.15	13.84	8.38	1.21	0.00	0.00	0.00	0.00	9.05	18.64
	B35HE032	6.94	1.25	0.00	0.00	0.00	0.00	6.56	14.75	8.92	1.29	0.00	0.00	0.00	0.00	9.64	19.85
	B35HE033	8.84	1.60	0.00	0.00	0.00	0.00	8.35	18.79	11.37	1.65	0.00	0.00	0.00	0.00	12.28	25.30
	B35HE034	9.86	1.78	0.00	0.00	0.00	0.00	9.31	20.95	12.67	1.84	0.00	0.00	0.00	0.00	13.68	28.19
	B35HE035	2.72	0.54	0.00	0.00	0.00	0.00	2.57	5.83	3.40	0.55	0.00	0.00	0.00	0.00	3.67	7.62
	B35HE036	2.84	0.56	0.00	0.00	0.00	0.00	2.68	6.08	3.55	0.58	0.00	0.00	0.00	0.00	3.83	7.96
	B35HE037	3.19	0.63	0.00	0.00	0.00	0.00	3.02	6.84	3.99	0.65	0.00	0.00	0.00	0.00	4.31	8.95

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>B35</b>	<b>cont.</b>																
	B35HE038	4.34	0.86	0.00	0.00	0.00	0.00	4.10	9.30	5.42	0.88	0.00	0.00	0.00	0.00	5.86	12.16
	B35HE039	4.85	0.96	0.00	0.00	0.00	0.00	4.58	10.39	6.06	0.99	0.00	0.00	0.00	0.00	6.55	13.60
	B35HE040	5.01	0.99	0.00	0.00	0.00	0.00	4.73	10.73	6.26	1.02	0.00	0.00	0.00	0.00	6.76	14.04
	B35HE041	5.36	1.06	0.00	0.00	0.00	0.00	5.07	11.49	6.70	1.09	0.00	0.00	0.00	0.00	7.24	15.03
	B35HE042	6.90	1.37	0.00	0.00	0.00	0.00	6.52	14.79	8.63	1.40	0.00	0.00	0.00	0.00	9.32	19.35
	B35HE043	7.10	1.41	0.00	0.00	0.00	0.00	6.70	15.21	8.87	1.44	0.00	0.00	0.00	0.00	9.58	19.89
	B35HE044	9.23	1.83	0.00	0.00	0.00	0.00	8.72	19.78	11.54	1.88	0.00	0.00	0.00	0.00	12.46	25.88
	B35HE045	9.58	1.90	0.00	0.00	0.00	0.00	9.05	20.53	11.98	1.95	0.00	0.00	0.00	0.00	12.94	26.87
	B35HE046	11.40	2.26	0.00	0.00	0.00	0.00	10.77	24.43	14.25	2.32	0.00	0.00	0.00	0.00	15.39	31.96
	B35HE047	12.16	2.41	0.00	0.00	0.00	0.00	11.48	26.05	15.20	2.47	0.00	0.00	0.00	0.00	16.42	34.09
	B35SA001	1.90	0.31	0.00	0.00	0.00	0.00	1.79	4.00	2.34	0.32	0.00	0.00	0.00	0.00	2.53	5.19
	B35SA003	2.85	0.46	0.00	0.00	0.00	0.00	2.69	6.00	3.50	0.48	0.00	0.00	0.00	0.00	3.78	7.76
	B35SA004	3.90	0.63	0.00	0.00	0.00	0.00	3.68	8.21	4.80	0.65	0.00	0.00	0.00	0.00	5.18	10.63
	B35SA005	4.88	0.79	0.00	0.00	0.00	0.00	4.61	10.28	6.01	0.82	0.00	0.00	0.00	0.00	6.49	13.32
	B35SA006	5.76	0.94	0.00	0.00	0.00	0.00	5.44	12.14	7.09	0.96	0.00	0.00	0.00	0.00	7.65	15.70
	B35SA007	6.48	1.05	0.00	0.00	0.00	0.00	6.12	13.65	7.97	1.08	0.00	0.00	0.00	0.00	8.61	17.66
	B35SA008	7.63	1.24	0.00	0.00	0.00	0.00	7.21	16.08	9.40	1.28	0.00	0.00	0.00	0.00	10.15	20.83
	B35SA009	9.69	1.58	0.00	0.00	0.00	0.00	9.15	20.42	11.93	1.62	0.00	0.00	0.00	0.00	12.88	26.43
	B35SA010	11.83	1.92	0.00	0.00	0.00	0.00	11.17	24.92	14.56	1.98	0.00	0.00	0.00	0.00	15.72	32.26
	B35XX001	2.95	0.48	0.00	0.00	0.00	0.00	2.79	6.22	3.63	0.49	0.00	0.00	0.00	0.00	3.92	8.04
	B35XX002	3.32	0.54	0.00	0.00	0.00	0.00	3.13	6.99	4.08	0.56	0.00	0.00	0.00	0.00	4.41	9.05
	B35XX003	3.67	0.60	0.00	0.00	0.00	0.00	3.47	7.74	4.52	0.61	0.00	0.00	0.00	0.00	4.88	10.01
	B35XX004	4.18	0.68	0.00	0.00	0.00	0.00	3.95	8.81	5.15	0.70	0.00	0.00	0.00	0.00	5.56	11.41
	B35XX005	4.70	0.76	0.00	0.00	0.00	0.00	4.44	9.90	5.78	0.79	0.00	0.00	0.00	0.00	6.25	12.82
	B35XX006	5.78	0.94	0.00	0.00	0.00	0.00	5.46	12.18	7.12	0.97	0.00	0.00	0.00	0.00	7.69	15.78
	B35XX007	2.97	0.54	0.00	0.00	0.00	0.00	2.80	6.31	3.82	0.55	0.00	0.00	0.00	0.00	4.12	8.49
	B35XX008	3.39	0.61	0.00	0.00	0.00	0.00	3.20	7.20	4.36	0.63	0.00	0.00	0.00	0.00	4.71	9.70
	B35XX009	3.65	0.66	0.00	0.00	0.00	0.00	3.45	7.76	4.70	0.68	0.00	0.00	0.00	0.00	5.07	10.45
	B35XX010	4.34	0.78	0.00	0.00	0.00	0.00	4.10	9.22	5.59	0.81	0.00	0.00	0.00	0.00	6.03	12.43
	B35XX011	4.80	0.87	0.00	0.00	0.00	0.00	4.54	10.21	6.18	0.89	0.00	0.00	0.00	0.00	6.67	13.74
B35XX012	6.09	1.10	0.00	0.00	0.00	0.00	5.75	12.94	7.83	1.13	0.00	0.00	0.00	0.00	8.46	17.42	
B35XX013	0.68	0.13	0.00	0.00	0.00	0.00	0.64	1.45	0.85	0.14	0.00	0.00	0.00	0.00	0.91	1.90	
B35XX014	0.76	0.15	0.00	0.00	0.00	0.00	0.72	1.63	0.95	0.15	0.00	0.00	0.00	0.00	1.03	2.13	
B35XX015	1.13	0.22	0.00	0.00	0.00	0.00	1.07	2.42	1.41	0.23	0.00	0.00	0.00	0.00	1.53	3.17	
B35XX016	1.29	0.26	0.00	0.00	0.00	0.00	1.22	2.77	1.61	0.26	0.00	0.00	0.00	0.00	1.74	3.61	



**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>B35</b>	<i>cont.</i>																
	B35XX017	1.41	0.28	0.00	0.00	0.00	0.00	1.33	3.02	1.76	0.29	0.00	0.00	0.00	0.00	1.90	3.95
	B35XX018	3.00	0.59	0.00	0.00	0.00	0.00	2.83	6.42	3.75	0.61	0.00	0.00	0.00	0.00	4.05	8.41
	B35XX019	3.20	0.63	0.00	0.00	0.00	0.00	3.02	6.85	4.00	0.65	0.00	0.00	0.00	0.00	4.32	8.97
	B35XX020	3.61	0.72	0.00	0.00	0.00	0.00	3.41	7.74	4.52	0.74	0.00	0.00	0.00	0.00	4.88	10.14
	B35XX021	3.93	0.78	0.00	0.00	0.00	0.00	3.71	8.42	4.91	0.80	0.00	0.00	0.00	0.00	5.30	11.01
	B35XX022	4.97	0.98	0.00	0.00	0.00	0.00	4.69	10.64	6.21	1.01	0.00	0.00	0.00	0.00	6.71	13.93
	B35XX023	5.32	1.05	0.00	0.00	0.00	0.00	5.03	11.40	6.65	1.08	0.00	0.00	0.00	0.00	7.18	14.91
<b>C05</b>	C05OL001	0.13	0.01	0.56	0.08	0.00	0.00	0.45	1.23								
	C05OL002	0.21	0.01	1.15	0.17	0.00	0.00	0.72	2.26								
	C05OL003	0.26	0.01	1.28	0.19	0.00	0.00	0.87	2.61								
	C05OL004	0.28	0.02	1.40	0.20	0.00	0.00	0.95	2.85								
	<b>C10</b>	C10BO001	0.97	0.08	0.74	0.08	0.00	0.00	1.48	3.35							
C10BO003		0.53	0.04	0.98	0.11	0.00	0.00	0.81	2.47								
C10BO004		0.59	0.05	1.47	0.16	0.00	0.00	0.90	3.17								
C10BO007		2.40	0.20	0.39	0.04	0.00	0.00	3.67	6.70								
C10BO008		3.26	0.28	0.87	0.09	0.00	0.00	4.99	9.49								
C10BO009		1.23	0.12	0.98	0.11	0.00	0.00	2.09	4.53								
C10BO011		3.27	0.32	0.78	0.08	0.00	0.00	5.58	10.03								
C10BO013		8.62	0.86	1.85	0.20	0.00	0.00	14.74	26.27								
C10BO015		2.81	0.28	0.49	0.05	0.00	0.00	4.80	8.43								
C10BO016		4.10	0.41	0.87	0.09	0.00	0.00	7.01	12.48								
C10RX001		5.69	0.57	0.78	0.08	0.00	0.00	9.73	16.85								
C10RX002		7.85	0.78	1.36	0.15	0.00	0.00	13.42	23.56								
C10RX003		13.12	1.30	3.21	0.35	0.00	0.00	22.42	40.40								
C10WC003		1.14	0.10	0.39	0.04	0.00	0.00	1.74	3.41								
C10WC006		1.06	0.09	1.96	0.21	0.00	0.00	1.63	4.95								
C10WC007		2.12	0.18	2.21	0.24	0.00	0.00	3.24	7.99								
C10WC008		3.03	0.26	0.87	0.09	0.00	0.00	4.63	8.88								
C10WC010		2.57	0.25	2.70	0.29	0.00	0.00	4.39	10.20								
C10WC015		5.41	0.46	1.36	0.15	0.00	0.00	8.27	15.65								
C10WC016		8.05	0.80	1.94	0.21	0.00	0.00	13.76	24.76								
C10WC017	3.41	0.34	0.87	0.09	0.00	0.00	5.82	10.53									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C10</b>	<i>cont.</i> C10WC019	7.94	0.79	1.94	0.21	0.00	0.00	13.58	24.46								
<b>C15</b>	C15BL001	1.78	0.19	0.12	0.57	0.00	0.00	2.43	5.09								
	C15BL003	8.53	0.92	0.62	1.85	0.00	0.00	11.63	23.55								
	C15BL004	9.99	1.08	0.93	2.28	0.00	0.00	13.61	27.89								
	C15BL005	14.64	1.58	1.87	3.06	0.00	0.00	19.94	41.09								
	C15BL006	0.19	0.04	35.60	4.53	0.00	0.00	0.25	40.61								
	C15ED001	1.26	0.14	2.10	0.30	0.00	0.00	1.71	5.51								
	C15ED002	0.86	0.09	1.72	0.25	0.00	0.00	1.18	4.10								
	C15XX001	11.58	2.30	20.44	2.60	0.46	0.07	15.84	53.29								
<b>C20</b>	C20WC002	1.84	0.22	2.48	0.36	0.19	0.03	1.99	7.11								
	C20XX001	1.29	0.15	1.53	0.22	0.13	0.02	1.40	4.74								
<b>C25</b>	C25AJ001	0.66	0.08	1.15	0.17	0.00	0.00	0.79	2.85								
	C25AJ003	0.93	0.12	1.15	0.17	0.00	0.00	1.12	3.49								
	C25AJ004	1.32	0.17	1.53	0.22	0.00	0.00	1.60	4.84								
	C25AJ005	1.55	0.20	2.10	0.30	0.00	0.00	1.88	6.03								
	C25AJ006	1.85	0.24	2.10	0.30	0.00	0.00	2.24	6.73								
	C25AJ007	1.96	0.25	2.10	0.30	0.00	0.00	2.38	6.99								
	C25AJ008	1.22	0.29	0.98	0.19	0.00	0.00	1.27	3.95								
	C25AJ009	1.30	0.31	0.98	0.19	0.00	0.00	1.35	4.13								
	C25AJ010	1.39	0.33	0.98	0.19	0.00	0.00	1.44	4.33								
	C25AJ011	1.49	0.35	0.98	0.19	0.00	0.00	1.54	4.55								
	C25AJ012	1.58	0.37	0.98	0.19	0.00	0.00	1.64	4.76								
	C25AJ013	1.67	0.39	0.98	0.19	0.00	0.00	1.73	4.96								
	C25AJ015	1.75	0.23	3.82	0.55	0.00	0.00	2.12	8.47								
	C25AJ016	1.83	0.24	3.82	0.55	0.00	0.00	2.22	8.66								
	C25AJ018	2.13	0.28	4.77	0.69	0.00	0.00	2.57	10.44								
	C25AJ019	3.08	0.40	5.34	0.77	0.00	0.00	3.73	13.32								
	C25ST001	0.36	0.05	1.53	0.22	0.00	0.00	0.44	2.60								
	C25ST002	0.38	0.05	1.72	0.25	0.00	0.00	0.46	2.86								
	C25SV001	60.48	14.32	4.55	0.78	0.33	0.05	62.87	143.38								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C25</b>	<i>cont.</i>																
	C25SV002	24.57	5.83	4.55	0.78	0.25	0.04	25.55	61.57								
	C25SV003	11.06	2.64	2.10	0.36	0.23	0.04	11.53	27.96								
	C25WC002	0.44	0.06	1.53	0.22	0.00	0.00	0.53	2.78								
<b>C35</b>	C35AF001	2.52	0.48	0.00	0.30	0.04	0.01	3.67	7.02								
	C35AF002	1.34	0.26	0.00	2.00	0.04	0.01	1.96	5.61								
	C35AF004	4.33	0.83	6.18	2.90	0.05	0.01	6.31	20.61								
	C35AF005	6.21	1.20	4.39	2.56	0.12	0.02	9.05	23.55								
	C35AL002	3.48	0.70	2.12	1.27	0.24	0.04	5.13	12.98								
	C35AL003	1.13	0.25	0.33	0.36	0.24	0.04	1.72	4.07								
	C35AL008	2.65	0.50	0.00	0.30	0.00	0.00	3.86	7.31								
	C35AL013	1.12	0.23	0.00	0.40	0.12	0.02	1.66	3.55								
	C35AL014	6.00	1.15	4.31	1.05	0.05	0.01	8.74	21.31								
	C35AV006	8.89	1.70	1.34	2.68	0.11	0.02	12.94	27.68								
	C35AV008	2.67	0.51	0.47	2.24	0.00	0.00	3.88	9.77								
	C35AV009	3.25	0.62	1.07	2.55	0.00	0.00	4.72	12.21								
	C35AV010	5.86	1.11	1.74	2.89	0.00	0.00	8.52	20.12								
	C35AV011	4.49	0.85	0.80	2.41	0.00	0.00	6.52	15.07								
C35AV012	13.43	2.55	1.34	3.18	0.00	0.00	19.51	40.01									
<b>C40</b>	C40CC001	3.70	0.48	0.62	0.35	0.00	0.00	4.48	9.63								
	C40MU001	0.43	0.06	1.53	0.22	0.04	0.01	0.53	2.82								
	C40MU002	0.93	0.13	2.48	0.36	0.04	0.01	1.14	5.09								
	C40MU003	0.45	0.06	1.53	0.22	0.04	0.01	0.55	2.86								
	C40MU004	0.54	0.07	1.53	0.22	0.04	0.01	0.66	3.07								
	C40RC005	32.88	4.26	7.48	8.24	0.00	0.00	39.83	92.69								
	C40ST001	0.25	0.04	0.03	0.22	0.04	0.01	0.31	0.90								
	C40ST002	0.28	0.04	1.05	0.15	0.04	0.01	0.34	1.91								
	C40ST003	0.34	0.05	0.12	0.32	0.04	0.01	0.42	1.30								
	C40ST005	0.48	0.07	0.09	0.35	0.04	0.01	0.59	1.63								
	C40XX001	0.49	0.06	0.12	0.27	0.00	0.00	0.59	1.53								
	C40XX002	0.52	0.07	1.34	0.19	0.00	0.00	0.63	2.75								
	C40XX003	0.74	0.10	0.19	0.31	0.00	0.00	0.90	2.24								
	C40XX004	0.75	0.10	1.53	0.22	0.00	0.00	0.91	3.51								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C40</b>	<i>cont.</i>																
	C40XX005	0.98	0.13	0.31	0.43	0.00	0.00	1.19	3.04								
	C40XX006	1.37	0.18	0.31	0.43	0.00	0.00	1.66	3.95								
	C40XX007	1.27	0.16	1.72	0.25	0.00	0.00	1.54	4.94								
<b>C45</b>	C45G0010	18.14	2.75	7.49	0.95	0.00	0.00	27.41	56.74								
	C45G0011	27.99	4.24	15.05	1.91	0.00	0.00	42.30	91.49								
	C45G0012	37.55	5.69	13.75	1.75	0.00	0.00	56.75	115.49								
	C45G0013	15.08	2.28	7.49	0.95	0.00	0.00	22.79	48.59								
	C45G0014	20.76	3.14	7.97	1.01	0.00	0.00	31.38	64.26								
	C45G0016	41.16	6.23	18.71	2.38	0.00	0.00	62.20	130.68								
	C45G0018	51.36	7.78	27.26	3.47	0.00	0.00	77.62	167.49								
	C45G0020	61.26	9.28	36.61	4.65	0.00	0.00	92.57	204.37								
	C45G0026	6.50	0.98	7.42	1.08	0.00	0.00	9.83	25.81								
	C45G0027	8.26	1.25	4.07	0.52	0.00	0.00	12.48	26.58								
	C45G0028	13.16	1.99	4.07	0.52	0.00	0.00	19.88	39.62								
	C45G0029	8.74	1.32	7.42	1.08	0.00	0.00	13.21	31.77								
	C45G0031	49.89	7.55	31.32	3.98	0.00	0.00	75.39	168.13								
	C45MJ001	0.88	0.13	3.09	0.45	0.00	0.00	1.34	5.89								
	C45MW002	5.31	0.81	2.12	0.27	0.06	0.01	8.03	16.61								
	C45MW003	6.75	1.03	2.12	0.27	0.08	0.01	10.21	20.47								
<b>C55</b>	C55M3001	2.31	0.38	8.78	1.27	0.04	0.01	3.11	15.90								
	C55M3002	5.54	0.90	4.61	0.59	0.00	0.00	7.46	19.10								
	C55M3003	7.01	1.14	8.15	1.04	0.00	0.00	9.43	26.77								
	C55OE001	26.26	4.27	0.00	0.00	0.00	0.00	35.33	65.86								
	C55OE002	33.74	5.49	0.00	0.00	0.00	0.00	45.40	84.63								
	C55OE003	51.42	8.37	0.00	0.00	0.00	0.00	69.18	128.97								
	C55OE006	4.88	0.80	5.69	0.72	0.08	0.01	6.57	18.75								
	C55OE009	9.22	1.52	9.76	1.24	0.15	0.02	12.42	34.33								
	C55OE011	8.52	1.40	13.91	1.77	0.15	0.02	11.48	37.25								
	C55OE012	10.85	1.78	13.91	1.77	0.15	0.02	14.62	43.10								
	C55SC001	8.06	1.32	6.15	0.78	0.05	0.01	10.85	27.22								
	C55SC002	17.20	2.83	13.60	1.73	0.24	0.04	23.17	58.81								
	C55SC005	33.48	5.53	19.71	2.51	0.92	0.15	45.11	107.41								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C55</b>	<i>cont.</i> C55SC006	42.43	6.99	19.71	2.51	0.92	0.15	57.16	129.87								
<b>C60</b>	C60CQ001	1.75	0.22	8.59	1.25	0.00	0.00	2.36	14.17								
	C60CQ002	0.38	0.05	2.21	0.32	0.00	0.00	0.51	3.47								
	C60CQ003	0.41	0.05	3.19	0.46	0.00	0.00	0.55	4.66								
	C60CQ010	1.77	0.23	3.40	0.59	0.00	0.00	2.38	8.37								
	C60CQ011	2.17	0.28	15.95	2.31	0.00	0.00	2.93	23.64								
	C60CQ012	2.22	0.28	15.95	2.31	0.00	0.00	2.98	23.74								
	C60CQ013	2.25	0.29	15.95	2.31	0.00	0.00	3.03	23.83								
	C60CQ014	2.18	0.28	2.40	1.22	0.00	0.00	2.94	9.02								
	C60CQ016	3.72	0.47	8.16	1.41	0.00	0.00	5.01	18.77								
	C60FE002	0.20	0.03	0.49	0.07	0.00	0.00	0.27	1.06								
	C60FE006	0.41	0.05	2.21	0.32	0.00	0.00	0.55	3.54								
	C60FE007	0.43	0.05	3.19	0.46	0.00	0.00	0.58	4.71								
	C60FE009	1.38	0.18	4.91	0.71	0.00	0.00	1.85	9.03								
	C60LY001	3.54	0.45	2.45	0.36	0.00	0.00	4.76	11.56								
	C60LY002	5.23	0.67	8.59	1.25	0.00	0.00	7.04	22.78								
	C60LY005	0.40	0.05	3.19	0.46	0.00	0.00	0.54	4.64								
	C60LY011	10.10	1.29	3.11	0.54	0.00	0.00	13.59	28.63								
<b>C65</b>	C65ST007	0.21	0.02	0.06	0.03	0.00	0.00	0.68	1.00								
	C65ST008	0.22	0.02	0.12	0.06	0.00	0.00	0.71	1.13								
	C65ST009	0.26	0.02	0.17	0.09	0.00	0.00	0.84	1.38								
	C65ST013	0.43	0.04	0.98	0.14	0.00	0.00	1.41	3.00								
	C65WC003	0.32	0.03	0.12	0.20	0.00	0.00	1.03	1.70								
	C65WC004	0.27	0.02	0.17	0.23	0.00	0.00	0.88	1.57								
	C65WC005	0.39	0.04	0.89	0.13	0.00	0.00	1.26	2.71								
<b>C75</b>	C75BD004	4.45	1.33	8.65	1.26	0.26	0.04	5.10	21.09								
	C75BD005	5.52	1.67	14.22	2.06	0.53	0.09	6.33	30.42								
	C75BD006	8.02	2.43	22.66	3.29	0.94	0.15	9.21	46.70								
	C75BD007	3.22	0.96	7.83	1.14	0.15	0.02	3.69	17.01								
	C75BD008	4.30	1.28	8.65	1.26	0.15	0.02	4.92	20.58								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C75</b>	<i>cont.</i>																
	C75BD009	5.70	1.72	14.22	2.06	0.53	0.09	6.54	30.86								
	C75BD010	9.51	2.87	6.92	0.94	0.94	0.15	10.91	32.24								
	C75BD011	12.70	3.83	10.58	1.44	1.90	0.30	14.57	45.32								
	C75GV014	26.33	8.25	19.53	2.66	13.14	2.11	30.38	102.40								
	C75GV016	62.08	18.80	24.41	3.32	13.12	2.11	71.26	195.10								
	C75GV019	26.32	8.24	19.53	2.66	13.14	2.11	30.37	102.37								
	C75GV020	43.08	13.19	20.34	2.77	13.12	2.11	49.53	144.14								
	C75GV021	6.39	1.92	12.77	1.85	0.56	0.09	7.33	30.91								
	C75GV022	7.84	2.38	8.95	1.22	0.99	0.16	9.00	30.54								
	C75GV023	15.05	4.75	12.37	1.68	8.51	1.37	17.39	61.12								
	C75GV024	23.25	7.17	14.08	1.92	8.51	1.37	26.76	83.06								
	C75GV025	42.81	13.11	20.34	2.77	12.44	2.00	49.23	142.70								
	C75GV028	14.82	4.49	12.37	1.68	2.86	0.46	17.02	53.70								
	C75PB001	19.67	5.97	10.33	1.41	2.54	0.41	22.58	62.91								
	C75PB002	25.02	7.55	15.05	2.05	2.54	0.41	28.71	81.33								
	C75TD003	20.15	6.09	14.64	1.99	3.89	0.62	23.12	70.50								
	C75TD007	37.71	11.54	20.10	2.74	6.38	1.02	43.36	122.85								
	C75TD008	34.86	10.70	20.10	2.74	11.39	1.83	40.09	121.71								
	C75TE001	19.07	5.73	10.58	1.44	2.32	0.37	21.86	61.37								
C75TE002	26.21	7.88	12.37	1.68	3.43	0.55	30.05	82.17									
C75TE004	29.31	9.18	17.49	2.38	5.19	0.83	33.82	98.20									
C75TE005	40.41	12.47	21.15	2.88	5.19	0.83	46.52	129.45									
C75TE006	43.85	13.48	21.15	2.88	5.19	0.83	50.45	137.83									
C75TE007	51.05	15.46	21.15	2.88	10.65	1.71	58.60	161.50									
<b>C80</b>	C80GV006	32.60	11.02	28.02	3.31	1.61	0.26	32.65	109.47	37.25	11.11	37.06	4.38	6.23	1.00	39.99	137.02
	C80GV013	77.53	32.36	20.47	2.42	9.61	1.54	99.86	243.79	86.15	32.52	26.06	3.07	39.00	6.26	117.14	310.20
	C80GV014	77.74	32.44	20.47	2.42	9.61	1.54	100.12	244.34	86.37	32.61	26.06	3.07	39.00	6.26	117.45	310.82
	C80GV015	78.04	32.57	20.47	2.42	9.61	1.54	100.51	245.16	86.71	32.73	26.06	3.07	39.00	6.26	117.91	311.74
	C80GV016	110.11	45.89	18.81	2.23	11.34	1.82	141.78	331.98	122.35	46.11	23.98	2.84	45.35	7.28	166.33	414.24
	C80GV020	35.28	13.33	28.02	3.31	2.27	0.36	40.42	122.99	39.69	13.44	37.06	4.38	8.85	1.42	48.27	153.11
	C80GV025	21.22	7.19	21.02	2.48	1.32	0.21	21.26	74.70	24.25	7.25	27.80	3.28	5.22	0.84	26.04	94.68
	C80GV026	31.98	10.87	24.38	2.88	2.41	0.39	32.05	104.96	36.55	10.95	32.25	3.81	9.46	1.52	39.26	133.80
	C80GV027	26.52	9.04	17.52	2.07	2.43	0.39	26.59	84.56	30.31	9.11	23.17	2.74	9.59	1.54	32.57	109.03

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C80</b>	<i>cont.</i>																
	C80GV028	34.12	11.61	28.02	3.31	2.89	0.46	34.20	114.61	38.99	11.71	37.06	4.38	11.42	1.83	41.89	147.28
	C80GV029	32.45	11.05	28.02	3.31	2.89	0.46	32.54	110.72	37.09	11.14	37.06	4.38	11.42	1.83	39.85	142.77
	C80GV030	32.51	11.07	28.02	3.31	2.89	0.46	32.59	110.85	37.15	11.16	37.06	4.38	11.42	1.83	39.92	142.92
	C80GV031	32.80	12.44	28.02	3.31	2.89	0.46	37.59	117.51	36.90	12.54	37.06	4.38	11.42	1.83	44.90	149.03
	C80GV032	43.64	16.57	29.57	3.49	7.40	1.19	50.03	151.89	49.09	16.71	39.10	4.62	29.03	4.66	59.76	202.97
	C80LB001	26.07	9.92	25.57	3.02	2.76	0.44	29.89	97.67	29.32	10.00	33.82	4.00	10.94	1.76	35.70	125.54
	C80LB002	35.20	13.18	30.13	3.56	0.49	0.08	40.27	122.91	39.60	13.29	39.84	4.71	1.99	0.32	48.10	147.85
	C80LB005	17.30	5.23	13.31	2.18	1.90	0.30	14.89	55.11	20.18	5.29	17.61	2.88	7.88	1.26	18.80	73.90
	C80LI009	20.19	6.89	24.52	2.90	2.01	0.32	20.25	77.08	23.08	6.95	32.43	3.83	8.10	1.30	24.80	100.49
	C80LI010	23.06	7.89	22.07	2.61	2.52	0.40	23.14	81.69	26.36	7.95	29.19	3.45	9.96	1.60	28.34	106.85
	C80LI011	26.05	8.91	25.57	3.02	2.92	0.47	26.13	93.07	29.77	8.98	33.82	4.00	11.54	1.85	32.01	121.97
	C80TD001	30.18	11.55	13.30	1.57	4.28	0.69	34.64	96.21	33.96	11.64	16.99	2.00	17.27	2.77	41.38	126.01
	C80TD002	37.85	14.41	16.25	1.92	4.15	0.67	43.40	118.65	42.58	14.53	20.85	2.46	16.25	2.61	51.84	151.12
	C80TD005	40.85	17.21	44.28	5.23	5.25	0.84	52.69	166.35	45.39	17.30	57.72	6.81	20.82	3.34	61.81	213.19
	C80TE001	21.04	7.15	17.52	2.07	1.72	0.28	21.09	70.87	24.04	7.21	23.17	2.74	6.89	1.11	25.83	90.99
	C80TE002	16.84	5.75	17.52	2.07	1.82	0.29	16.89	61.18	19.24	5.80	23.17	2.74	7.29	1.17	20.69	80.10
	C80TE003	22.33	7.65	25.92	3.06	2.76	0.44	22.41	84.57	25.52	7.72	34.28	4.05	10.94	1.76	27.45	111.72
	C80TE005	15.81	4.80	16.95	2.77	2.02	0.32	13.61	56.28	18.44	4.85	22.42	3.67	8.13	1.30	17.19	76.00
C80TE006	15.81	4.80	16.95	2.77	2.02	0.32	13.61	56.28	18.44	4.85	22.42	3.67	8.13	1.30	17.19	76.00	
C80TE007	22.02	7.54	22.14	2.62	2.52	0.40	22.09	79.33	25.17	7.60	29.28	3.46	9.96	1.60	27.06	104.13	
<b>C85</b>	C85AM017	46.80	21.16	13.53	1.47	0.00	0.00	63.54	146.50	57.20	21.37	17.80	1.94	0.00	0.00	81.70	180.01
	C85KC003	38.91	16.07	11.38	1.13	0.00	0.00	47.24	114.73	48.64	16.28	14.97	1.49	0.00	0.00	62.54	143.92
	C85KC004	24.57	10.15	7.64	0.76	0.00	0.00	29.83	72.95	30.71	10.28	10.06	1.00	0.00	0.00	39.49	91.54
	C85KC005	28.32	11.70	9.15	0.91	0.00	0.00	34.39	84.47	35.40	11.85	12.03	1.20	0.00	0.00	45.52	106.00
	C85KC006	66.06	29.86	11.98	1.30	0.00	0.00	89.69	198.89	80.74	30.16	15.76	1.71	0.00	0.00	115.32	243.69
	C85KC007	23.77	9.79	7.64	0.69	0.00	0.00	27.07	68.96	28.53	9.90	10.06	0.91	0.00	0.00	34.66	84.06
	C85KC008	46.89	21.20	13.57	1.48	0.00	0.00	63.65	146.79	57.30	21.41	17.85	1.94	0.00	0.00	81.84	180.34
	C85LB013	31.36	12.95	11.29	1.13	0.00	0.00	38.07	94.80	39.20	13.12	14.86	1.48	0.00	0.00	50.40	119.06
	C85LB014	40.46	16.71	11.29	1.13	0.00	0.00	49.13	118.72	50.58	16.93	14.86	1.48	0.00	0.00	65.04	148.89
	C85LB015	42.54	17.57	8.89	0.89	0.00	0.00	51.65	121.54	53.17	17.80	11.70	1.17	0.00	0.00	68.38	152.22
	C85LB016	51.95	23.49	10.18	1.11	0.00	0.00	70.53	157.26	63.50	23.72	13.39	1.46	0.00	0.00	90.69	192.76
	C85LB017	64.07	28.96	18.89	2.05	0.00	0.00	86.98	200.95	78.31	29.25	24.86	2.70	0.00	0.00	111.84	246.96
	C85LB018	21.26	8.76	6.74	0.61	0.00	0.00	24.21	61.58	25.51	8.85	8.87	0.80	0.00	0.00	31.00	75.03

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C85</b>	<i>cont.</i>																
	C85LB019	35.86	13.21	15.45	2.38	0.00	0.00	46.26	113.16	44.14	13.40	20.21	3.11	0.00	0.00	63.67	144.53
	C85LB020	46.09	16.98	15.45	2.38	0.00	0.00	59.46	140.36	56.73	17.22	20.21	3.11	0.00	0.00	81.83	179.10
	C85LB021	44.49	18.32	12.16	1.21	0.00	0.00	64.17	140.35	53.38	18.53	15.91	1.59	0.00	0.00	85.08	174.49
	C85LB022	59.76	24.62	13.93	1.39	0.00	0.00	86.21	185.91	71.71	24.89	18.21	1.82	0.00	0.00	114.30	230.93
	C85LB023	63.36	28.86	25.85	2.81	0.00	0.00	100.98	221.86	79.20	29.18	33.81	3.68	0.00	0.00	138.30	284.17
	C85LI001	25.64	10.59	8.89	0.89	0.00	0.00	31.13	77.14	32.05	10.73	11.70	1.17	0.00	0.00	41.21	96.86
	C85MA001	40.98	16.88	20.57	2.05	0.00	0.00	59.11	139.59	49.18	17.07	26.89	2.68	0.00	0.00	78.37	174.19
	C85MA002	50.15	20.66	19.98	1.99	0.00	0.00	72.34	165.12	60.18	20.89	26.13	2.61	0.00	0.00	95.91	205.72
	C85MA003	67.25	30.63	22.04	2.40	0.00	0.00	107.18	229.50	84.06	30.97	28.82	3.13	0.00	0.00	146.80	293.78
	C85MA004	38.73	16.00	15.03	1.50	0.00	0.00	47.02	118.28	48.41	16.21	19.78	1.97	0.00	0.00	62.25	148.62
	C85MA005	36.26	14.98	14.38	1.43	0.00	0.00	44.03	111.08	45.33	15.18	18.93	1.89	0.00	0.00	58.29	139.62
	C85MA006	45.82	20.71	14.60	1.59	0.00	0.00	62.20	144.92	56.00	20.92	19.21	2.09	0.00	0.00	79.98	178.20
	C85MA007	64.66	29.23	16.10	1.75	0.00	0.00	87.79	199.53	79.03	29.52	21.19	2.30	0.00	0.00	112.88	244.92
	C85MA008	38.38	15.85	14.38	1.43	0.00	0.00	46.60	116.64	47.98	16.06	18.93	1.89	0.00	0.00	61.70	146.56
	C85MA009	59.14	26.94	19.98	2.17	0.00	0.00	94.26	202.49	73.93	27.24	26.13	2.84	0.00	0.00	129.10	259.24
	C85MA010	58.54	26.46	14.60	1.59	0.00	0.00	79.48	180.67	71.55	26.73	19.21	2.09	0.00	0.00	102.19	221.77
	C85TE001	29.12	10.73	8.81	1.36	0.00	0.00	37.57	87.59	35.84	10.88	11.53	1.78	0.00	0.00	51.70	111.73
C85TE002	40.51	14.93	14.69	2.26	0.00	0.00	52.26	124.65	49.86	15.14	19.21	2.96	0.00	0.00	71.92	159.09	
C85TE003	45.33	18.67	19.68	1.96	0.00	0.00	65.39	151.03	54.40	18.88	25.74	2.57	0.00	0.00	86.70	188.29	
C85TE008	25.98	10.73	7.90	0.79	0.00	0.00	31.54	76.94	32.47	10.87	10.40	1.04	0.00	0.00	41.76	96.54	
C85TE009	32.02	13.22	9.88	0.99	0.00	0.00	38.87	94.98	40.02	13.40	13.00	1.30	0.00	0.00	51.46	119.18	
C85TE010	42.51	17.56	10.31	1.03	0.00	0.00	51.61	123.02	53.13	17.79	13.56	1.35	0.00	0.00	68.32	154.15	
C85TE011	57.02	25.78	13.53	1.47	0.00	0.00	77.42	175.22	69.69	26.03	17.80	1.94	0.00	0.00	99.54	215.00	
<b>C90</b>																	
	C90LB001	51.48	23.76	17.16	2.03	8.78	1.41	70.52	175.14	57.20	23.87	21.62	2.55	35.11	5.64	82.73	228.72
	C90LB002	59.45	27.39	19.38	2.29	8.78	1.41	81.41	200.11	66.05	27.52	24.49	2.89	35.11	5.64	95.50	257.20
C90LB003	94.41	43.47	25.46	3.01	13.17	2.11	129.26	310.89	104.90	43.67	32.34	3.82	52.65	8.45	151.64	397.47	
<b>C95</b>																	
	C95AP004	20.80	8.57	7.40	8.20	0.00	0.00	26.83	71.80								
	C95AP005	0.66	0.27	0.00	0.00	0.00	0.00	0.85	1.78								
	C95AP006	1.22	0.50	0.00	0.00	0.00	0.00	1.58	3.30								
	C95AP007	32.85	13.53	12.32	11.99	0.00	0.00	42.37	113.06								
	C95AP008	5.01	2.06	0.00	0.50	0.00	0.00	6.46	14.03								
C95AP009	1.66	0.68	0.00	0.00	0.00	0.00	2.14	4.48									



**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>C95</b>	<i>cont.</i>																
	C95AP010	43.90	18.08	12.55	12.12	0.00	0.00	56.63	143.28								
	C95AP011	1.55	0.64	0.00	0.00	0.00	0.00	1.99	4.18								
	C95AP012	6.26	2.58	0.00	0.50	0.00	0.00	8.07	17.41								
	C95AP013	41.89	17.25	20.48	16.61	0.00	0.00	54.04	150.27								
	C95AP014	1.41	0.58	0.00	0.00	0.00	0.00	1.82	3.81								
	C95AP015	5.45	2.24	0.00	0.50	0.00	0.00	7.03	15.22								
	C95AP016	1.90	0.78	0.00	0.00	0.00	0.00	2.45	5.13								
	C95AP017	17.71	7.29	7.23	7.10	0.00	0.00	22.85	62.18								
	C95AP018	0.58	0.24	0.00	0.00	0.00	0.00	0.75	1.57								
	C95AP019	3.38	1.39	0.00	0.50	0.00	0.00	4.36	9.63								
	C95AP020	19.55	8.05	12.90	10.32	0.00	0.00	25.22	76.04								
	C95AP021	30.62	12.61	14.93	12.47	0.00	0.00	39.50	110.13								
	C95AP022	4.61	1.90	1.39	1.79	0.00	0.00	5.95	15.64								
	C95AP023	0.11	0.04	0.00	0.00	0.00	0.00	0.14	0.29								
	C95LH003	18.13	7.47	6.31	6.58	0.00	0.00	23.39	61.88								
	C95LH005	23.59	9.72	8.56	8.85	0.00	0.00	30.44	81.16								
	C95LH011	44.07	18.15	12.90	12.32	0.00	0.00	56.85	144.29								
	C95LH013	56.26	23.17	12.90	12.32	0.00	0.00	72.58	177.23								
	C95LH015	74.98	30.88	18.34	17.40	0.00	0.00	96.73	238.33								
C95LH022	15.89	6.62	2.02	3.15	0.69	0.11	20.55	49.03									
C95LH023	22.23	9.25	3.76	5.13	0.87	0.14	28.74	70.12									
<b>D10</b>	D10IR003	10.64	3.82	0.00	0.79	0.00	0.00	18.28	33.53								
	D10IR005	40.19	10.54	18.46	2.35	0.00	0.00	69.07	140.61								
	D10SU002	13.11	4.70	0.00	0.80	0.00	0.00	22.52	41.13								
	D10SU003	13.39	4.81	0.00	0.80	0.00	0.00	23.02	42.02								
	D10SU005	20.36	5.34	22.33	2.84	0.00	0.00	35.00	85.87								
	D10SU006	20.61	5.41	22.33	2.84	0.00	0.00	35.42	86.61								
	D15BI001	1.43	0.38	2.62	0.38	0.00	0.00	2.22	7.03								
D15BI002	2.58	0.68	1.72	0.22	0.00	0.00	4.00	9.20									
D15BI003	3.88	1.02	2.58	0.33	0.00	0.00	6.00	13.81									
D15BI004	6.05	1.59	3.86	0.49	0.00	0.00	9.36	21.35									
D15BI005	8.40	2.20	5.84	0.74	0.00	0.00	12.99	30.17									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>D15</b>	<i>cont.</i>																
	D15BI006	13.29	3.48	10.22	1.30	0.00	0.00	20.55	48.84								
	D15BI007	19.49	5.11	14.69	1.87	0.00	0.00	30.15	71.31								
	D15BI008	16.35	4.29	14.69	1.87	0.00	0.00	25.29	62.49								
	D15XX001	0.76	0.20	0.00	0.00	0.00	0.00	1.17	2.13								
D15XX002	1.14	0.30	0.00	0.00	0.00	0.00	1.77	3.21									
<b>D20</b>	D20AD002	0.67	0.14	0.14	0.32	0.00	0.00	0.98	2.25								
	D20AD005	0.66	0.14	0.14	0.32	0.00	0.00	0.96	2.22								
	D20AD006	1.09	0.23	0.28	0.54	0.00	0.00	1.59	3.73								
	D20AD007	1.80	0.38	0.57	1.09	0.00	0.00	2.63	6.47								
	D20CQ001	2.59	0.56	9.16	2.17	0.00	0.00	3.79	18.27								
	D20LY001	0.97	0.21	0.21	0.61	0.00	0.00	1.42	3.42								
	D20LY002	1.00	0.21	0.00	0.60	0.00	0.00	1.46	3.27								
<b>D25</b>	D25AD003	9.37	2.46	5.93	0.64	0.00	0.00	16.10	34.50								
	D25AD004	7.47	1.96	2.40	0.26	0.00	0.00	12.85	24.94								
	D25EZ001	0.63	0.17	0.00	0.50	0.00	0.00	1.09	2.39								
	D25EZ002	0.50	0.14	0.00	0.50	0.09	0.01	0.88	2.12								
	D25EZ003	0.55	0.15	0.00	0.50	0.06	0.01	0.96	2.23								
	D25EZ005	2.12	0.57	0.00	1.25	0.12	0.02	3.66	7.74								
<b>D30</b>	D30HD001	6.99	1.83	18.03	4.29	0.00	0.00	12.01	43.15								
	D30HD002	10.50	2.75	23.19	5.95	0.00	0.00	18.04	60.43								
	D30HD003	13.68	3.59	28.77	7.66	0.00	0.00	23.52	77.22								
	D30MR001	1.02	0.27	1.75	0.25	0.00	0.00	1.75	5.04								
	D30MR003	10.13	2.68	4.98	0.63	0.15	0.02	17.44	36.03								
	D30MR005	18.50	4.91	40.92	5.20	0.53	0.09	31.89	102.04								
	D30MR006	21.33	5.66	12.71	1.62	0.53	0.09	36.76	78.70								
	D30MR007	30.43	8.04	12.71	1.62	0.53	0.09	52.40	105.82								
<b>D35</b>	D35DT001	30.71	9.98	38.65	6.67	0.00	0.00	49.48	135.49								
	D35DT002	32.38	10.52	38.65	6.67	0.00	0.00	52.17	140.39								
	D35DT003	35.68	11.59	38.65	6.67	0.00	0.00	57.50	150.09								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>D35</b>	<i>cont.</i>																
	D35DT004	37.63	12.23	45.09	7.78	0.00	0.00	60.63	163.36								
	D35DT005	56.64	18.40	65.27	11.26	0.00	0.00	91.25	242.82								
	D35DT006	38.00	15.65	65.27	9.47	0.00	0.00	61.23	189.62								
	D35IB003	36.00	14.92	46.03	6.68	0.92	0.15	58.08	162.78								
	D35IB004	34.22	14.22	45.17	6.55	1.21	0.19	55.23	156.79								
	D35IB005	39.73	16.49	54.62	7.92	1.21	0.19	64.11	184.27								
	D35IB006	41.80	17.34	55.74	8.09	1.21	0.19	67.44	191.81								
D35RD001	31.53	10.24	39.18	6.75	0.00	0.00	50.80	138.50									
<b>F10</b>																	
	F10JC001	4.81	1.19	5.25	0.57	0.73	0.12	5.50	18.17								
	F10JC002	5.25	1.29	5.25	0.57	0.73	0.12	6.00	19.21								
<b>G10</b>																	
	G10CA012	2.73	0.54	22.00	2.39	0.00	0.00	2.61	30.27	3.41	0.56	29.10	3.16	0.00	0.00	3.73	39.96
	G10CA013	3.52	0.70	28.37	3.08	0.00	0.00	3.36	39.03	4.40	0.72	37.53	4.08	0.00	0.00	4.80	51.53
	G10CA014	4.63	0.92	37.55	4.08	0.00	0.00	4.43	51.61	5.79	0.94	49.67	5.40	0.00	0.00	6.32	68.12
	G10CA015	6.42	1.27	48.13	5.23	0.00	0.00	6.14	67.19	8.03	1.31	63.66	6.92	0.00	0.00	8.77	88.69
	G10CA016	7.86	1.56	57.24	6.22	0.00	0.00	7.51	80.39	9.82	1.60	75.70	8.23	0.00	0.00	10.73	106.08
	G10CA017	12.33	2.44	76.30	8.29	0.00	0.00	11.78	111.14	15.41	2.51	100.91	10.97	0.00	0.00	16.83	146.63
	G10CA018	15.65	3.10	101.10	10.99	0.00	0.00	14.96	145.80	19.57	3.18	133.71	14.54	0.00	0.00	21.37	192.37
	G10CA019	26.34	5.21	161.42	17.55	0.00	0.00	25.17	235.69	32.93	5.36	213.49	23.21	0.00	0.00	35.97	310.96
	G10CA020	2.18	0.43	12.19	1.33	0.00	0.00	2.09	18.22	2.73	0.44	16.12	1.75	0.00	0.00	2.98	24.02
	G10WC001	0.23	0.04	1.43	0.16	0.00	0.00	0.19	2.05	0.26	0.04	1.87	0.20	0.00	0.00	0.25	2.62
	G10WC002	0.29	0.05	1.97	0.21	0.00	0.00	0.24	2.76	0.34	0.05	2.57	0.28	0.00	0.00	0.32	3.56
	G10WC003	0.47	0.08	2.86	0.31	0.00	0.00	0.39	4.11	0.54	0.08	3.73	0.41	0.00	0.00	0.52	5.28
	G10WC004	0.53	0.09	3.22	0.35	0.00	0.00	0.44	4.63	0.61	0.09	4.20	0.46	0.00	0.00	0.58	5.94
	G10XX001	0.10	0.02	0.18	0.02	0.00	0.00	0.08	0.40	0.11	0.02	0.23	0.03	0.00	0.00	0.11	0.50
	G10XX002	0.49	0.08	3.40	0.37	0.00	0.00	0.40	4.74	0.56	0.08	4.43	0.48	0.00	0.00	0.53	6.08
	G10XX003	1.11	0.18	1.61	0.18	0.00	0.00	0.91	3.99	1.27	0.18	2.13	0.23	0.00	0.00	1.21	5.02
	G10XX004	0.58	0.09	0.63	0.07	0.00	0.00	0.47	1.84	0.66	0.10	0.83	0.09	0.00	0.00	0.63	2.31
	G10XX005	1.40	0.28	6.44	0.70	0.00	0.00	1.34	10.16	1.75	0.29	8.40	0.91	0.00	0.00	1.92	13.27
G10XX006	1.23	0.24	8.94	0.97	0.00	0.00	1.18	12.56	1.54	0.25	11.67	1.27	0.00	0.00	1.68	16.41	
G10XX007	1.86	0.37	12.51	1.36	0.00	0.00	1.78	17.88	2.32	0.38	16.33	1.78	0.00	0.00	2.54	23.35	
G10XX008	2.27	0.45	7.50	0.82	0.00	0.00	2.17	13.21	2.84	0.46	9.91	1.08	0.00	0.00	3.10	17.39	
G10XX009	1.94	0.38	10.02	1.09	0.00	0.00	1.86	15.29	2.43	0.40	13.25	1.44	0.00	0.00	2.65	20.17	

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>G10</b>	<i>cont.</i>																
	G10XX010	2.91	0.58	14.01	1.52	0.00	0.00	2.78	21.80	3.63	0.59	18.53	2.01	0.00	0.00	3.97	28.73
	G10XX011	3.19	0.63	26.27	2.86	0.00	0.00	3.04	35.99	3.98	0.65	34.75	3.78	0.00	0.00	4.35	47.51
	G10XX012	3.75	0.74	29.99	3.26	0.00	0.00	3.59	41.33	4.69	0.76	39.66	4.31	0.00	0.00	5.13	54.55
	G10XX013	4.68	0.93	39.93	4.34	0.00	0.00	4.47	54.35	5.85	0.95	52.82	5.74	0.00	0.00	6.39	71.75
	G10XX014	6.76	1.34	49.95	5.43	0.00	0.00	6.46	69.94	8.45	1.38	66.07	7.18	0.00	0.00	9.23	92.31
	G10XX015	11.20	2.22	73.56	8.00	0.00	0.00	10.70	105.68	14.00	2.28	97.29	10.58	0.00	0.00	15.29	139.44
G10XX016	15.89	3.15	99.84	10.85	0.00	0.00	15.19	144.92	19.87	3.23	132.04	14.35	0.00	0.00	21.70	191.19	
<b>G15</b>	G15CA001	10.40	3.91	8.19	1.26	1.03	0.17	12.31	37.27	11.17	3.92	10.45	1.61	3.40	0.55	14.98	46.08
	G15CA003	12.25	4.60	9.18	1.41	1.03	0.17	14.49	43.13	13.15	4.61	11.71	1.80	3.40	0.55	17.64	52.86
	G15CA004	13.09	4.92	10.81	1.67	1.13	0.18	15.50	47.30	14.06	4.93	13.80	2.13	3.72	0.60	18.86	58.10
	G15CA005	17.79	6.77	14.09	2.17	3.21	0.52	21.13	65.68	19.11	6.79	17.98	2.77	10.58	1.70	25.72	84.65
	G15CA006	25.75	9.79	18.02	2.78	5.08	0.82	30.56	92.80	27.66	9.82	23.00	3.54	16.77	2.69	37.21	120.69
	G15CA007	11.05	4.15	8.85	1.36	1.03	0.17	13.08	39.69	11.86	4.17	11.29	1.74	3.40	0.55	15.92	48.93
	G15CA008	15.21	5.70	12.12	1.87	1.28	0.21	17.99	54.38	16.33	5.72	15.47	2.38	4.31	0.69	21.90	66.80
	G15CA009	14.20	5.33	12.12	1.87	1.13	0.18	16.80	51.63	15.25	5.34	15.47	2.38	3.72	0.60	20.45	63.21
	G15CA010	16.46	6.17	13.11	2.02	1.28	0.21	19.47	58.72	17.68	6.19	16.72	2.58	4.31	0.69	23.70	71.87
	G15JD008	11.02	4.27	9.90	1.53	3.42	0.55	13.15	43.84	11.84	4.28	12.63	1.95	11.30	1.81	16.00	59.81
	G15JD009	12.78	4.92	10.22	1.57	3.88	0.62	15.22	49.21	13.73	4.94	13.04	2.01	13.09	2.10	18.53	67.44
	G15JD010	12.83	4.94	12.12	1.87	3.42	0.55	15.28	51.01	13.78	4.95	15.47	2.38	11.30	1.81	18.60	68.29
	G15JD011	14.57	5.58	13.44	2.07	3.88	0.62	17.33	57.49	15.65	5.60	17.14	2.64	13.09	2.10	21.09	77.31
	<b>H10</b>	H10NP001	0.87	0.13	0.00	0.50	0.00	0.00	1.32	2.82							
H10NP002		0.97	0.15	0.00	0.50	0.00	0.00	1.47	3.09								
H10NP003		1.45	0.22	0.00	0.75	0.00	0.00	2.20	4.62								
H10NP004		1.87	0.28	0.00	0.75	0.00	0.00	2.83	5.73								
H10NP005		2.47	0.37	0.00	1.00	0.00	0.00	3.74	7.58								
H10NP006		3.33	0.50	0.00	1.00	0.00	0.00	5.03	9.86								
H10NP008		5.04	0.76	0.00	1.25	0.00	0.00	7.63	14.68								
H10NP009		6.43	0.97	0.00	1.25	0.00	0.00	9.74	18.39								
H10NP015		7.84	1.19	0.00	1.25	0.00	0.00	11.86	22.14								
H10NP016		10.79	1.63	0.00	1.25	0.00	0.00	16.34	30.01								
H10NP017		14.10	2.13	0.00	1.25	0.00	0.00	21.34	38.82								
H10NP018		32.71	4.95	0.00	1.25	0.00	0.00	49.51	88.42								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>H13</b>	H13AY007	12.70	3.03	0.00	0.00	0.00	0.00	17.30	33.03								
	H13AY008	6.18	1.47	0.00	0.00	0.00	0.00	8.41	16.06								
	H13AY009	11.29	2.69	0.00	0.00	0.00	0.00	15.39	29.37								
	H13AY010	5.70	1.36	0.00	0.00	0.00	0.00	7.77	14.83								
	H13AY011	9.43	2.25	0.00	0.00	0.00	0.00	12.85	24.53								
	H13AY012	4.77	1.14	0.00	0.00	0.00	0.00	6.50	12.41								
	H13AY013	7.55	1.80	0.00	0.00	0.00	0.00	10.29	19.64								
	H13AY014	4.01	0.96	0.00	0.00	0.00	0.00	5.46	10.43								
	H13AY015	4.44	1.06	0.00	0.00	0.00	0.00	6.05	11.55								
	H13AY016	2.86	0.68	0.00	0.00	0.00	0.00	3.89	7.43								
	H13AY017	14.11	3.36	0.00	0.00	0.00	0.00	19.22	36.69								
	H13AY018	7.12	1.70	0.00	0.00	0.00	0.00	9.70	18.52								
	H13AY019	0.93	0.22	0.06	0.28	0.00	0.00	1.27	2.76								
	H13AY020	1.21	0.29	0.06	0.28	0.00	0.00	1.65	3.49								
	H13AY021	15.96	3.51	0.00	0.00	0.57	0.09	18.23	38.36								
	H13AY022	8.53	1.90	0.00	0.00	0.57	0.09	9.76	20.85								
	H13AY023	14.46	3.18	0.00	0.00	0.57	0.09	16.52	34.82								
	H13AY024	7.53	1.68	0.00	0.00	0.57	0.09	8.62	18.49								
	H13AY025	12.87	2.84	0.00	0.00	0.57	0.09	14.71	31.08								
	H13AY026	6.92	1.55	0.00	0.00	0.57	0.09	7.93	17.06								
	H13AY027	10.79	2.39	0.00	0.00	0.57	0.09	12.34	26.18								
	H13AY028	5.84	1.31	0.00	0.00	0.57	0.09	6.69	14.50								
	H13AY029	8.70	1.93	0.00	0.00	0.57	0.09	9.95	21.24								
	H13AY030	4.94	1.12	0.00	0.00	0.57	0.09	5.66	12.38								
	H13AY031	5.68	1.28	0.00	0.00	0.57	0.09	6.51	14.13								
	H13AY032	3.70	0.85	0.00	0.00	0.57	0.09	4.25	9.46								
	H13BB001	3.92	0.39	0.58	1.05	0.00	0.00	5.59	11.53								
	H13BB002	3.48	0.35	0.87	1.44	0.00	0.00	4.95	11.09								
	H13BC003	4.04	0.44	0.29	0.16	0.00	0.00	4.28	9.21								
	H13BC006	3.78	0.41	0.17	0.10	0.00	0.00	4.00	8.46								
	H13BC007	5.86	0.63	0.17	0.10	0.00	0.00	6.22	12.98								
	H13BC008	7.17	0.77	0.29	0.16	0.00	0.00	7.60	15.99								
H13BC009	4.92	0.53	0.17	0.10	0.00	0.00	5.22	10.94									
H13BC010	2.89	0.31	0.17	0.10	0.00	0.00	3.07	6.54									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>H13</b>	<i>cont.</i>																
	H13BC011	3.68	0.40	0.29	0.16	0.00	0.00	3.90	8.43								
	H13BC012	3.01	0.32	0.17	0.10	0.00	0.00	3.19	6.79								
	H13BC013	2.72	0.29	0.17	0.10	0.00	0.00	2.89	6.17								
	H13CB001	1.81	0.39	0.29	0.41	0.00	0.00	2.07	4.97								
	H13CB002	1.96	0.43	0.58	0.58	0.00	0.00	2.24	5.79								
	H13CO002	0.74	0.16	0.29	0.41	0.00	0.00	0.84	2.44								
	H13CO003	1.21	0.34	0.17	0.35	0.00	0.00	1.66	3.73								
	H13CO004	2.36	0.66	0.17	0.60	0.00	0.00	3.22	7.01								
	H13CO005	3.81	1.07	0.17	0.60	0.00	0.00	5.19	10.84								
	H13CO006	2.79	0.79	0.17	0.45	0.00	0.00	3.81	8.01								
	H13EP001	1.78	0.39	0.29	0.41	0.00	0.00	2.03	4.90								
	H13EP002	2.27	0.64	0.43	0.54	0.00	0.00	3.09	6.97								
	H13KP001	6.19	1.35	0.72	0.41	0.14	0.02	7.06	15.89								
	H13KP002	7.02	1.54	0.90	0.51	0.14	0.02	8.01	18.14								
	H13KP003	8.27	1.81	1.27	0.72	0.14	0.02	9.43	21.66								
	H13KP004	9.52	2.08	1.62	0.92	0.14	0.02	10.86	25.16								
	H13MN001	21.72	4.80	8.68	7.43	0.64	0.10	27.93	71.30								
	H13MN002	26.28	5.82	11.57	9.91	0.83	0.13	33.80	88.34								
	H13MN003	31.03	6.85	11.57	10.91	0.83	0.13	39.89	101.21								
	H13MN004	35.62	7.84	17.36	14.86	0.83	0.13	45.78	122.42								
	H13PR001	8.61	2.05	0.17	0.10	0.00	0.00	11.73	22.66								
	H13PR002	25.72	5.63	0.17	1.60	0.57	0.09	29.36	63.14								
	H13PR003	15.19	3.62	0.29	0.16	0.00	0.00	20.69	39.95								
	H13PR005	20.19	4.81	0.29	0.16	0.00	0.00	27.51	52.96								
H13PR006	22.63	4.96	0.29	1.66	0.57	0.09	25.83	56.03									
H13PR007	24.64	5.87	0.58	0.33	0.00	0.00	33.58	65.00									
H13PR011	35.58	7.77	0.12	1.57	0.57	0.09	40.60	86.30									
H13PR012	38.28	8.36	0.17	1.60	0.57	0.09	43.67	92.74									
H13PR013	40.64	8.87	0.29	1.66	0.57	0.09	46.36	98.48									
H13PR014	45.74	9.97	0.46	1.76	0.57	0.09	52.18	110.77									
H13PR015	52.13	11.36	0.46	1.76	0.57	0.09	59.47	125.84									
H13PR022	17.87	4.26	0.12	0.07	0.00	0.00	24.35	46.67									
H13PR023	20.44	4.87	0.17	0.10	0.00	0.00	27.85	53.43									
H13PR024	22.66	5.40	0.17	0.10	0.00	0.00	30.87	59.20									
H13PR025	27.46	6.54	0.17	0.10	0.00	0.00	37.41	71.68									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>H13</b>	<i>cont.</i>																
	H13PR026	14.42	3.44	0.23	0.13	0.00	0.00	19.65	37.87								
	H13S5001	5.24	1.14	0.17	0.10	0.00	0.00	5.97	12.62								
	H13S5002	10.74	2.33	0.29	0.16	0.00	0.00	12.25	25.77								
	H13S5003	12.82	2.78	0.29	0.16	0.00	0.00	14.62	30.67								
	H13S5004	17.80	3.86	0.29	0.16	0.00	0.00	20.30	42.41								
	H13SH001	4.12	0.89	1.16	0.59	0.00	0.00	5.28	12.04								
	H13SH002	3.86	0.84	1.16	0.59	0.00	0.00	4.95	11.40								
	H13SH003	6.64	1.44	2.31	1.18	0.00	0.00	8.52	20.09								
	H13SH004	6.93	1.50	2.31	1.18	0.00	0.00	8.88	20.80								
	H13SH005	11.01	2.39	5.79	2.96	0.00	0.00	14.12	36.27								
	H13SH006	35.65	7.74	17.36	8.86	0.00	0.00	45.71	115.32								
	H13SH007	46.46	10.09	34.71	17.72	0.00	0.00	59.58	168.56								
	H13TH001	0.94	0.21	0.29	0.16	0.00	0.00	1.08	2.68								
	H13TH002	1.73	0.39	0.63	0.07	0.07	0.01	1.98	4.88								
	H13TH003	2.18	0.48	1.12	0.12	0.07	0.01	2.49	6.47								
	H13YB001	27.89	6.06	2.89	1.64	0.00	0.00	31.80	70.28								
H13YB002	27.89	6.06	2.89	1.64	0.00	0.00	31.80	70.28									
H13YB003	27.89	6.06	2.89	1.64	0.00	0.00	31.80	70.28									
<b>H20</b>																	
	H20BE002	1.93	0.42	0.00	0.20	0.00	0.00	2.34	4.89								
	H20BE003	2.54	0.55	0.00	0.30	0.00	0.00	3.08	6.47								
	H20BE004	4.16	0.90	0.00	0.40	0.00	0.00	5.04	10.50								
<b>H25</b>																	
	H25AU001	0.94	0.13	0.00	0.00	0.00	0.00	1.34	2.41								
	H25AU002	1.08	0.15	0.00	0.00	0.00	0.00	1.54	2.77								
	H25AU003	1.50	0.21	0.00	0.00	0.00	0.00	2.14	3.85								
	H25AU004	2.34	0.32	0.00	0.00	0.00	0.00	3.34	6.00								
	H25AU005	2.35	0.33	0.00	0.00	0.00	0.00	3.34	6.02								
	H25AX001	0.93	0.13	0.00	0.00	0.00	0.00	1.33	2.39								
	H25AX002	1.09	0.15	0.00	0.00	0.00	0.00	1.56	2.80								
	H25AX003	1.12	0.16	0.00	0.00	0.00	0.00	1.59	2.87								
	H25AX004	1.35	0.19	0.00	0.00	0.00	0.00	1.92	3.46								
	H25AX005	1.26	0.18	0.00	0.00	0.00	0.00	1.80	3.24								
	H25AX006	1.55	0.22	0.00	0.00	0.00	0.00	2.21	3.98								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>H25</b>	<b>cont.</b>																
	H25BS001	0.61	0.09	0.00	0.00	0.00	0.00	0.74	1.44								
	H25BS002	0.70	0.11	0.00	0.00	0.00	0.00	0.85	1.66								
	H25BS003	0.74	0.11	0.00	0.00	0.00	0.00	0.90	1.75								
	H25BS004	0.94	0.14	0.00	0.00	0.00	0.00	1.13	2.21								
	H25BS005	1.43	0.22	0.00	0.00	0.00	0.00	1.74	3.39								
	H25CA020	11.34	2.57	5.53	0.88	0.00	0.00	12.85	33.17	13.77	2.62	7.32	1.17	0.00	0.00	18.95	43.83
	H25CA021	12.43	2.81	5.89	0.94	0.00	0.00	14.08	36.15	15.09	2.87	7.78	1.24	0.00	0.00	20.76	47.74
	H25CA022	13.39	4.16	8.97	1.43	0.00	0.00	17.35	45.30	16.06	4.21	11.86	1.89	0.00	0.00	24.72	58.74
	H25CA023	16.96	5.27	8.97	1.43	0.00	0.00	21.98	54.61	20.35	5.34	11.86	1.89	0.00	0.00	31.32	70.76
	H25CA034	3.31	0.71	1.19	0.19	0.00	0.00	3.75	9.15	3.78	0.72	1.58	0.25	0.00	0.00	4.90	11.23
	H25CA035	3.95	0.85	1.75	0.28	0.00	0.00	4.48	11.31	4.52	0.86	2.32	0.37	0.00	0.00	5.85	13.92
	H25CA036	6.55	1.40	2.94	0.47	0.00	0.00	7.43	18.79	7.49	1.42	3.89	0.62	0.00	0.00	9.70	23.12
	H25CA038	8.59	1.94	3.78	0.60	0.00	0.00	9.73	24.64	10.43	1.98	5.00	0.80	0.00	0.00	14.35	32.56
	H25CA040	9.21	2.86	8.76	1.40	0.00	0.00	11.94	34.17	11.05	2.90	11.58	1.85	0.00	0.00	17.01	44.39
	H25CA052	12.94	1.79	0.00	1.50	0.00	0.00	16.59	32.82								
	H25CA053	17.51	2.43	0.00	1.60	0.00	0.00	22.46	44.00								
	H25CA054	22.53	3.12	0.00	3.00	0.00	0.00	28.90	57.55								
	H25CA055	3.36	0.47	0.00	0.40	0.00	0.00	4.31	8.54								
	H25CA056	36.83	5.11	0.00	3.00	0.00	0.00	47.23	92.17								
	H25CA057	11.43	1.58	0.00	0.80	0.00	0.00	14.66	28.47								
	H25CA058	2.75	0.38	0.00	0.50	0.00	0.00	3.92	7.55								
	H25CA059	10.02	1.39	0.00	0.60	0.00	0.00	14.27	26.28								
	H25CA060	14.74	2.04	0.00	0.75	0.00	0.00	21.00	38.53								
	H25CA061	12.86	1.78	0.00	0.75	0.00	0.00	18.32	33.71								
	H25CA062	23.52	3.26	0.00	0.90	0.00	0.00	33.51	61.19								
	H25CA063	16.83	2.33	0.00	0.90	0.00	0.00	23.98	44.04								
	H25CA064	20.46	2.84	0.00	1.00	0.00	0.00	29.15	53.45								
H25KC016	12.06	2.73	6.59	1.05	0.00	0.00	13.67	36.10	14.64	2.78	8.71	1.39	0.00	0.00	20.15	47.67	
H25KC017	8.50	1.92	3.78	0.60	0.00	0.00	9.63	24.43	10.32	1.96	5.00	0.80	0.00	0.00	14.20	32.28	
H25KC019	13.35	4.15	10.02	1.60	0.00	0.00	17.30	46.42	16.02	4.20	13.25	2.11	0.00	0.00	24.65	60.23	
H25KC020	14.73	4.57	10.02	1.60	0.00	0.00	19.09	50.01	17.68	4.64	13.25	2.11	0.00	0.00	27.20	64.88	
H25KC021	15.59	4.84	12.33	1.97	0.00	0.00	20.20	54.93	18.70	4.91	16.31	2.60	0.00	0.00	28.78	71.30	
H25KC022	17.66	5.48	12.33	1.97	0.00	0.00	22.89	60.33	21.19	5.56	16.31	2.60	0.00	0.00	32.61	78.27	
H25KC023	22.00	6.83	16.67	2.66	0.00	0.00	28.51	76.67	26.40	6.92	22.05	3.52	0.00	0.00	40.61	99.50	
H25KC024	20.94	8.53	21.44	1.08	0.00	0.00	33.90	85.89	24.82	8.61	28.35	1.43	0.00	0.00	44.21	107.42	



**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>H25</b>	<b>cont.</b>																
	H25KC026	21.94	8.93	22.07	1.11	0.00	0.00	35.51	89.56	26.00	9.02	29.19	1.47	0.00	0.00	46.32	112.00
	H25KM001	10.64	2.41	6.24	0.99	0.00	0.00	12.05	32.33	12.92	2.45	8.25	1.32	0.00	0.00	17.77	42.71
	H25KM003	16.47	3.73	7.71	1.23	0.00	0.00	18.67	47.81	20.00	3.80	10.19	1.62	0.00	0.00	27.52	63.13
	H25KM009	38.00	18.24	31.81	1.74	0.00	0.00	67.70	157.49	48.14	18.43	42.07	2.30	0.00	0.00	97.43	208.37
	H25KM013	34.36	10.67	21.44	3.42	0.00	0.00	44.53	114.42	41.23	10.81	28.35	4.52	0.00	0.00	63.43	148.34
	H25KM015	37.68	15.34	26.90	1.35	0.00	0.00	60.98	142.25	44.65	15.48	35.58	1.79	0.00	0.00	79.54	177.04
	H25KM018	3.90	0.83	1.40	0.22	0.00	0.00	4.42	10.77	4.45	0.85	1.85	0.29	0.00	0.00	5.77	13.21
	H25KM021	5.22	1.12	2.73	0.44	0.00	0.00	5.91	15.42	5.96	1.13	3.61	0.58	0.00	0.00	7.73	19.01
	H25KM022	6.68	1.43	2.80	0.45	0.00	0.00	7.57	18.93	7.64	1.45	3.71	0.59	0.00	0.00	9.90	23.29
	H25KM023	8.23	1.76	3.78	0.60	0.00	0.00	9.32	23.69	9.40	1.79	5.00	0.80	0.00	0.00	12.18	29.17
	H25KM027	15.08	3.41	6.03	0.96	0.00	0.00	17.09	42.57	18.31	3.48	7.97	1.27	0.00	0.00	25.20	56.23
	H25KM033	76.09	36.51	63.61	3.47	0.00	0.00	135.54	315.22	96.38	36.91	84.14	4.59	0.00	0.00	195.07	417.09
	H25KN001	4.01	0.56	0.00	0.50	0.00	0.00	5.72	10.79								
	H25KN002	5.55	0.77	0.00	0.50	0.00	0.00	7.91	14.73								
	H25KN003	6.77	0.94	0.00	0.50	0.00	0.00	9.65	17.86								
	H25KN004	7.78	1.08	0.00	0.50	0.00	0.00	11.09	20.45								
	H25KN005	11.19	1.55	0.00	1.00	0.00	0.00	15.95	29.69								
	H25KN006	15.69	2.17	0.00	1.00	0.00	0.00	22.35	41.21								
	H25KN007	0.80	0.11	0.00	0.15	0.00	0.00	1.14	2.20								
	H25KN009	1.65	0.23	0.00	0.15	0.00	0.00	2.35	4.38								
	H25KN010	2.27	0.32	0.00	0.15	0.00	0.00	3.24	5.98								
	H25LI003	11.03	2.49	6.24	0.99	0.00	0.00	12.50	33.25	13.39	2.55	8.25	1.32	0.00	0.00	18.43	43.94
	H25LI005	12.89	2.92	7.08	1.13	0.00	0.00	14.61	38.63	15.66	2.98	9.36	1.49	0.00	0.00	21.54	51.03
	H25LU001	2.72	0.38	0.00	0.40	0.00	0.00	3.49	6.99								
	H25LU002	2.99	0.42	0.00	0.50	0.00	0.00	3.84	7.75								
	H25LU003	5.74	0.80	0.00	0.80	0.00	0.00	7.36	14.70								
	H25LU004	6.67	0.92	0.00	0.90	0.00	0.00	8.56	17.05								
	H25LU005	8.36	1.16	0.00	1.10	0.00	0.00	10.72	21.34								
	H25LU006	11.71	1.62	0.00	1.50	0.00	0.00	15.02	29.85								
	H25LU007	9.98	1.38	0.00	1.40	0.00	0.00	12.79	25.55								
H25LU008	13.05	1.81	0.00	1.60	0.00	0.00	16.73	33.19									
H25LU009	14.31	1.98	0.00	1.70	0.00	0.00	18.35	36.34									
H25LU010	17.18	2.38	0.00	2.00	0.00	0.00	22.03	43.59									
H25LU011	17.03	2.36	0.00	2.00	0.00	0.00	21.84	43.23									
H25LU012	20.85	2.89	0.00	2.50	0.00	0.00	26.73	52.97									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>H25</b>	<i>cont.</i>																
	H25LU013	21.56	2.99	0.00	2.60	0.00	0.00	27.65	54.80								
	H25LU014	25.09	3.48	0.00	3.00	0.00	0.00	32.17	63.74								
	H25LU023	1.49	0.23	0.00	0.25	0.00	0.00	1.81	3.78								
	H25LU024	2.12	0.32	0.00	0.30	0.00	0.00	2.56	5.30								
	H25LU025	2.59	0.39	0.00	0.40	0.00	0.00	3.14	6.52								
	H25LU026	2.94	0.45	0.00	0.50	0.00	0.00	3.56	7.45								
	H25LU027	3.29	0.50	0.00	0.60	0.00	0.00	3.98	8.37								
	H25LU028	4.20	0.64	0.00	0.70	0.00	0.00	5.09	10.63								
	H25LU034	6.14	0.93	0.00	0.80	0.00	0.00	7.44	15.31								
	H25LU035	6.51	0.99	0.00	0.90	0.00	0.00	7.89	16.29								
	H25LU036	6.88	1.04	0.00	1.00	0.00	0.00	8.33	17.25								
	H25LU040	14.09	1.95	0.00	0.75	0.00	0.00	20.08	36.87								
	H25LU041	17.26	2.39	0.00	0.75	0.00	0.00	24.58	44.98								
	H25LU042	20.44	2.83	0.00	1.50	0.00	0.00	29.12	53.89								
	H25LU046	3.31	0.46	0.00	0.50	0.00	0.00	4.72	8.99								
	H25LU047	3.81	0.53	0.00	0.60	0.00	0.00	5.43	10.37								
	H25LU048	4.31	0.60	0.00	0.70	0.00	0.00	6.15	11.76								
	H25LU049	5.23	0.72	0.00	0.80	0.00	0.00	7.45	14.20								
	H25LU050	6.38	0.88	0.00	0.90	0.00	0.00	9.09	17.25								
	H25LU053	14.81	2.05	0.00	0.75	0.00	0.00	21.09	38.70								
	H25LU054	18.25	2.53	0.00	0.75	0.00	0.00	26.01	47.54								
	H25ME001	2.62	0.56	0.93	0.15	0.00	0.00	2.97	7.23	3.00	0.57	1.23	0.20	0.00	0.00	3.88	8.88
	H25ME002	3.81	0.81	2.80	0.45	0.00	0.00	4.31	12.18	4.35	0.83	3.71	0.59	0.00	0.00	5.64	15.12
	H25ME003	5.42	1.16	3.36	0.54	0.00	0.00	6.14	16.62	6.19	1.18	4.45	0.71	0.00	0.00	8.02	20.55
	H25WN001	0.86	0.13	0.00	0.00	0.00	0.00	1.05	2.04								
	H25WN002	0.97	0.13	0.00	0.00	0.00	0.00	1.39	2.49								
H25WN003	1.07	0.15	0.00	0.00	0.00	0.00	1.52	2.74									
H25WN004	1.16	0.16	0.00	0.00	0.00	0.00	1.66	2.98									
H25WN005	1.32	0.18	0.00	0.00	0.00	0.00	1.88	3.38									
<b>H30</b>																	
	H30CA005	18.00	3.99	9.90	1.49	1.78	0.29	14.69	50.14	22.16	4.08	12.63	1.91	6.40	1.03	19.90	68.11
	H30CA007	14.77	3.33	7.93	1.20	2.25	0.36	12.11	41.95	18.18	3.41	10.12	1.53	8.12	1.30	16.40	59.06
	H30GA006	23.89	5.25	15.27	2.30	1.67	0.27	19.47	68.12	29.41	5.38	19.48	2.94	5.93	0.95	26.37	90.46
	H30GA007	18.18	3.98	9.04	1.36	1.02	0.16	14.79	48.53	22.37	4.07	11.54	1.74	3.60	0.58	20.03	63.93

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>H30</b>	<i>cont.</i>																
	H30GA008	22.15	6.05	13.85	2.09	5.27	0.85	21.75	72.01	27.69	6.17	17.44	2.63	18.63	2.99	29.43	104.98
	H30KM001	15.60	4.17	8.06	1.22	1.09	0.17	15.24	45.55	19.50	4.26	10.29	1.55	3.93	0.63	20.62	60.78
<b>H35</b>	H35HI006	59.20	21.81	44.91	2.45	0.00	0.00	107.83	236.20	67.66	21.98	59.40	3.24	0.00	0.00	133.55	285.83
	H35OK001	37.51	13.82	42.53	2.32	0.00	0.00	68.32	164.50	42.87	13.93	56.24	3.07	0.00	0.00	84.62	200.73
	H35OK003	76.19	28.07	71.32	3.89	0.00	0.00	138.76	318.23	87.08	28.29	94.33	5.15	0.00	0.00	171.87	386.72
	H35OK004	121.55	44.78	89.68	4.89	0.00	0.00	221.38	482.28	138.92	45.14	118.60	6.47	0.00	0.00	274.19	583.32
	H35OK005	229.18	84.44	157.64	8.60	0.00	0.00	417.40	897.26	261.92	85.10	208.49	11.38	0.00	0.00	516.97	1,083.86
<b>L10</b>	L10BS002	2.08	0.50	0.00	0.30	0.00	0.00	2.77	5.65	2.97	0.51	0.00	0.30	0.00	0.00	4.41	8.19
	L10BS004	0.72	0.17	0.00	0.25	0.00	0.00	0.96	2.10	1.03	0.18	0.00	0.25	0.00	0.00	1.52	2.98
	L10BS005	1.89	0.45	0.00	0.30	0.00	0.00	2.53	5.17	2.71	0.47	0.00	0.30	0.00	0.00	4.01	7.49
	L10BS007	2.67	0.64	0.00	0.50	0.00	0.00	3.56	7.37	3.82	0.66	0.00	0.50	0.00	0.00	5.66	10.64
	L10BU005	0.68	0.16	0.00	1.10	0.00	0.00	0.91	2.85	0.97	0.17	0.00	1.10	0.00	0.00	1.44	3.68
	L10BU009	0.36	0.09	0.00	0.90	0.00	0.00	0.48	1.83	0.51	0.09	0.00	0.90	0.00	0.00	0.76	2.26
	L10BU010	0.34	0.08	0.00	0.80	0.00	0.00	0.46	1.68	0.49	0.09	0.00	0.80	0.00	0.00	0.73	2.11
	L10BU011	0.74	0.18	0.00	1.50	0.00	0.00	0.99	3.41	1.06	0.18	0.00	1.50	0.00	0.00	1.57	4.31
	L10BU012	1.52	0.36	0.00	2.00	0.00	0.00	2.03	5.91	2.17	0.38	0.00	2.00	0.00	0.00	3.22	7.77
	L10BU013	1.57	0.37	0.00	2.50	0.00	0.00	2.10	6.54	2.25	0.39	0.00	2.50	0.00	0.00	3.33	8.47
	L10RM001	3.59	0.86	0.00	0.40	0.00	0.00	4.79	9.64	5.13	0.89	0.00	0.40	0.00	0.00	7.60	14.02
	L10RM002	3.08	0.73	0.00	0.00	0.00	0.00	4.10	7.91	4.39	0.76	0.00	0.00	0.00	0.00	6.51	11.66
	L10VE002	1.25	0.31	5.56	0.76	0.07	0.01	1.68	9.64	1.79	0.32	7.21	0.98	0.23	0.04	2.67	13.24
	L10VE005	0.89	0.22	2.13	0.29	0.06	0.01	1.19	4.79	1.27	0.23	2.76	0.38	0.19	0.03	1.89	6.75
	L10VE006	1.97	0.48	3.27	0.45	0.06	0.01	2.64	8.88	2.82	0.49	4.24	0.58	0.19	0.03	4.19	12.54
	L10VE007	1.79	0.43	0.00	1.50	0.00	0.00	2.39	6.11	2.56	0.44	0.00	1.50	0.00	0.00	3.80	8.30
L10VE009	2.48	0.60	12.27	1.67	0.06	0.01	3.32	20.41	3.55	0.62	15.91	2.17	0.19	0.03	5.27	27.74	
L10VE010	0.98	0.24	4.09	0.56	0.03	0.00	1.32	7.22	1.41	0.25	5.30	0.72	0.11	0.02	2.09	9.90	
<b>L15</b>	L15BW001	3.03	0.31	5.45	0.59	0.08	0.01	3.04	12.51								
	L15BW002	5.45	0.56	7.64	0.83	0.16	0.03	5.46	20.13								
	L15BW003	6.27	0.64	10.91	1.19	0.16	0.03	6.28	25.48								
	L15BW004	9.12	0.91	7.73	0.84	0.00	0.00	9.09	27.69								
	L15FG001	35.29	3.51	14.08	1.53	0.00	0.00	35.20	89.61								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>L15</b>	<i>cont.</i>																
	L15FG002	7.93	0.80	9.88	1.07	0.14	0.02	7.93	27.77								
	L15HZ001	0.22	0.02	0.65	0.07	0.00	0.00	0.22	1.18								
	L15JD001	1.24	0.21	4.36	0.47	1.77	0.28	1.36	9.69								
	L15JD005	0.39	0.04	0.00	0.00	0.00	0.00	0.39	0.82								
	L15JD006	0.74	0.07	0.00	0.00	0.00	0.00	0.73	1.54								
	L15TO001	0.27	0.03	1.31	0.14	0.00	0.00	0.27	2.02								
	L15TO002	0.63	0.07	2.84	0.31	0.11	0.02	0.63	4.61								
	L15TO003	1.59	0.16	3.71	0.40	0.11	0.02	1.59	7.58								
	L15TO004	1.76	0.18	4.15	0.45	0.10	0.02	1.77	8.43								
	L15TO006	3.00	0.31	5.89	0.64	0.27	0.04	3.01	13.16								
	L15TO007	3.37	0.35	5.89	0.64	0.27	0.04	3.38	13.94								
L15WI001	1.30	0.14	0.00	0.05	0.08	0.01	1.30	2.88									
<b>L20</b>	L20AB017	1.23	0.25	1.02	0.11	0.06	0.01	2.81	5.49								
	L20AB018	1.29	0.26	1.30	0.14	0.06	0.01	2.94	6.00								
	L20AB019	1.38	0.27	1.30	0.14	0.06	0.01	3.14	6.30								
	L20AB020	1.10	0.22	1.02	0.11	0.06	0.01	2.50	5.02								
	L20AB021	1.15	0.23	1.30	0.14	0.06	0.01	2.64	5.53								
	L20AB022	1.34	0.27	1.30	0.14	0.06	0.01	3.05	6.17								
	L20AB023	0.52	0.10	0.00	0.00	0.04	0.01	1.18	1.85								
	L20AB024	0.58	0.12	0.00	0.00	0.04	0.01	1.32	2.07								
	<b>L25</b>	L25JE001	1.03	0.20	3.03	0.33	0.00	0.00	1.87	6.46							
L25JE002		8.64	1.71	21.31	2.32	0.32	0.05	15.73	50.08								
L25MB002		0.44	0.11	1.17	1.13	0.27	0.04	0.84	4.00								
L25MB004		13.49	2.65	44.33	6.32	0.32	0.05	24.55	91.71								
L25MB005		0.90	0.19	2.33	1.25	0.27	0.04	1.66	6.64								
L25MB006		8.30	1.62	14.00	2.77	0.00	0.00	15.07	41.76								
L25MB007		4.65	0.91	5.37	1.58	0.00	0.00	8.45	20.96								
L25MB008		14.47	2.91	17.61	3.41	1.18	0.19	26.45	66.22								
<b>L30</b>	L30HW015	9.79	2.40	1.45	0.74	0.82	0.13	14.91	30.24	12.23	2.46	1.89	0.96	2.63	0.42	20.50	41.09
	L30KB001	2.34	0.58	0.87	0.44	0.30	0.05	3.58	8.16	2.93	0.60	1.13	0.58	0.96	0.15	4.92	11.27

Table 2-2 . HOURLY RATE ELEMENTS

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>L30</b>	<i>cont.</i>																
	L30KB002	2.50	0.62	0.87	0.44	0.30	0.05	3.82	8.60	3.13	0.64	1.13	0.58	0.96	0.15	5.25	11.84
	L30RA001	4.26	1.05	1.75	0.22	0.33	0.05	6.49	14.15	5.33	1.07	2.32	0.29	1.04	0.17	8.93	19.15
	L30S4001	1.31	0.31	0.87	0.44	0.00	0.00	1.98	4.91	1.63	0.32	1.13	0.58	0.00	0.00	2.72	6.38
	L30S4002	1.50	0.36	0.00	0.00	0.00	0.00	2.27	4.13	1.87	0.37	0.00	0.00	0.00	0.00	3.12	5.36
	L30S4003	0.11	0.03	0.00	0.00	0.00	0.00	0.16	0.30	0.13	0.03	0.00	0.00	0.00	0.00	0.22	0.38
	L30S4004	0.18	0.04	0.00	0.00	0.00	0.00	0.28	0.50	0.23	0.04	0.00	0.00	0.00	0.00	0.38	0.65
	L30TS001	2.09	0.55	0.69	0.35	0.56	0.09	3.23	7.56	2.62	0.56	0.91	0.46	1.76	0.28	4.44	11.03
<b>L35</b>	L35CA005	14.58	3.47	9.30	1.01	0.00	0.00	23.76	52.12	18.22	3.55	12.03	1.30	0.00	0.00	33.75	68.85
	L35CA007	29.17	6.95	18.60	2.01	0.00	0.00	47.55	104.28	36.46	7.11	24.06	2.60	0.00	0.00	67.55	137.78
	L35CA013	8.96	2.13	6.92	0.75	0.00	0.00	14.60	33.36	11.19	2.18	8.95	0.97	0.00	0.00	20.74	44.03
	L35CA014	19.04	4.54	12.29	1.33	0.00	0.00	31.04	68.24	23.81	4.64	15.91	1.72	0.00	0.00	44.10	90.18
	L35KM006	32.94	7.85	15.37	1.66	0.00	0.00	53.69	111.51	41.17	8.03	19.89	2.15	0.00	0.00	76.27	147.51
	<b>L40</b>	L40CA007	24.10	7.99	21.02	1.80	10.11	1.62	25.28	91.92	27.11	8.05	27.80	2.38	36.40	5.84	30.46
L40CA008		36.24	12.08	30.13	2.58	10.65	1.71	38.05	131.44	40.77	12.17	39.84	3.41	38.35	6.16	45.85	186.55
L40CA009		82.81	27.68	56.05	4.80	16.05	2.58	87.01	276.98	93.16	27.90	74.13	6.35	57.79	9.28	104.84	373.45
L40CA012		11.32	3.03	10.16	1.21	1.24	0.20	15.28	42.44	12.23	3.05	13.44	1.60	4.47	0.72	17.49	53.00
L40CA013		8.23	2.21	6.31	0.75	1.19	0.19	11.13	30.01	8.89	2.23	8.34	0.99	4.28	0.69	12.73	38.15
L40CA014		18.32	4.88	14.01	1.66	1.61	0.26	24.72	65.46	19.81	4.92	18.53	2.20	5.78	0.93	28.29	80.46
L40CA015		10.73	2.68	9.46	1.12	1.24	0.20	11.94	37.37	11.34	2.69	12.51	1.49	4.47	0.72	14.42	47.64
L40CA018		60.04	20.01	43.30	3.71	11.08	1.78	63.04	202.96	67.54	20.17	57.26	4.90	39.88	6.40	75.97	272.12
L40CA019		7.40	1.86	6.24	0.74	1.19	0.19	8.25	25.87	7.82	1.87	8.25	0.98	4.28	0.69	9.96	33.85
L40CA022		9.71	2.43	7.85	0.93	1.24	0.20	10.81	33.17	10.26	2.44	10.38	1.23	4.47	0.72	13.05	42.55
L40CA023		12.66	3.23	11.21	1.33	2.95	0.47	14.17	46.02	13.39	3.25	14.83	1.76	10.63	1.71	17.11	62.68
L40CA024		16.77	4.30	12.61	1.50	4.27	0.69	18.78	58.92	17.73	4.32	16.68	1.98	15.38	2.47	22.68	81.24
L40CA025		17.62	4.51	14.01	1.66	4.27	0.69	19.73	62.49	18.63	4.53	18.53	2.20	15.38	2.47	23.82	85.56
L40CA026		17.57	5.78	17.23	1.47	6.18	0.99	18.40	67.62	19.77	5.82	22.79	1.95	22.24	3.57	22.17	98.31
L40CA027		19.28	6.32	18.57	1.59	6.18	0.99	20.17	73.10	21.69	6.36	24.55	2.10	22.24	3.57	24.31	104.82
L40CA028		2.42	0.50	3.77	0.45	0.69	0.11	2.90	10.84								
L40CA029		2.80	0.57	4.15	0.49	0.69	0.11	3.35	12.16								
L40CA030		3.01	0.62	4.53	0.54	0.96	0.15	3.61	13.42								
L40CA031		3.29	0.68	5.69	0.68	0.96	0.15	3.94	15.39								
L40CA032		5.21	1.33	3.15	0.37	0.70	0.11	5.83	16.70	5.51	1.33	4.17	0.50	2.52	0.40	7.04	21.47

Table 2-2 . HOURLY RATE ELEMENTS

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>L40</b>	<i>cont.</i>																
	L40CA033	5.41	1.37	4.20	0.50	0.70	0.11	6.05	18.34	5.72	1.38	5.56	0.66	2.52	0.40	7.30	23.54
	L40CA034	5.71	1.51	5.74	0.68	3.28	0.53	6.45	23.90	6.03	1.52	7.60	0.90	11.80	1.89	7.79	37.53
	L40CS009	10.99	2.80	9.53	1.13	2.34	0.38	12.29	39.46	11.62	2.81	12.60	1.50	8.44	1.35	14.84	53.16
	L40CS010	13.21	3.34	12.68	1.51	2.34	0.38	14.75	48.21	13.97	3.35	16.77	1.99	8.44	1.35	17.81	63.68
	L40CS011	16.44	4.22	13.10	1.56	4.27	0.69	18.42	58.70	17.38	4.24	17.33	2.06	15.38	2.47	22.24	81.10
	L40KM001	7.94	2.01	7.36	0.87	1.45	0.23	8.86	28.72	8.39	2.02	9.73	1.16	5.24	0.84	10.70	38.08
	L40KM002	9.60	2.41	8.97	1.07	1.45	0.23	10.70	34.43	10.15	2.42	11.86	1.41	5.24	0.84	12.92	44.84
	L40KM003	10.66	2.67	9.74	1.16	1.45	0.23	11.87	37.78	11.27	2.68	12.88	1.53	5.24	0.84	14.34	48.78
	L40KM004	12.30	3.14	12.12	1.44	2.95	0.47	13.77	46.19	13.00	3.16	16.03	1.90	10.63	1.71	16.62	63.05
	L40KM008	24.08	7.99	23.47	2.01	6.47	1.04	25.26	90.32	27.09	8.05	31.04	2.66	23.30	3.74	30.44	126.32
	L40KM009	34.29	11.49	34.33	2.94	6.92	1.11	36.04	127.12	38.57	11.58	45.40	3.89	24.93	4.00	43.43	171.80
	L40KM010	55.82	18.69	47.92	4.10	11.08	1.78	58.67	198.06	62.80	18.83	63.38	5.43	39.88	6.40	70.69	267.41
	L40KM011	71.06	23.99	59.76	5.12	16.05	2.58	74.81	253.37	79.94	24.18	79.04	6.77	57.79	9.28	90.15	347.15
	L40KM012	9.47	2.55	8.97	1.07	1.45	0.23	12.81	36.55	10.24	2.57	11.86	1.41	5.24	0.84	14.66	46.82
	L40KM014	6.50	1.66	3.50	0.42	0.99	0.16	7.27	20.50	6.87	1.67	4.63	0.55	3.56	0.57	8.78	26.63
	L40KM015	6.06	1.57	5.25	0.62	1.22	0.20	6.81	21.73	6.40	1.58	6.95	0.83	4.40	0.71	8.22	29.09
	L40ME012	2.26	0.45	3.53	0.42	0.37	0.06	2.70	9.79								
L40ME016	1.43	0.29	1.73	0.21	0.25	0.04	1.71	5.66									
L40ME017	1.59	0.33	1.92	0.23	0.51	0.08	1.91	6.57									
<b>L50</b>	L50CA001	4.74	1.29	4.23	2.00	0.66	0.11	6.05	19.08	7.90	1.36	5.99	2.83	2.35	0.38	10.73	31.54
	L50CA004	9.69	2.64	5.97	2.82	1.19	0.19	12.37	34.87	16.15	2.78	8.45	3.99	4.22	0.68	21.92	58.19
	L50CS005	6.12	1.67	4.88	2.30	0.79	0.13	7.80	23.69	10.19	1.76	6.92	3.27	2.78	0.45	13.83	39.20
	L50CS006	7.31	2.00	5.32	2.51	1.10	0.18	9.35	27.77	12.19	2.11	7.53	3.55	3.90	0.63	16.57	46.48
	L50JC001	4.63	1.26	3.63	1.71	0.57	0.09	5.91	17.80	7.72	1.33	5.15	2.43	2.06	0.33	10.47	29.49
	L50JC002	5.20	1.43	4.99	2.35	0.85	0.14	6.65	21.61	8.66	1.51	7.07	3.34	2.98	0.48	11.79	35.83
	L50JC003	6.33	1.74	5.42	2.56	1.13	0.18	8.09	25.45	10.54	1.84	7.68	3.62	4.07	0.65	14.34	42.74
	L50JC005	7.39	2.02	5.42	2.56	1.13	0.18	9.43	28.13	12.31	2.13	7.68	3.62	4.07	0.65	16.72	47.18
	L50JC007	9.57	2.59	5.42	2.56	1.11	0.18	12.19	33.62	15.94	2.73	7.68	3.62	4.01	0.64	21.60	56.22
	<b>L55</b>	L55KN001	0.89	0.14	0.00	0.52	0.00	0.00	1.35	2.90							
L55KN002		1.84	0.28	0.00	1.06	0.00	0.00	2.78	5.96								
L55KN004		1.64	0.25	0.00	0.00	0.00	0.00	2.48	4.37								
L55KN005		2.42	0.37	0.00	0.00	0.00	0.00	3.67	6.46								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>L55</b>	<b>cont.</b> L55KN006	3.60	0.55	0.00	0.00	0.00	0.00	5.45	9.60								
<b>L60</b>	L60CA010	25.34	5.50	10.51	1.34	0.00	0.00	24.95	67.64	31.67	5.63	13.90	1.77	0.00	0.00	35.62	88.59
	L60CA011	30.31	6.58	10.51	1.34	0.00	0.00	29.85	78.59	37.89	6.73	13.90	1.77	0.00	0.00	42.62	102.91
	L60CA013	16.94	3.82	11.21	1.43	1.96	0.31	16.77	52.44	21.17	3.91	14.83	1.89	6.83	1.10	23.95	73.68
	L60CA014	22.06	4.79	8.41	1.07	0.00	0.00	21.72	58.05	27.57	4.90	11.12	1.41	0.00	0.00	31.01	76.01
	L60JD001	11.09	2.57	8.34	1.06	2.65	0.43	11.03	37.17	13.87	2.63	11.03	1.40	9.53	1.53	15.75	55.74
	L60JD002	13.30	3.05	10.58	1.34	2.65	0.43	13.21	44.56	16.63	3.12	13.99	1.78	9.53	1.53	18.85	65.43
	L60JD003	10.81	2.51	8.34	1.06	2.65	0.43	10.75	36.55	13.51	2.56	11.03	1.40	9.53	1.53	15.35	54.91
	L60JD004	14.11	3.33	11.21	1.43	4.44	0.71	14.07	49.30	17.64	3.41	14.83	1.89	15.99	2.57	20.09	76.42
	L60JD006	17.57	4.03	11.91	1.51	3.53	0.57	17.45	56.57	21.97	4.12	15.75	2.00	12.72	2.04	24.91	83.51
	L60JD007	19.33	4.41	14.01	1.78	3.53	0.57	19.18	62.81	24.16	4.51	18.53	2.36	12.72	2.04	27.38	91.70
	L60JD008	26.73	5.80	11.91	1.51	0.00	0.00	26.33	72.28	33.42	5.94	15.75	2.00	0.00	0.00	37.59	94.70
<b>M10</b>	M10MZ001	2.37	0.30	0.00	0.00	0.00	0.00	1.58	4.25								
	M10MZ003	2.92	0.37	0.00	0.00	0.00	0.00	1.95	5.24								
	M10MZ005	0.67	0.37	0.00	0.00	0.00	0.00	0.54	1.58								
	M10MZ007	0.70	0.39	0.00	0.00	0.00	0.00	0.56	1.65								
	M10MZ010	2.33	0.78	9.81	1.69	0.00	0.00	2.31	16.92	2.87	0.79	12.97	2.24	0.00	0.00	3.04	21.91
	M10MZ011	3.31	1.11	14.71	2.54	0.00	0.00	3.27	24.94	4.07	1.12	19.46	3.36	0.00	0.00	4.31	32.32
	M10SM001	2.81	0.94	26.82	3.89	0.00	0.00	2.78	37.24	3.46	0.95	35.00	5.08	0.00	0.00	3.66	48.15
	M10SM003	3.48	1.17	35.75	5.19	0.00	0.00	3.44	49.03	4.29	1.18	46.66	6.77	0.00	0.00	4.54	63.44
	M10SM004	3.74	1.25	44.69	6.48	0.00	0.00	3.70	59.86	4.61	1.27	58.33	8.46	0.00	0.00	4.88	77.55
	M10SM005	1.29	0.43	20.56	2.98	0.00	0.00	1.28	26.54	1.59	0.44	26.83	3.89	0.00	0.00	1.69	34.44
	M10SM008	2.35	0.79	35.75	5.19	0.00	0.00	2.33	46.41	2.90	0.80	46.66	6.77	0.00	0.00	3.07	60.20
	M10XX001	0.17	0.09	0.00	0.00	0.00	0.00	0.14	0.40								
	M10XX002	0.53	0.29	0.00	0.00	0.00	0.00	0.42	1.24								
	M10XX003	0.64	0.35	0.00	0.00	0.00	0.00	0.51	1.50								
	M10XX004	1.04	0.57	0.00	0.00	0.00	0.00	0.83	2.44								
	M10XX005	1.58	2.31	0.00	0.00	0.00	0.00	1.19	5.08								
	M10XX006	2.22	3.25	0.00	0.00	0.00	0.00	1.68	7.15								
	M10XX007	2.82	4.13	0.00	0.00	0.00	0.00	2.14	9.09								
	M10XX008	3.92	5.73	0.00	0.00	0.00	0.00	2.97	12.62								
	M10XX009	0.71	0.24	8.94	1.30	0.00	0.00	0.70	11.89	0.87	0.24	11.67	1.69	0.00	0.00	0.92	15.39

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>M10</b>	<i>cont.</i>																
	M10XX010	2.37	0.79	5.25	0.91	0.00	0.00	2.35	11.67	2.92	0.81	6.95	1.20	0.00	0.00	3.09	14.97
	M10XX011	2.72	0.91	7.01	1.21	0.00	0.00	2.69	14.54	3.35	0.92	9.27	1.60	0.00	0.00	3.55	18.69
	M10XX012	2.77	0.93	7.01	1.21	0.00	0.00	2.74	14.66	3.41	0.94	9.27	1.60	0.00	0.00	3.62	18.84
	M10XX013	3.59	1.20	8.06	1.39	0.00	0.00	3.55	17.79	4.42	1.22	10.66	1.84	0.00	0.00	4.68	22.82
	M10XX014	4.93	1.65	12.26	2.11	0.00	0.00	4.87	25.82	6.07	1.67	16.22	2.80	0.00	0.00	6.42	33.18
	M10XX015	6.18	2.07	17.52	3.02	0.00	0.00	6.11	34.90	7.61	2.10	23.17	4.00	0.00	0.00	8.05	44.93
	M10XX016	7.07	3.54	0.00	0.00	0.00	0.00	6.25	16.86								
	M10XX017	7.47	3.74	0.00	0.00	0.00	0.00	6.61	17.82								
	M10XX018	9.31	4.66	0.00	0.00	0.00	0.00	8.23	22.20								
	M10XX019	9.51	4.77	0.00	0.00	0.00	0.00	8.41	22.69								
	M10XX021	15.47	5.25	26.62	4.59	0.00	0.00	16.50	68.43	18.57	5.32	35.21	6.07	0.00	0.00	21.04	86.21
	M10XX022	17.61	5.98	30.48	5.26	0.00	0.00	18.78	78.11	21.13	6.06	40.31	6.95	0.00	0.00	23.95	98.40
	M10XX023	23.60	8.01	28.02	4.83	0.00	0.00	25.17	89.63	28.32	8.12	37.06	6.39	0.00	0.00	32.10	111.99
M10XX024	33.66	11.43	30.48	5.26	0.00	0.00	35.90	116.73	40.39	11.58	40.31	6.95	0.00	0.00	45.77	145.00	
<b>P10</b>	P10IC001	10.50	2.12	12.26	1.78	0.00	0.00	15.65	42.31								
	P10IC002	16.53	3.33	21.02	3.05	0.00	0.00	24.64	68.57								
	P10IC005	44.44	8.96	56.05	8.13	0.00	0.00	66.25	183.83								
	P10IC010	1.48	0.30	0.00	0.00	0.00	0.00	2.21	3.99								
	P10IC011	2.98	0.60	0.91	0.13	0.00	0.00	4.44	9.06								
	P10IC012	2.08	0.42	0.00	0.00	0.00	0.00	3.10	5.60								
	P10IC013	3.67	0.74	2.32	0.34	0.00	0.00	5.47	12.54								
	<b>P20</b>	P20IC002	10.99	1.82	0.00	1.90	0.00	0.00	19.53	34.24							
P20IC003		11.14	1.85	0.00	2.50	0.00	0.00	19.79	35.28								
P20IC004		11.87	1.97	0.00	3.15	0.00	0.00	21.09	38.08								
P20MK001		6.71	1.11	0.00	1.25	0.00	0.00	11.91	20.98								
P20MK002		2.14	0.32	0.00	0.50	0.00	0.00	3.56	6.52								
P20MK003		2.68	0.41	0.00	1.00	0.00	0.00	4.47	8.56								
P20MK004		3.31	0.50	0.00	1.25	0.00	0.00	5.51	10.57								
P20MK005		5.59	0.85	0.00	1.25	0.00	0.00	9.31	17.00								
P20MK006		6.16	0.93	0.00	2.50	0.00	0.00	10.26	19.85								
P20MK007		6.72	1.02	0.00	2.50	0.00	0.00	11.19	21.43								



**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>P25</b>	P25DL001	6.47	0.98	0.00	0.95	0.00	0.00	9.79	18.19								
	P25DL003	7.74	1.17	0.00	1.20	0.00	0.00	11.71	21.82								
	P25DL004	8.83	1.34	0.00	1.80	0.00	0.00	13.36	25.33								
	P25DL005	12.14	1.84	0.00	2.65	0.00	0.00	18.38	35.01								
	P25DL006	12.57	1.90	0.00	3.30	0.00	0.00	19.03	36.80								
	P25DL008	15.43	2.34	0.00	5.30	0.00	0.00	23.36	46.43								
	P25DL009	23.32	3.53	0.00	6.60	0.00	0.00	35.31	68.76								
	P25DL010	34.07	5.16	0.00	8.25	0.00	0.00	51.58	99.06								
	P25DL011	36.44	5.52	0.00	9.90	0.00	0.00	55.16	107.02								
	P25IC001	8.04	1.22	0.00	2.20	0.00	0.00	12.16	23.62								
	P25IC002	8.93	1.35	0.00	3.45	0.00	0.00	13.53	27.26								
	P25IC003	12.83	1.94	0.00	4.40	0.00	0.00	19.43	38.60								
	P25IC004	14.21	2.15	0.00	5.30	0.00	0.00	21.52	43.18								
	P25IC005	17.74	2.69	0.00	6.25	0.00	0.00	26.85	53.53								
	P25IC006	21.95	3.32	0.00	7.20	0.00	0.00	33.23	65.70								
	P25MK001	7.88	1.19	0.00	2.50	0.00	0.00	11.93	23.50								
	P25MK003	13.05	1.98	0.00	4.15	0.00	0.00	19.76	38.94								
	P25VU002	8.86	1.23	0.00	2.50	0.00	0.00	12.62	25.21								
	P25VU003	10.91	1.51	0.00	2.50	0.00	0.00	15.54	30.46								
	P25VU004	11.14	1.54	0.00	2.50	0.00	0.00	15.87	31.05								
	P25VU005	14.97	2.07	0.00	2.50	0.00	0.00	21.32	40.86								
P25VU010	15.37	2.13	0.00	0.95	0.00	0.00	21.90	40.35									
P25VU011	15.59	2.16	0.00	1.17	0.00	0.00	22.21	41.13									
<b>P30</b>	P30MK001	12.01	1.82	12.96	1.88	0.00	0.00	18.19	46.86								
	P30MK003	20.56	3.11	22.77	3.30	0.00	0.00	31.12	80.86								
	P30MK004	36.84	5.58	42.04	6.10	0.00	0.00	55.76	146.32								
<b>P35</b>	P35CA001	11.46	3.72	4.23	0.77	0.00	0.00	16.12	36.30	13.95	3.77	5.47	1.00	0.00	0.00	22.73	46.92
	P35CA006	35.91	11.67	16.14	2.94	0.00	0.00	50.54	117.20	43.72	11.83	20.88	3.80	0.00	0.00	71.26	151.49
	P35CA008	21.36	6.94	8.84	1.61	0.00	0.00	30.06	68.81	26.00	7.04	11.44	2.08	0.00	0.00	42.38	88.94
	P35CA009	27.67	8.99	11.72	2.13	0.00	0.00	38.95	89.46	33.69	9.12	15.16	2.76	0.00	0.00	54.92	115.65

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS								
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	
<b>P40</b>	P40BX001	1.31	0.21	0.00	0.05	0.00	0.00	1.41	2.98									
	P40GW016	13.09	2.15	3.25	0.41	0.63	0.10	14.15	33.78									
	P40GW017	21.22	3.51	5.42	0.69	1.78	0.29	22.96	55.87									
	P40GW019	31.53	5.23	5.42	0.69	4.90	0.79	34.12	82.68									
	P40GW023	14.20	2.34	3.25	0.41	0.93	0.15	15.36	36.64									
	P40GW024	18.28	2.99	4.61	0.59	0.48	0.08	19.76	46.79									
	P40GW025	19.17	3.14	4.61	0.59	0.48	0.08	20.72	48.79									
	P40TE001	3.81	0.63	3.27	0.47	0.37	0.06	4.13	12.74									
	P40TE002	4.83	0.80	5.32	0.77	0.37	0.06	5.22	17.37									
	P40TE003	8.64	1.44	1.74	0.22	0.95	0.15	9.35	22.49									
	P40TE004	9.86	1.65	2.39	0.30	1.34	0.22	10.68	26.44									
	P40TE005	7.58	1.27	3.58	0.46	0.95	0.15	8.21	22.20									
	P40TE006	10.15	1.69	3.58	0.46	1.19	0.19	10.98	28.24									
	P40TE007	17.18	2.84	3.58	0.46	1.19	0.19	18.58	44.02									
	P40TE008	19.15	3.16	4.12	0.52	1.19	0.19	20.71	49.04									
	P40TE009	21.46	3.53	4.12	0.52	1.19	0.19	23.21	54.22									
P40TE010	7.23	1.21	11.39	1.45	0.71	0.11	7.83	29.93										
P40TE011	7.91	1.33	11.39	1.45	1.01	0.16	8.57	31.82										
P40TE012	11.95	1.99	11.39	1.45	1.01	0.16	12.93	40.88										
P40TE013	10.91	1.82	11.39	1.45	1.01	0.16	11.81	38.55										
P40TE014	11.13	1.85	11.39	1.45	1.01	0.16	12.05	39.04										
P40TE015	12.68	2.11	11.39	1.45	1.01	0.16	13.73	42.53										
<b>P45</b>	P45AF002	0.09	0.02	0.00	0.00	0.00	0.00	0.12	0.23									
	P45AF003	0.14	0.02	0.00	0.00	0.00	0.00	0.20	0.36									
	P45AF005	1.09	0.20	2.87	0.42	0.07	0.01	1.56	6.22									
	P45AF006	1.42	0.26	2.87	0.42	0.07	0.01	2.03	7.08									
	P45AF007	3.12	0.56	3.05	0.39	0.07	0.01	4.45	11.65									
	P45AF008	0.79	0.14	0.00	0.10	0.00	0.00	1.13	2.16									
	P45AF009	2.44	0.43	0.00	0.10	0.00	0.00	3.48	6.45									
	P45AF010	2.82	0.51	4.69	0.68	0.07	0.01	4.03	12.81									
	P45AF011	5.05	0.90	9.12	1.32	0.07	0.01	7.20	23.67									
	P45AL015	4.58	0.82	4.17	0.53	0.07	0.01	6.53	16.71									
	P45CG001	0.35	0.06	0.00	0.05	0.00	0.00	0.50	0.96									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>P45</b>	<i>cont.</i>																
	P45CG002	0.58	0.10	0.00	0.10	0.00	0.00	0.83	1.61								
	P45CG003	1.41	0.25	0.00	0.15	0.00	0.00	2.01	3.82								
	P45CG006	2.46	0.44	4.17	0.61	0.07	0.01	3.51	11.27								
	P45CG007	2.03	0.36	4.17	0.61	0.00	0.00	2.89	10.06								
	P45OE001	2.55	0.46	4.27	0.54	0.11	0.02	3.64	11.59								
	P45OE002	3.21	0.58	5.59	0.71	0.11	0.02	4.59	14.81								
	P45OE003	4.19	0.75	8.54	1.09	0.11	0.02	5.98	20.68								
	P45OE004	5.02	0.90	12.20	1.55	0.11	0.02	7.16	26.96								
P45OE005	6.71	1.21	18.41	2.34	0.22	0.04	9.59	38.52									
<b>P50</b>	P50GR001	0.08	0.01	0.00	0.00	0.00	0.00	0.17	0.26								
	P50GR002	0.12	0.01	0.00	0.00	0.00	0.00	0.25	0.38								
	P50GR003	0.17	0.02	0.00	0.00	0.00	0.00	0.35	0.54								
	P50GR004	0.35	0.03	0.00	0.00	0.00	0.00	0.71	1.09								
	P50GR005	0.11	0.01	0.00	0.00	0.00	0.00	0.23	0.35								
	P50GR006	0.17	0.02	0.00	0.00	0.00	0.00	0.34	0.53								
	P50GR007	0.23	0.02	0.00	0.00	0.00	0.00	0.46	0.71								
	P50GR008	0.50	0.05	0.00	0.00	0.00	0.00	1.00	1.55								
	P50WC001	0.14	0.03	2.45	0.36	0.00	0.00	0.20	3.18								
	P50WC002	0.17	0.03	1.46	0.25	0.00	0.00	0.23	2.14								
	P50WC003	0.37	0.07	1.55	0.27	0.00	0.00	0.50	2.76								
	P50WC004	1.62	0.32	3.21	0.55	0.04	0.01	2.22	7.97								
	P50XX001	2.15	0.42	5.83	1.01	0.00	0.00	2.92	12.33								
	P50XX002	3.97	0.77	6.80	1.17	0.00	0.00	5.40	18.11								
	P50XX003	4.25	0.83	8.26	1.42	0.00	0.00	5.79	20.55								
<b>P55</b>	P55GF001	1.86	0.36	2.04	0.35	0.00	0.00	2.82	7.43								
	P55GF002	2.06	0.40	7.00	1.21	0.00	0.00	3.12	13.79								
	P55GR001	0.31	0.06	0.16	0.08	0.00	0.00	0.27	0.88								
	P55GR002	0.42	0.08	0.40	0.20	0.00	0.00	0.36	1.46								
	P55GR003	1.46	0.26	2.00	1.02	0.00	0.00	1.25	5.99								
	P55GR004	1.98	0.35	4.81	2.46	0.00	0.00	1.70	11.30								
	P55WC001	0.05	0.01	0.08	0.04	0.00	0.00	0.04	0.22								
	P55WC002	0.07	0.01	0.08	0.04	0.00	0.00	0.06	0.26								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>P60</b>	P60GF003	2.08	0.41	2.04	0.35	0.07	0.01	2.84	7.80								
	P60GF004	2.28	0.45	7.00	1.21	0.07	0.01	3.11	14.13								
	P60GF005	2.62	0.52	10.98	1.89	0.07	0.01	3.58	19.67								
	P60GF006	4.11	0.81	13.61	2.35	0.09	0.01	5.61	26.59								
	P60GF008	2.28	0.45	7.00	1.21	0.07	0.01	3.11	14.13								
	P60GR001	2.10	0.42	4.57	0.79	0.07	0.01	2.87	10.83								
	P60GR002	2.31	0.46	24.79	3.60	0.07	0.01	3.16	34.40								
	P60HO002	0.08	0.02	0.86	0.12	0.00	0.00	0.11	1.19								
	P60HO003	0.15	0.03	1.96	0.28	0.00	0.00	0.20	2.62								
	P60WC001	0.06	0.01	0.98	0.14	0.00	0.00	0.08	1.27								
	P60WC002	0.07	0.01	1.47	0.21	0.00	0.00	0.10	1.86								
<b>P65</b>	P65GR001	0.19	0.05	1.23	0.18	0.13	0.02	0.24	2.04								
	P65GR002	0.26	0.06	0.37	0.05	0.13	0.02	0.33	1.22								
	P65GR003	0.74	0.16	0.74	0.11	0.16	0.03	0.91	2.85								
	P65HO001	0.15	0.03	0.86	0.12	0.00	0.00	0.21	1.37								
	P65HO002	0.16	0.03	0.86	0.12	0.00	0.00	0.22	1.39								
	P65WC001	0.18	0.03	0.98	0.14	0.00	0.00	0.22	1.55								
	P65WC002	0.19	0.04	0.98	0.14	0.00	0.00	0.23	1.58								
<b>P70</b>	P70XX001	0.28	0.06	0.49	0.07	0.00	0.00	0.37	1.27								
	P70XX002	0.74	0.16	1.47	0.21	0.00	0.00	0.96	3.54								
<b>R10</b>	R10CA001	0.96	0.19	0.00	0.08	0.00	0.00	1.28	2.51	1.18	0.19	0.00	0.08	0.00	0.00	1.76	3.21
	R10CA003	0.96	0.19	0.00	0.08	0.00	0.00	1.28	2.51	1.18	0.19	0.00	0.08	0.00	0.00	1.76	3.21
	R10CA005	0.96	0.19	0.00	0.08	0.00	0.00	1.28	2.51	1.18	0.19	0.00	0.08	0.00	0.00	1.76	3.21
	R10CA006	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.04	0.07
	R10CA007	2.18	0.43	0.00	0.08	0.00	0.00	2.91	5.60	2.69	0.44	0.00	0.08	0.00	0.00	3.99	7.20
	R10CA009	4.07	0.79	0.00	0.08	0.00	0.00	5.42	10.36	5.00	0.81	0.00	0.08	0.00	0.00	7.42	13.31
	R10CA010	0.16	0.03	0.00	0.00	0.00	0.00	0.22	0.41	0.20	0.03	0.00	0.00	0.00	0.00	0.30	0.53
	R10CA011	4.41	0.86	0.00	0.10	0.00	0.00	5.89	11.26	5.43	0.88	0.00	0.10	0.00	0.00	8.05	14.46
	R10CA012	5.21	1.02	0.00	0.10	0.00	0.00	6.95	13.28	6.42	1.04	0.00	0.10	0.00	0.00	9.51	17.07
	R10CA013	0.36	0.07	0.00	0.00	0.00	0.00	0.48	0.91	0.45	0.07	0.00	0.00	0.00	0.00	0.66	1.18

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>R10</b>	<i>cont.</i>																
	R10CA014	5.69	1.11	0.00	0.16	0.00	0.00	7.59	14.55	7.00	1.14	0.00	0.16	0.00	0.00	10.38	18.68
	R10CA015	6.50	1.27	0.00	0.16	0.00	0.00	8.67	16.60	8.00	1.30	0.00	0.16	0.00	0.00	11.86	21.32
	R10CA016	0.36	0.07	0.00	0.00	0.00	0.00	0.49	0.92	0.45	0.07	0.00	0.00	0.00	0.00	0.66	1.18
	R10CA017	8.66	1.69	0.00	0.21	0.00	0.00	11.55	22.11	10.66	1.73	0.00	0.21	0.00	0.00	15.80	28.40
	R10CA018	10.35	2.02	0.00	0.22	0.00	0.00	13.80	26.39	12.73	2.06	0.00	0.22	0.00	0.00	18.88	33.89
	R10CA019	0.59	0.12	0.00	0.24	0.00	0.00	0.79	1.74	0.73	0.12	0.00	0.24	0.00	0.00	1.08	2.17
	R10CA020	10.58	2.06	0.00	0.23	0.00	0.00	14.11	26.98	13.02	2.11	0.00	0.23	0.00	0.00	19.30	34.66
	R10CA021	10.89	2.12	0.00	0.25	0.00	0.00	14.53	27.79	13.41	2.17	0.00	0.25	0.00	0.00	19.88	35.71
	R10CA022	0.10	0.02	0.00	0.00	0.00	0.00	0.13	0.25	0.12	0.02	0.00	0.00	0.00	0.00	0.18	0.32
R10CA023	0.10	0.02	0.00	0.00	0.00	0.00	0.13	0.25	0.12	0.02	0.00	0.00	0.00	0.00	0.18	0.32	
<b>R15</b>	R15SO001	8.61	2.30	0.00	0.40	1.38	0.22	9.22	22.13								
	R15SO002	8.52	2.53	0.00	0.45	2.80	0.45	9.36	24.11								
	R15SO003	12.84	3.56	0.00	0.67	2.80	0.45	13.88	34.20								
<b>R20</b>	R20RI002	2.34	0.56	0.00	0.25	0.00	0.00	2.80	5.95								
	R20SO001	5.31	1.26	0.00	0.25	0.00	0.00	6.34	13.16								
<b>R30</b>	R30BO003	12.90	2.43	9.45	1.03	1.86	0.30	12.82	40.79								
	R30BO004	8.12	1.49	7.30	0.79	0.56	0.09	8.03	26.38								
	R30BO005	5.94	1.29	4.04	0.44	0.00	0.00	6.68	18.39								
	R30BO006	7.04	1.53	7.13	0.78	0.00	0.00	7.92	24.40								
	R30BO007	8.29	1.80	6.70	0.73	0.00	0.00	9.33	26.85								
	R30BO008	38.35	10.80	37.96	4.13	0.00	0.00	45.83	137.07								
	R30BO009	36.13	10.17	37.96	4.13	0.00	0.00	43.18	131.57								
	R30CA003	21.96	6.18	20.61	2.24	0.00	0.00	26.25	77.24								
	R30CA006	33.40	9.40	27.05	2.94	0.00	0.00	39.91	112.70								
	R30CA009	46.13	12.99	40.62	4.42	0.00	0.00	55.12	159.28								
	R30CA010	7.77	1.41	6.01	0.65	0.51	0.08	7.67	24.10								
	R30CA011	8.88	1.63	9.02	0.98	0.79	0.13	8.78	30.21								
	R30CA012	22.45	6.32	18.89	2.05	0.00	0.00	26.83	76.54								
	R30CA013	34.75	9.79	27.05	2.94	0.00	0.00	41.53	116.06								
R30CA014	15.12	2.71	9.02	0.98	0.32	0.05	14.90	43.10									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>R30</b>	<i>cont.</i>																
	R30RS001	1.12	0.24	3.49	0.38	0.00	0.00	1.26	6.49								
	R30RS002	2.24	0.49	3.44	0.37	0.00	0.00	2.52	9.06								
	R30RS003	5.98	1.10	6.87	0.75	0.50	0.08	5.92	21.20								
	R30SI002	9.66	1.84	7.82	0.85	1.67	0.27	9.61	31.72								
	R30SI003	12.19	2.29	8.16	0.89	1.67	0.27	12.10	37.57								
	R30SI004	16.51	3.04	9.28	1.01	1.40	0.22	16.34	47.80								
R30SI005	9.80	2.13	6.44	0.70	0.00	0.00	11.02	30.09									
<b>R40</b>																	
	R40BO001	7.24	1.41	4.86	0.71	0.00	0.00	8.65	22.87								
	R40BO002	8.09	1.58	4.86	0.71	0.00	0.00	9.67	24.91								
<b>R45</b>																	
	R45BO004	4.89	0.95	3.21	0.47	0.00	0.00	8.04	17.56								
	R45BO005	5.97	1.16	4.47	0.65	0.00	0.00	9.81	22.06								
	R45BO006	12.41	2.42	10.50	1.52	0.00	0.00	20.40	47.25								
	R45BO007	14.32	2.79	12.73	1.85	0.00	0.00	23.54	55.23								
	R45BO008	14.94	2.91	19.92	2.89	0.00	0.00	24.56	65.22								
	R45CA001	4.20	0.82	3.11	0.45	0.00	0.00	6.91	15.49								
	R45CA002	4.84	0.94	3.11	0.45	0.00	0.00	7.95	17.29								
	R45CA005	11.71	2.28	6.80	0.99	0.00	0.00	19.25	41.03								
	R45CA007	14.24	2.78	10.20	1.48	0.00	0.00	23.40	52.10								
	R45CA010	17.74	3.46	14.09	2.04	0.00	0.00	29.17	66.50								
	R45RS001	1.69	0.33	1.94	0.28	0.00	0.00	2.78	7.02								
	R45SI008	4.18	0.82	3.30	0.48	0.00	0.00	6.87	15.65								
	R45SI009	9.56	1.86	3.60	0.52	0.00	0.00	15.72	31.26								
R45SI010	13.37	2.61	11.76	1.71	0.00	0.00	21.98	51.43									
<b>R50</b>																	
	R50BO005	5.24	1.21	3.50	0.51	1.22	0.20	8.52	20.40								
	R50BO006	7.60	1.64	5.25	0.76	0.13	0.02	12.13	27.53								
	R50BO007	10.39	2.26	5.25	0.76	0.44	0.07	16.61	35.78								
	R50BO008	13.47	2.98	10.86	1.58	1.22	0.20	21.64	51.95								
	R50BO009	19.30	4.22	13.66	1.98	1.22	0.20	30.92	71.50								
	R50BO010	5.73	1.25	3.50	0.51	0.31	0.05	9.17	20.52								
R50BO011	8.18	1.76	5.25	0.76	0.13	0.02	13.05	29.15									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>R50</b>	<i>cont.</i>																
	R50BO012	11.75	2.55	7.08	1.03	0.44	0.07	18.78	41.70								
	R50BO013	14.48	3.19	9.18	1.33	1.22	0.20	23.24	52.84								
	R50CA001	7.17	1.56	4.90	0.71	0.30	0.05	11.46	26.15								
	R50CA002	8.37	1.81	4.90	0.71	0.30	0.05	13.38	29.52								
	R50CA003	9.66	2.10	6.80	0.99	0.41	0.07	15.44	35.47								
	R50CA004	11.59	2.51	7.01	1.02	0.41	0.07	18.53	41.14								
	R50CA005	10.49	2.28	7.01	1.02	0.41	0.07	16.77	38.05								
	R50CA009	13.04	2.88	10.51	1.52	1.19	0.19	20.94	50.27								
	R50CA010	15.71	3.45	10.51	1.52	1.19	0.19	25.19	57.76								
	R50CA011	16.12	3.54	10.51	1.52	1.19	0.19	25.85	58.92								
	R50CA012	15.72	3.45	10.51	1.52	1.19	0.19	25.21	57.79								
	R50IP001	7.76	1.70	5.32	0.77	0.52	0.08	12.43	28.58								
	R50SI006	6.54	1.43	4.20	0.61	0.41	0.07	10.48	23.74								
	R50SI007	7.16	1.56	4.20	0.61	0.41	0.07	11.46	25.47								
	R50SI013	10.54	2.35	9.67	1.40	1.22	0.20	16.96	42.34								
	R50SI016	11.45	2.54	8.27	1.20	1.22	0.20	18.41	43.29								
	R50SI017	13.14	2.90	8.27	1.20	1.22	0.20	21.11	48.04								
	R50SI022	9.06	1.98	9.67	1.40	0.51	0.08	14.51	37.21								
	R50SI023	10.24	2.23	5.74	0.83	0.51	0.08	16.39	36.02								
R50SI024	4.75	1.04	1.96	0.28	0.28	0.04	7.61	15.96									
R50SI025	5.89	1.28	2.10	0.30	0.28	0.04	9.42	19.31									
R50SI026	11.79	2.54	7.29	1.06	0.28	0.04	18.82	41.82									
<b>R55</b>	R55AE001	0.92	0.13	1.31	3.44	0.05	0.01	1.06	6.92								
	R55AE002	1.13	0.16	1.31	5.14	0.05	0.01	1.30	9.10								
	R55AE003	1.49	0.22	1.31	6.74	0.10	0.02	1.72	11.60								
	R55AE004	1.88	0.29	1.31	7.14	0.24	0.04	2.18	13.08								
	R55AE008	0.66	0.10	1.31	0.14	0.06	0.01	0.76	3.04								
	R55AE009	0.25	0.04	1.47	0.16	0.00	0.00	0.29	2.21								
	R55AE010	0.47	0.06	2.62	0.28	0.00	0.00	0.53	3.96								
	R55AE011	0.39	0.07	0.82	0.09	0.11	0.02	0.46	1.96								
	R55GL001	0.44	0.07	0.00	0.50	0.03	0.00	0.51	1.55								
	R55GL002	0.87	0.13	0.82	0.59	0.05	0.01	1.00	3.47								
	R55GL003	1.78	0.26	1.47	0.91	0.07	0.01	2.04	6.54								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>R55</b>	<i>cont.</i>																
	R55GL004	2.15	0.31	1.47	1.16	0.06	0.01	2.46	7.62								
	R55GL007	1.63	0.23	2.95	0.32	0.00	0.00	1.85	6.98								
	R55GL008	0.59	0.10	1.80	0.20	0.13	0.02	0.69	3.53								
	R55GL009	0.32	0.04	1.72	0.19	0.00	0.00	0.37	2.64								
	R55GL011	0.79	0.11	2.62	0.28	0.00	0.00	0.90	4.70								
	R55GL012	1.40	0.20	1.47	0.91	0.05	0.01	1.61	5.65								
	R55GL013	0.08	0.02	0.00	0.25	0.11	0.02	0.11	0.59								
	R55GL014	0.41	0.06	0.00	0.35	0.00	0.00	0.46	1.28								
	R55GL015	1.33	0.18	1.47	0.16	0.00	0.00	1.52	4.66								
	R55GL016	0.74	0.10	1.47	0.16	0.00	0.00	0.85	3.32								
	R55GL017	0.26	0.04	0.82	0.09	0.00	0.00	0.30	1.51								
	R55GL018	0.27	0.04	0.82	0.09	0.00	0.00	0.31	1.53								
R55GL019	0.53	0.07	1.31	0.14	0.00	0.00	0.60	2.65									
<b>S10</b>	S10CA001	19.84	4.88	12.26	2.22	2.93	0.47	26.51	69.11	24.79	5.00	16.22	2.94	11.82	1.90	36.82	99.49
	S10CA002	21.26	7.69	18.57	2.69	11.22	1.80	32.42	95.65	24.04	7.75	24.55	3.56	45.32	7.27	38.58	151.07
	S10CA003	32.87	11.47	25.57	3.71	9.09	1.46	49.64	133.81	37.15	11.56	33.82	4.91	36.74	5.90	59.07	189.15
<b>S15</b>	S15CA001	26.47	9.60	23.92	3.47	9.09	1.46	31.51	105.52	31.76	9.71	30.52	4.43	36.74	5.90	40.18	159.24
	S15CA002	40.05	14.56	29.49	4.28	14.34	2.30	47.71	152.73	48.06	14.72	37.63	5.46	57.91	9.29	60.82	233.89
	S15CA003	49.89	18.05	36.05	5.23	16.01	2.57	59.37	187.17	59.86	18.25	45.99	6.67	64.71	10.39	75.69	281.56
	S15JU001	27.26	9.66	27.66	4.01	2.83	0.45	32.30	104.17	32.71	9.76	35.29	5.12	10.54	1.69	41.18	136.29
	S15JU002	28.23	10.00	27.66	4.01	2.83	0.45	33.44	106.62	33.87	10.11	35.29	5.12	10.54	1.69	42.64	139.26
<b>S20</b>	S20CA001	30.22	10.91	37.63	4.44	11.42	1.83	38.19	134.64	33.58	10.97	48.92	5.78	48.33	7.76	44.93	200.27
	S20CA002	31.92	11.50	37.63	4.44	11.42	1.83	40.33	139.07	35.47	11.57	48.92	5.78	48.33	7.76	47.44	205.27
	S20CA003	51.20	18.43	47.46	5.60	18.01	2.89	64.67	208.26	56.89	18.54	61.70	7.29	76.21	12.23	76.08	308.94
	S20CA004	53.38	19.18	47.46	5.60	18.01	2.89	67.40	213.92	59.31	19.30	61.70	7.29	76.21	12.23	79.29	315.33
	S20CA005	59.77	21.81	64.41	7.61	29.27	4.70	75.71	263.28	66.41	21.95	83.74	9.90	123.84	19.88	89.07	414.79
	S20CA006	67.03	24.00	64.41	7.61	20.12	3.23	84.57	270.97	74.48	24.15	83.74	9.90	85.14	13.66	99.50	390.57
<b>S25</b>	S25JD001	2.40	0.77	0.00	1.50	1.38	0.22	2.55	8.82	2.88	0.79	0.00	1.50	5.14	0.82	3.28	14.41
	S25JD002	2.97	0.99	0.00	1.50	2.07	0.33	3.18	11.04	3.57	1.00	0.00	1.50	7.71	1.24	4.09	19.11



**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>S25</b>	<i>cont.</i>																
	S25RI001	2.53	0.75	0.00	1.50	0.45	0.07	2.64	7.94	3.04	0.76	0.00	1.50	1.68	0.27	3.39	10.64
	S25RI002	2.85	0.85	0.00	1.50	0.68	0.11	2.98	8.97	3.42	0.86	0.00	1.50	2.52	0.40	3.83	12.53
	S25RM001	6.76	2.13	0.00	1.50	3.90	0.63	7.15	22.07	8.11	2.17	0.00	1.50	14.35	2.30	9.19	37.62
	S25RM002	9.20	2.90	0.00	1.50	5.22	0.84	9.73	29.39	11.04	2.95	0.00	1.50	19.26	3.09	12.51	50.35
S25RM003	5.15	1.68	0.00	1.50	3.90	0.63	5.48	18.34	6.18	1.71	0.00	1.50	14.35	2.30	7.05	33.09	
<b>S30</b>	S30HW001	10.25	4.90	14.46	7.38	1.35	0.22	13.83	52.39	17.08	5.05	17.36	10.72	1.52	0.24	28.82	80.79
	S30HW002	13.88	6.61	20.25	10.34	1.58	0.25	18.73	71.64	23.13	6.81	24.30	15.00	1.78	0.29	39.02	110.33
	S30HW005	5.51	2.65	2.31	1.18	0.83	0.13	4.84	17.45	9.18	2.73	2.78	1.72	0.92	0.15	10.55	28.03
	S30HW006	9.30	4.41	5.79	2.96	0.88	0.14	8.15	31.63	15.50	4.54	6.94	4.28	0.97	0.16	17.78	50.17
	S30HW007	10.12	4.79	7.23	3.69	0.88	0.14	8.87	35.72	16.87	4.94	8.68	5.36	0.97	0.16	19.35	56.33
	S30HW008	10.59	5.01	7.23	3.69	0.88	0.14	9.28	36.82	17.65	5.16	8.68	5.36	0.97	0.16	20.24	58.22
	S30HW009	10.88	5.19	8.68	4.43	1.29	0.21	9.54	40.22	18.14	5.35	10.41	6.43	1.46	0.23	20.82	62.84
	S30HW010	13.31	6.33	11.57	5.91	1.40	0.22	11.67	50.41	22.19	6.52	13.88	8.57	1.58	0.25	25.46	78.45
	S30HW011	13.03	6.20	11.57	5.91	1.45	0.23	11.43	49.82	21.72	6.40	13.88	8.57	1.63	0.26	24.92	77.38
	S30HW012	15.44	7.33	11.57	5.91	1.58	0.25	13.54	55.62	25.74	7.56	13.88	8.57	1.78	0.29	29.53	87.35
	S30HW013	12.40	5.89	26.03	13.29	1.32	0.21	16.72	75.86	20.66	6.08	31.24	19.29	1.49	0.24	34.84	113.84
	S30HW014	10.04	2.05	0.87	0.44	0.51	0.08	10.85	24.84	12.56	2.10	1.04	0.64	0.56	0.09	16.95	33.94
	S30HW015	11.05	2.25	1.45	0.74	0.51	0.08	11.93	28.01	13.81	2.31	1.74	1.07	0.56	0.09	18.63	38.21
	S30HW016	10.45	2.13	1.16	0.59	0.51	0.08	11.29	26.21	13.07	2.19	1.39	0.86	0.56	0.09	17.63	35.79
	S30HW017	11.23	2.28	1.45	0.74	0.51	0.08	12.13	28.42	14.04	2.35	1.74	1.07	0.56	0.09	18.94	38.79
	S30HW018	13.16	2.72	2.31	1.18	0.96	0.15	14.23	34.71	16.45	2.79	2.78	1.72	1.07	0.17	22.23	47.21
	S30KB001	2.52	0.55	0.58	0.30	0.46	0.07	2.40	6.88	3.16	0.57	0.69	0.43	0.51	0.08	3.65	9.09
	S30KB002	2.99	0.66	0.87	0.44	0.55	0.09	2.85	8.45	3.74	0.68	1.04	0.64	0.62	0.10	4.33	11.15
	S30KB003	2.79	0.59	1.16	0.59	0.29	0.05	2.64	8.11	3.48	0.60	1.39	0.86	0.34	0.05	4.01	10.73
	S30KB004	3.56	0.82	1.45	0.74	0.97	0.16	3.41	11.11	4.45	0.84	1.74	1.07	1.08	0.17	5.17	14.52
	S30KB005	3.10	0.68	1.45	0.74	0.62	0.10	2.95	9.64	3.87	0.70	1.74	1.07	0.69	0.11	4.48	12.66
	S30KB006	3.89	0.89	1.74	0.89	1.01	0.16	3.73	12.31	4.87	0.92	2.08	1.28	1.13	0.18	5.66	16.12
	S30KB007	2.72	0.59	0.58	0.30	0.46	0.07	2.59	7.31	3.40	0.61	0.69	0.43	0.51	0.08	3.93	9.65
	S30KB008	3.41	0.73	0.87	0.44	0.50	0.08	3.24	9.27	4.26	0.75	1.04	0.64	0.55	0.09	4.91	12.24
S30KB009	4.55	1.02	0.87	0.44	0.98	0.16	4.35	12.37	5.69	1.05	1.04	0.64	1.09	0.17	6.60	16.28	
S30KB010	2.82	0.63	1.16	0.59	0.58	0.09	2.69	8.56	3.52	0.64	1.39	0.86	0.64	0.10	4.08	11.23	
S30KB011	4.15	0.89	1.45	0.74	0.62	0.10	3.95	11.90	5.19	0.92	1.74	1.07	0.69	0.11	5.99	15.71	
S30KB012	4.84	1.08	1.45	0.74	1.04	0.17	4.62	13.94	6.05	1.11	1.74	1.07	1.15	0.18	7.02	18.32	

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>S30</b>	<i>cont.</i>																
	S30KB013	3.29	0.72	1.45	0.74	0.62	0.10	3.14	10.06	4.11	0.74	1.74	1.07	0.69	0.11	4.76	13.22
	S30KB014	4.49	0.97	1.74	0.89	0.67	0.11	4.27	13.14	5.62	0.99	2.08	1.28	0.75	0.12	6.48	17.32
	S30KB015	5.96	1.31	2.31	1.18	1.10	0.18	5.68	17.72	7.45	1.34	2.78	1.72	1.22	0.20	8.62	23.33
	S30KB018	7.65	1.59	1.45	0.74	0.64	0.10	7.24	19.41	9.56	1.63	1.74	1.07	0.72	0.12	11.00	25.84
	S30KB021	9.02	1.87	2.31	1.18	0.71	0.11	8.54	23.74	11.27	1.92	2.78	1.72	0.80	0.13	12.96	31.58
	S30KB024	10.61	2.19	3.47	1.77	0.78	0.13	10.04	28.99	13.26	2.25	4.17	2.57	0.87	0.14	15.24	38.50
	S30KB025	5.37	1.13	1.16	0.59	0.55	0.09	5.09	13.98	6.71	1.16	1.39	0.86	0.62	0.10	7.72	18.56
	S30KB026	6.43	1.34	1.16	0.59	0.59	0.09	6.09	16.29	8.04	1.38	1.39	0.86	0.66	0.11	9.25	21.69
	S30KB027	8.19	1.70	1.45	0.74	0.64	0.10	7.76	20.58	10.24	1.74	1.74	1.07	0.72	0.12	11.78	27.41
	S30KB028	6.13	1.28	1.74	0.89	0.60	0.10	5.81	16.55	7.66	1.32	2.08	1.28	0.67	0.11	8.82	21.94
	S30KB029	7.59	1.58	1.74	0.89	0.64	0.10	7.19	19.73	9.49	1.62	2.08	1.28	0.72	0.12	10.91	26.22
	S30KB030	9.69	2.00	2.31	1.18	0.71	0.11	9.17	25.17	12.11	2.05	2.78	1.72	0.80	0.13	13.92	33.51
	S30KB031	8.04	1.67	2.89	1.48	0.64	0.10	7.61	22.43	10.05	1.71	3.47	2.14	0.72	0.12	11.56	29.77
	S30KB032	9.72	2.01	2.89	1.48	0.73	0.12	9.19	26.14	12.14	2.06	3.47	2.14	0.82	0.13	13.96	34.72
	S30KB033	11.39	2.35	3.47	1.77	0.78	0.13	10.78	30.67	14.24	2.41	4.17	2.57	0.87	0.14	16.36	40.76
	S30KB034	3.51	0.76	0.87	0.44	0.60	0.10	3.34	9.62	4.39	0.79	1.04	0.64	0.67	0.11	5.07	12.71
	S30KB035	4.03	0.88	1.16	0.59	0.69	0.11	3.84	11.30	5.04	0.90	1.39	0.86	0.77	0.12	5.82	14.90
	S30KB036	3.77	0.82	1.16	0.59	0.64	0.10	3.59	10.67	4.71	0.84	1.39	0.86	0.72	0.12	5.45	14.09
	S30KB041	4.34	0.95	1.16	0.59	0.75	0.12	4.13	12.04	5.42	0.97	1.39	0.86	0.84	0.13	6.27	15.88
	S30KB042	5.44	1.14	1.45	0.74	0.55	0.09	5.16	14.57	6.80	1.17	1.74	1.07	0.62	0.10	7.83	19.33
	S30KB043	9.61	1.97	0.87	0.44	0.59	0.09	9.08	22.65	12.01	2.02	1.04	0.64	0.66	0.11	13.79	30.27
	S30KB044	11.88	2.42	0.87	0.44	0.59	0.09	11.22	27.51	14.85	2.49	1.04	0.64	0.66	0.11	17.04	36.83
	S30KB045	15.84	7.47	25.22	3.21	1.10	0.18	21.35	74.37	26.40	7.70	30.10	4.59	1.24	0.20	44.48	114.71
	S30KB046	15.67	7.41	15.74	8.03	1.26	0.20	25.35	73.66	26.12	7.64	18.88	11.66	1.43	0.23	56.36	122.32
	S30KB047	13.78	6.49	18.22	9.30	0.93	0.15	22.29	71.16	22.97	6.69	21.87	13.50	1.04	0.17	49.55	115.79
	S30KB048	11.18	2.29	4.92	2.51	0.67	0.11	12.08	33.76	13.98	2.36	5.90	3.64	0.76	0.12	18.88	45.64
S30KB049	12.41	2.69	5.21	2.66	2.10	0.34	13.49	38.90	15.51	2.77	6.25	3.86	2.36	0.38	21.07	52.20	
S30KB050	17.53	3.56	14.46	7.38	0.74	0.12	18.92	62.71	21.91	3.66	17.36	10.72	0.82	0.13	29.56	84.16	
S30KB051	22.20	4.53	14.46	7.38	1.10	0.18	23.98	73.83	27.75	4.65	17.36	10.72	1.24	0.20	37.45	99.37	
S30KB052	21.42	4.28	14.46	7.38	0.37	0.06	23.09	71.06	26.78	4.40	17.36	10.72	0.41	0.07	36.07	95.81	
S30KB053	5.99	1.25	2.02	1.03	0.59	0.09	5.68	16.65	7.49	1.29	2.43	1.50	0.66	0.11	8.62	22.10	
S30KB054	6.56	1.36	0.87	0.44	0.55	0.09	6.21	16.08	8.20	1.40	1.04	0.64	0.62	0.10	9.44	21.44	
S30KB055	10.21	4.83	17.16	2.18	0.88	0.14	8.95	44.35	17.02	4.98	20.49	3.12	0.97	0.16	19.51	66.25	
S30KB056	10.47	4.95	17.16	2.18	0.88	0.14	9.17	44.95	17.45	5.10	20.49	3.12	0.97	0.16	20.01	67.30	
S30KB057	11.71	5.53	17.16	2.18	0.88	0.14	10.26	47.86	19.52	5.70	20.49	3.12	0.97	0.16	22.38	72.34	

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>S30</b>	<i>cont.</i>																
	S30KB058	11.03	5.19	7.52	3.84	0.74	0.12	9.66	38.10	18.38	5.35	9.02	5.57	0.82	0.13	21.07	60.34
	S30KB059	17.35	8.16	17.36	8.86	1.11	0.18	15.19	68.21	28.91	8.42	20.83	12.86	1.23	0.20	33.14	105.59
	S30PU001	19.61	3.95	15.06	1.91	0.71	0.11	18.51	59.86	24.51	4.06	17.98	2.74	0.84	0.13	28.10	78.36
	S30PU002	37.12	7.46	24.52	3.12	1.23	0.20	35.02	108.67	46.39	7.66	29.27	4.46	1.46	0.23	53.18	142.65
	S30PU003	51.88	10.39	24.52	3.12	1.33	0.21	48.94	140.39	64.85	10.68	29.27	4.46	1.57	0.25	74.30	185.38
	S30RA002	4.81	0.98	1.75	0.22	0.20	0.03	5.20	13.19	6.02	1.00	2.09	0.32	0.22	0.04	8.12	17.81
	S30RA003	8.98	1.83	3.43	0.44	0.40	0.06	9.69	24.83	11.22	1.88	4.10	0.62	0.45	0.07	15.14	33.48
	S30TS001	2.38	0.51	0.69	0.35	0.34	0.05	2.26	6.58	2.98	0.52	0.83	0.51	0.39	0.06	3.43	8.72
	S30TS002	4.26	0.89	0.98	0.50	0.42	0.07	4.03	11.15	5.32	0.91	1.18	0.73	0.47	0.08	6.13	14.82
	S30TS003	2.48	0.54	0.98	0.50	0.39	0.06	2.36	7.31	3.10	0.55	1.18	0.73	0.44	0.07	3.58	9.65
	S30TS004	4.39	0.92	1.27	0.65	0.48	0.08	4.16	11.95	5.49	0.95	1.53	0.94	0.54	0.09	6.32	15.86
	S30TS005	2.62	0.57	1.27	0.65	0.43	0.07	2.50	8.11	3.28	0.58	1.53	0.94	0.49	0.08	3.79	10.69
	S30TS006	4.55	0.96	1.56	0.80	0.54	0.09	4.32	12.82	5.69	0.99	1.87	1.15	0.61	0.10	6.56	16.97
	S30TS007	3.04	0.66	1.85	0.94	0.48	0.08	2.89	9.94	3.80	0.67	2.22	1.37	0.54	0.09	4.39	13.08
	S30TS008	6.27	1.31	2.43	1.24	0.61	0.10	5.94	17.90	7.84	1.35	2.92	1.80	0.68	0.11	9.02	23.72
S30TS009	8.97	4.16	17.36	11.86	0.00	0.00	12.07	54.42	14.95	4.29	20.83	15.86	0.00	0.00	25.15	81.08	
S30TS010	13.09	6.07	23.14	15.81	0.00	0.00	17.62	75.73	21.82	6.26	27.77	21.14	0.00	0.00	36.71	113.70	
S30TS011	21.68	10.05	46.28	31.62	0.00	0.00	29.17	138.80	36.13	10.36	55.54	42.29	0.00	0.00	60.77	205.09	
<b>S35</b>																	
	S35AR001	0.29	0.06	0.00	0.00	0.00	0.00	0.35	0.70								
	S35AR002	0.44	0.09	0.00	0.00	0.00	0.00	0.53	1.06								
<b>S40</b>																	
	S40BO002	29.07	7.04	27.66	3.52	1.48	0.24	36.57	105.58	36.34	7.20	35.80	4.55	6.11	0.98	51.08	142.06
	S40BO003	28.46	6.89	27.66	3.52	1.48	0.24	35.79	104.04	35.57	7.05	35.80	4.55	6.11	0.98	50.01	140.07
	S40BO004	27.92	6.76	27.66	3.52	1.48	0.24	35.11	102.69	34.89	6.91	35.80	4.55	6.11	0.98	49.06	138.30
	S40CA001	26.44	6.40	23.74	3.02	1.78	0.29	33.26	94.93	33.05	6.55	30.73	3.91	6.87	1.10	46.47	128.68
	S40CA002	25.25	6.15	23.74	3.02	1.43	0.23	31.80	91.62	31.57	6.29	30.73	3.91	5.46	0.88	44.43	123.27
	S40CA003	20.16	5.20	26.89	3.42	8.48	1.36	25.69	91.20	25.20	5.32	34.80	4.42	33.58	5.39	35.90	144.61
	S40CA004	35.03	8.65	41.49	5.27	6.36	1.02	44.25	142.07	43.79	8.85	53.70	6.83	24.98	4.01	61.82	203.98
<b>S45</b>																	
	S45DA004	1.55	0.23	0.00	0.25	0.00	0.00	2.34	4.37								
	S45DA005	1.85	0.28	0.00	0.25	0.00	0.00	2.80	5.18								
	S45DA007	1.95	0.30	0.00	0.25	0.00	0.00	2.95	5.45								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T10</b>	T10CA001	0.98	0.23	0.00	0.08	0.00	0.00	1.16	2.45	1.22	0.24	0.00	0.08	0.00	0.00	1.63	3.17
	T10CA002	1.47	0.35	0.00	0.08	0.00	0.00	1.74	3.64	1.84	0.36	0.00	0.08	0.00	0.00	2.45	4.73
	T10CA004	1.08	0.26	0.00	0.08	0.00	0.00	1.28	2.70	1.35	0.26	0.00	0.08	0.00	0.00	1.80	3.49
	T10CA005	1.47	0.35	0.00	0.08	0.00	0.00	1.74	3.64	1.84	0.36	0.00	0.08	0.00	0.00	2.45	4.73
	T10CA007	1.64	0.39	0.00	0.08	0.00	0.00	1.95	4.06	2.05	0.40	0.00	0.08	0.00	0.00	2.74	5.27
	T10CA008	2.20	0.52	0.00	0.08	0.00	0.00	2.61	5.41	2.75	0.54	0.00	0.08	0.00	0.00	3.67	7.04
	T10CA009	1.99	0.47	0.00	0.08	0.00	0.00	2.36	4.90	2.48	0.48	0.00	0.08	0.00	0.00	3.31	6.35
	T10CA010	2.17	0.52	0.00	0.08	0.00	0.00	2.57	5.34	2.71	0.53	0.00	0.08	0.00	0.00	3.62	6.94
	T10CA011	3.07	0.73	0.00	0.08	0.00	0.00	3.64	7.52	3.84	0.75	0.00	0.08	0.00	0.00	5.12	9.79
	T10CA012	2.93	0.70	0.00	0.08	0.00	0.00	3.47	7.18	3.66	0.71	0.00	0.08	0.00	0.00	4.89	9.34
	T10CA013	3.22	0.77	0.00	0.08	0.00	0.00	3.81	7.88	4.02	0.78	0.00	0.08	0.00	0.00	5.37	10.25
	T10CA014	2.67	0.64	0.00	0.08	0.00	0.00	3.17	6.56	3.34	0.65	0.00	0.08	0.00	0.00	4.46	8.53
	T10CA015	4.03	0.96	0.00	0.10	0.00	0.00	4.77	9.86	5.04	0.98	0.00	0.10	0.00	0.00	6.72	12.84
	T10CA016	3.90	0.93	0.00	0.12	0.00	0.00	4.62	9.57	4.88	0.95	0.00	0.12	0.00	0.00	6.51	12.46
	T10CA017	4.23	1.01	0.00	0.13	0.00	0.00	5.01	10.38	5.29	1.03	0.00	0.13	0.00	0.00	7.05	13.50
	T10CA018	3.73	0.89	0.00	0.13	0.00	0.00	4.42	9.17	4.67	0.91	0.00	0.13	0.00	0.00	6.22	11.93
	T10CA019	0.11	0.03	0.00	0.05	0.00	0.00	0.13	0.32	0.13	0.03	0.00	0.05	0.00	0.00	0.18	0.39
	T10CA020	4.01	0.96	0.00	0.15	0.00	0.00	4.75	9.87	5.01	0.98	0.00	0.15	0.00	0.00	6.69	12.83
	T10CA021	5.30	1.26	0.00	0.19	0.00	0.00	6.28	13.03	6.63	1.29	0.00	0.19	0.00	0.00	8.84	16.95
	T10CA022	5.76	1.37	0.00	0.19	0.00	0.00	6.83	14.15	7.20	1.40	0.00	0.19	0.00	0.00	9.61	18.40
T10CA023	5.38	1.28	0.00	0.20	0.00	0.00	6.38	13.24	6.73	1.31	0.00	0.20	0.00	0.00	8.97	17.21	
T10CA024	7.87	1.87	0.00	0.28	0.00	0.00	9.32	19.34	9.83	1.92	0.00	0.28	0.00	0.00	13.12	25.15	
T10CA025	8.42	2.01	0.00	0.29	0.00	0.00	9.98	20.70	10.53	2.05	0.00	0.29	0.00	0.00	14.04	26.91	
T10CA026	11.49	2.74	0.00	0.40	0.00	0.00	13.62	28.25	14.37	2.80	0.00	0.40	0.00	0.00	19.16	36.73	
T10CA027	12.43	2.96	0.00	0.42	0.00	0.00	14.72	30.53	15.53	3.03	0.00	0.42	0.00	0.00	20.72	39.70	
T10JD001	0.93	0.23	0.00	0.25	0.07	0.01	1.12	2.61	1.17	0.24	0.00	0.25	0.08	0.01	1.57	3.32	
<b>T15</b>	T15CA002	5.93	1.72	5.38	0.88	0.00	0.00	11.05	24.96	7.42	1.75	6.96	1.14	0.00	0.00	15.70	32.97
	T15CA005	7.35	2.13	6.15	1.01	0.00	0.00	13.69	30.33	9.19	2.17	7.96	1.30	0.00	0.00	19.45	40.07
	T15CA008	14.73	4.27	11.14	1.82	0.00	0.00	27.44	59.40	18.41	4.35	14.42	2.36	0.00	0.00	38.98	78.52
	T15CA009	21.21	6.15	12.68	2.08	0.00	0.00	39.51	81.63	26.51	6.26	16.41	2.69	0.00	0.00	56.13	108.00
	T15CA011	20.57	5.97	14.22	2.33	0.00	0.00	38.32	81.41	25.71	6.07	18.40	3.01	0.00	0.00	54.43	107.62
	T15CA012	21.09	6.81	18.44	2.35	0.00	0.00	40.01	88.70	25.11	6.89	23.87	3.04	0.00	0.00	49.61	108.52
	T15CA014	25.03	8.08	18.44	2.35	0.00	0.00	47.48	101.38	29.79	8.18	23.87	3.04	0.00	0.00	58.87	123.75

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T15</b>	<i>cont.</i>																
	T15CA016	27.73	8.96	23.82	3.03	0.00	0.00	52.62	116.16	33.02	9.06	30.83	3.93	0.00	0.00	65.24	142.08
	T15CA017	36.89	11.92	31.50	4.01	0.00	0.00	70.00	154.32	43.92	12.06	40.77	5.19	0.00	0.00	86.79	188.73
	T15CA018	46.59	16.17	38.01	2.68	0.00	0.00	82.87	186.32	55.91	16.35	48.50	3.43	0.00	0.00	111.88	236.07
	T15CA019	72.35	25.11	55.71	3.93	0.00	0.00	128.68	285.78	86.81	25.38	71.08	5.02	0.00	0.00	173.74	362.03
	T15CA020	7.50	2.18	6.15	1.01	0.00	0.00	13.98	30.82	9.38	2.21	7.96	1.30	0.00	0.00	19.86	40.71
	T15CA021	7.76	2.25	6.92	1.13	0.00	0.00	14.46	32.52	9.71	2.29	8.95	1.47	0.00	0.00	20.55	42.97
	T15CA022	8.22	2.39	6.92	1.13	0.00	0.00	15.32	33.98	10.28	2.43	8.95	1.47	0.00	0.00	21.76	44.89
	T15CA023	21.21	6.15	12.68	2.08	0.00	0.00	39.51	81.63	26.51	6.26	16.41	2.69	0.00	0.00	56.13	108.00
	T15CA024	10.52	3.05	8.45	1.38	0.00	0.00	19.60	43.00	13.15	3.10	10.94	1.79	0.00	0.00	27.84	56.82
	T15CS004	6.71	1.95	5.15	0.84	0.00	0.00	12.49	27.14	8.38	1.98	6.66	1.09	0.00	0.00	17.75	35.86
	T15CS007	11.72	3.40	9.14	1.50	0.00	0.00	21.84	47.60	14.65	3.46	11.83	1.94	0.00	0.00	31.02	62.90
	T15JD005	5.34	1.55	5.38	0.88	0.00	0.00	9.95	23.10	6.68	1.58	6.96	1.14	0.00	0.00	14.14	30.50
	T15JD006	6.36	1.85	5.69	0.93	0.00	0.00	11.86	26.69	7.95	1.88	7.36	1.20	0.00	0.00	16.84	35.23
	T15JD007	7.31	2.12	6.92	1.13	0.00	0.00	13.63	31.11	9.14	2.16	8.95	1.47	0.00	0.00	19.36	41.08
	T15JD008	12.97	3.76	10.76	1.76	0.00	0.00	24.16	53.41	16.21	3.83	13.92	2.28	0.00	0.00	34.32	70.56
	T15JD009	13.63	3.95	10.76	1.76	0.00	0.00	25.40	55.50	17.04	4.02	13.92	2.28	0.00	0.00	36.08	73.34
T15JD010	16.96	4.92	14.22	2.33	0.00	0.00	31.59	70.02	21.19	5.00	18.40	3.01	0.00	0.00	44.87	92.47	
T15JD011	18.36	5.33	14.22	2.33	0.00	0.00	34.20	74.44	22.95	5.42	18.40	3.01	0.00	0.00	48.59	98.37	
T15KM008	31.74	10.25	23.82	3.03	0.00	0.00	60.22	129.06	37.79	10.37	30.83	3.93	0.00	0.00	74.67	157.59	
<b>T20</b>																	
	T20CA001	18.69	5.68	15.73	2.00	3.66	0.59	15.84	62.19	20.13	5.71	20.07	2.56	15.38	2.47	18.48	84.80
	T20CA002	26.83	8.30	22.22	2.83	8.67	1.39	22.80	93.04	28.90	8.34	28.35	3.61	36.40	5.84	26.60	138.04
T20CA003	40.19	12.49	31.52	4.01	9.13	1.47	34.17	132.98	43.28	12.55	40.22	5.12	38.35	6.16	39.87	185.55	
<b>T25</b>																	
	T25CA006	15.52	3.37	18.71	2.38	0.00	0.00	18.55	58.53								
	T25CA007	17.04	3.70	20.46	2.61	0.00	0.00	20.37	64.18								
	T25CA008	18.47	4.01	24.73	3.15	0.00	0.00	22.08	72.44								
	T25JD008	7.37	1.36	7.36	0.94	0.54	0.09	7.30	24.96								
	T25JD009	9.79	1.79	9.81	1.25	0.54	0.09	9.68	32.95								
	T25JD010	10.88	2.04	11.91	1.52	1.23	0.20	10.80	38.58								
	T25JD012	14.88	3.01	22.77	2.90	3.88	0.62	14.96	63.02								
	T25JD013	20.24	3.96	29.78	3.79	3.88	0.62	20.24	82.51								
	T25JD014	14.64	2.71	15.06	1.92	1.23	0.20	14.51	50.27								
	T25JD015	1.61	0.32	3.50	0.45	0.39	0.06	1.62	7.95								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T25</b>	<i>cont.</i>																
	T25JD016	1.94	0.38	3.92	0.50	0.39	0.06	1.94	9.13								
	T25JD017	2.32	0.45	3.92	0.50	0.39	0.06	2.31	9.95								
	T25JD018	3.11	0.59	4.69	0.60	0.39	0.06	3.10	12.54								
	T25JD019	3.38	0.64	5.67	0.72	0.49	0.08	3.36	14.34								
	T25JD020	3.41	0.70	6.38	0.81	1.17	0.19	3.44	16.10								
<b>T30</b>	T30DW005	3.06	0.63	3.08	0.39	0.32	0.05	4.17	11.70	4.09	0.65	4.08	0.52	1.18	0.19	6.17	16.88
	T30DW011	18.37	3.58	12.96	1.65	0.00	0.00	24.71	61.27	24.49	3.71	17.14	2.18	0.00	0.00	36.59	84.11
	T30DW012	0.81	0.16	2.32	0.29	0.03	0.00	1.09	4.70	1.08	0.17	3.03	0.39	0.12	0.02	1.62	6.43
	T30DW013	1.10	0.23	3.22	0.41	0.11	0.02	1.50	6.59	1.47	0.23	4.20	0.53	0.40	0.06	2.22	9.11
	T30DW014	2.82	0.59	2.45	0.31	0.42	0.07	3.86	10.52	3.76	0.61	3.24	0.41	1.56	0.25	5.71	15.54
	T30DW016	5.07	1.02	3.99	0.51	0.32	0.05	6.86	17.82	6.76	1.06	5.28	0.67	1.18	0.19	10.16	25.30
	T30DW017	6.39	1.29	4.90	0.62	0.42	0.07	8.66	22.35	8.52	1.33	6.49	0.83	1.56	0.25	12.82	31.80
	T30DW018	7.18	1.44	5.46	0.69	0.42	0.07	9.72	24.98	9.58	1.49	7.23	0.92	1.56	0.25	14.39	35.42
	T30TM001	27.80	5.42	12.96	1.65	0.00	0.00	37.39	85.22	37.06	5.61	17.14	2.18	0.00	0.00	55.37	117.36
	T30TM004	30.02	5.85	12.96	1.65	0.00	0.00	40.38	90.86	40.03	6.06	17.14	2.18	0.00	0.00	59.79	125.20
	T30TM007	37.97	7.40	16.81	2.14	0.00	0.00	51.07	115.39	50.63	7.67	22.24	2.83	0.00	0.00	75.62	158.99
	T30TM008	39.44	7.69	16.81	2.14	0.00	0.00	53.04	119.12	52.58	7.96	22.24	2.83	0.00	0.00	78.55	164.16
	T30TM009	39.23	7.65	18.92	2.41	0.00	0.00	52.76	120.97	52.31	7.92	25.02	3.19	0.00	0.00	78.13	166.57
	T30TM012	51.84	10.11	24.52	3.12	0.00	0.00	69.73	159.32	69.12	10.47	32.43	4.13	0.00	0.00	103.25	219.40
	T30TM013	80.86	15.76	28.16	3.58	0.00	0.00	108.76	237.12	107.82	16.33	37.25	4.74	0.00	0.00	161.05	327.19
	T30TM014	79.18	15.44	35.24	4.48	0.00	0.00	106.50	240.84	105.58	15.99	46.61	5.93	0.00	0.00	157.71	331.82
	T30TM015	83.78	16.33	35.24	4.48	0.00	0.00	112.68	252.51	111.70	16.91	46.61	5.93	0.00	0.00	166.86	348.01
	T30VE007	14.25	2.78	8.76	1.11	0.00	0.00	19.17	46.07	19.00	2.88	11.58	1.47	0.00	0.00	28.38	63.31
	T30VE008	29.04	5.66	12.96	1.65	0.00	0.00	39.05	88.36	38.72	5.86	17.14	2.18	0.00	0.00	57.83	121.73
	T30VE009	31.32	6.10	17.52	2.23	0.00	0.00	42.12	99.29	41.75	6.32	23.17	2.95	0.00	0.00	62.37	136.56
T30VE010	40.26	7.85	17.52	2.23	0.00	0.00	54.15	122.01	53.68	8.13	23.17	2.95	0.00	0.00	80.19	168.12	
<b>T35</b>	T35CT001	20.92	4.08	9.81	1.25	0.00	0.00	28.14	64.20	27.89	4.22	12.97	1.65	0.00	0.00	41.67	88.40
	T35CT002	25.75	5.02	9.81	1.25	0.00	0.00	34.63	76.46	34.33	5.20	12.97	1.65	0.00	0.00	51.29	105.44
	T35CT003	28.94	5.64	12.96	1.65	0.00	0.00	38.93	88.12	38.59	5.84	17.14	2.18	0.00	0.00	57.64	121.39
	T35CT004	27.25	5.31	7.15	0.91	0.00	0.00	36.65	77.27	36.33	5.50	9.45	1.20	0.00	0.00	54.27	106.75
	T35CT005	25.78	5.03	7.15	0.91	0.00	0.00	34.67	73.54	34.37	5.20	9.45	1.20	0.00	0.00	51.34	101.56
	T35CT006	25.78	5.03	7.15	0.91	0.00	0.00	34.67	73.54	34.37	5.20	9.45	1.20	0.00	0.00	51.34	101.56

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T35</b>	<i>cont.</i>																
	T35CT007	28.52	5.56	7.15	0.91	0.00	0.00	38.36	80.50	38.03	5.76	9.45	1.20	0.00	0.00	56.81	111.25
	T35CT008	36.60	7.14	10.51	1.34	0.00	0.00	49.23	104.82	48.80	7.39	13.90	1.77	0.00	0.00	72.90	144.76
	T35CT009	42.62	8.31	10.51	1.34	0.00	0.00	57.33	120.11	56.83	8.60	13.90	1.77	0.00	0.00	84.89	165.99
	T35CT010	41.75	8.14	10.51	1.34	0.00	0.00	56.15	117.89	55.66	8.43	13.90	1.77	0.00	0.00	83.15	162.91
	T35CT011	50.21	9.79	12.26	1.56	0.00	0.00	67.54	141.36	66.95	10.14	16.22	2.06	0.00	0.00	100.01	195.38
<b>T40</b>	T40AG001	7.06	1.42	5.60	0.81	0.37	0.06	7.53	22.85								
	T40AH001	2.20	0.43	0.00	0.25	0.00	0.00	2.66	5.54								
	T40AH002	2.63	0.51	0.00	0.25	0.00	0.00	3.18	6.57								
	T40AH003	3.41	0.67	0.00	0.25	0.00	0.00	4.13	8.46								
	T40AH004	3.81	0.74	0.00	0.25	0.00	0.00	4.61	9.41								
	T40GN001	1.53	0.25	0.00	0.00	0.00	0.00	1.44	3.22	1.88	0.26	0.00	0.00	0.00	0.00	2.02	4.16
	T40KF011	0.23	0.05	0.00	0.00	0.00	0.00	0.21	0.49								
	T40KF013	0.35	0.07	0.00	0.00	0.00	0.00	0.32	0.74								
	T40KF014	0.31	0.06	0.00	0.00	0.00	0.00	0.28	0.65								
	T40KF016	0.45	0.09	0.00	0.00	0.00	0.00	0.41	0.95								
	T40KF018	0.54	0.11	0.00	0.00	0.00	0.00	0.49	1.14								
	T40KF020	0.63	0.12	0.00	0.00	0.00	0.00	0.57	1.32								
	T40KF021	0.26	0.05	0.00	0.10	0.00	0.00	0.27	0.68								
	T40KF022	0.51	0.10	0.00	0.10	0.00	0.00	0.54	1.25								
	T40KF023	0.35	0.07	0.00	0.05	0.00	0.00	0.37	0.84								
	T40KF024	0.41	0.08	0.00	0.05	0.00	0.00	0.43	0.97								
	T40MY002	0.50	0.08	0.00	0.00	0.00	0.00	0.47	1.05	0.62	0.08	0.00	0.00	0.00	0.00	0.66	1.36
	T40MY003	0.62	0.10	0.00	0.00	0.00	0.00	0.59	1.31	0.77	0.10	0.00	0.00	0.00	0.00	0.82	1.69
	T40MY004	0.72	0.12	0.00	0.00	0.00	0.00	0.68	1.52	0.89	0.12	0.00	0.00	0.00	0.00	0.95	1.96
	T40MY005	1.02	0.17	0.00	0.00	0.00	0.00	0.96	2.15	1.26	0.17	0.00	0.00	0.00	0.00	1.36	2.79
	T40MY006	1.16	0.19	0.00	0.00	0.00	0.00	1.10	2.45	1.43	0.19	0.00	0.00	0.00	0.00	1.54	3.16
	T40PA001	0.70	0.14	0.00	0.24	0.00	0.00	0.85	1.93								
	T40PA002	3.86	0.75	0.00	0.24	0.00	0.00	4.67	9.52								
	T40PA003	4.78	0.93	0.00	0.26	0.00	0.00	5.79	11.76								
	T40PA004	5.58	1.09	0.00	0.26	0.00	0.00	6.76	13.69								
	T40PA005	10.42	2.03	0.00	0.27	0.00	0.00	12.62	25.34								
T40PA006	10.94	2.13	0.00	0.27	0.00	0.00	13.25	26.59									
T40RS001	2.40	0.51	0.00	0.00	0.00	0.00	2.33	5.24									

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T40</b>	<i>cont.</i>																
	T40RS002	2.48	0.53	0.00	0.00	0.00	0.00	2.40	5.41								
	T40RS003	2.66	0.57	0.00	0.00	0.00	0.00	2.58	5.81								
	T40XX034	13.77	2.45	20.11	2.92	0.00	0.00	13.74	52.99								
	T40XX035	13.99	2.49	21.39	3.10	0.00	0.00	13.96	54.93								
	T40XX036	16.81	2.99	24.38	3.54	0.00	0.00	16.77	64.49								
	T40XX037	16.49	2.93	24.38	3.54	0.00	0.00	16.46	63.80								
T40XX038	17.26	3.07	24.38	3.54	0.00	0.00	17.22	65.47									
<b>T45</b>	T45EA006	2.37	0.60	0.00	0.50	1.81	0.29	1.64	7.21								
	T45EA007	3.26	0.85	0.00	0.50	2.71	0.43	2.26	10.01								
	T45MY004	1.91	0.47	0.00	0.30	1.31	0.21	1.84	6.04	2.38	0.49	0.00	0.30	4.77	0.77	2.63	11.34
	T45MY005	2.54	0.65	0.00	0.30	1.96	0.31	2.47	8.23	3.18	0.67	0.00	0.30	7.15	1.15	3.52	15.97
	T45MY006	2.63	0.67	0.00	0.30	1.96	0.31	2.55	8.42	3.29	0.68	0.00	0.30	7.15	1.15	3.64	16.21
	T45MY007	2.52	0.64	0.00	0.30	1.96	0.31	2.44	8.17	3.15	0.66	0.00	0.30	7.15	1.15	3.49	15.90
	T45MY015	2.10	0.51	0.00	0.40	1.31	0.21	1.88	6.41	2.63	0.53	0.00	0.40	4.77	0.77	2.71	11.81
	T45MY016	2.14	0.52	0.00	0.40	1.31	0.21	1.92	6.50	2.68	0.54	0.00	0.40	4.77	0.77	2.77	11.93
	T45MY017	2.17	0.57	0.00	0.40	1.96	0.31	1.96	7.37	2.71	0.59	0.00	0.40	7.15	1.15	2.83	14.83
	T45MY018	1.57	0.35	0.00	0.40	1.31	0.21	1.32	5.16								
	T45MY019	1.55	0.35	0.00	0.40	1.31	0.21	1.30	5.12								
	T45XX001	2.64	0.59	0.00	0.40	0.98	0.16	2.52	7.29	3.29	0.61	0.00	0.40	3.57	0.57	3.60	12.04
	T45XX003	3.65	0.80	0.00	0.40	0.98	0.16	3.47	9.46	4.56	0.82	0.00	0.40	3.57	0.57	4.96	14.88
	T45XX008	2.15	0.50	0.00	0.40	0.98	0.16	1.91	6.10	2.69	0.51	0.00	0.40	3.57	0.57	2.76	10.50
	T45XX009	2.76	0.52	0.00	0.40	0.98	0.16	2.27	7.09								
	T45XX010	2.77	0.53	0.00	0.40	0.98	0.16	2.28	7.12								
	T45XX011	2.22	0.50	0.00	0.40	0.87	0.14	1.52	5.65								
	T45XX012	2.37	0.53	0.00	0.40	0.87	0.14	1.62	5.93								
	T45XX013	2.47	0.56	0.00	0.40	0.98	0.16	1.68	6.25								
	T45XX014	2.98	0.69	0.00	0.50	1.30	0.21	2.04	7.72								
T45XX015	3.05	0.70	0.00	0.50	1.30	0.21	2.09	7.85									
T45XX016	3.42	0.78	0.00	0.50	1.47	0.24	2.34	8.75									
T45XX017	3.56	0.83	0.00	0.50	1.71	0.27	2.44	9.31									
T45XX018	3.58	0.84	0.00	0.50	1.71	0.27	2.45	9.35									
T45XX019	4.20	0.96	0.00	0.50	1.71	0.27	2.87	10.51									
T45XX020	3.97	0.93	0.00	0.60	1.95	0.31	2.72	10.48									



**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T45</b>	<i>cont.</i>																
	T45XX021	4.37	1.01	0.00	0.60	1.95	0.31	2.99	11.23								
	T45XX022	4.93	1.14	0.00	0.60	2.28	0.37	3.38	12.70								
	T45XX023	5.89	1.37	0.00	0.60	2.78	0.45	4.03	15.12								
	T45XX024	1.88	0.44	0.00	0.09	0.98	0.16	1.29	4.84								
	T45XX025	2.03	0.47	0.00	0.10	0.98	0.16	1.39	5.13								
	T45XX026	1.16	0.27	0.00	0.40	0.52	0.08	0.80	3.23								
	T45XX027	1.28	0.30	0.00	0.40	0.70	0.11	0.88	3.67								
	T45XX028	1.43	0.35	0.00	0.40	0.91	0.15	0.99	4.23								
	T45XX029	5.10	1.39	4.41	0.48	0.49	0.08	4.99	16.94								
	T45XX030	4.87	1.37	4.41	0.48	0.98	0.16	4.81	17.08								
	T45XX031	6.03	1.68	4.41	0.48	0.98	0.16	5.94	19.68								
	T45XX032	3.72	0.66	0.00	0.50	0.73	0.12	3.03	8.76								
	T45XX033	4.33	0.78	0.00	0.60	0.98	0.16	3.54	10.39								
	T45XX034	1.99	0.47	0.00	0.40	0.98	0.16	1.37	5.37								
T45XX035	2.14	0.50	0.00	0.40	0.98	0.16	1.47	5.65									
<b>T50</b>	T50GM001	1.35	0.28	5.09	0.65	0.18	0.03	1.42	9.00	1.66	0.28	6.54	0.83	0.60	0.10	1.87	11.88
	T50GM004	3.45	0.68	12.09	1.54	0.18	0.03	3.60	21.57	4.24	0.70	15.54	1.98	0.60	0.10	4.75	27.91
	T50GM005	3.71	0.74	12.09	1.54	0.19	0.03	3.88	22.18	4.56	0.75	15.54	1.98	0.66	0.11	5.11	28.71
	T50XX001	1.29	0.27	5.51	0.70	0.33	0.05	1.37	9.52	1.59	0.28	7.09	0.90	1.06	0.17	1.80	12.89
	T50XX002	1.61	0.33	5.51	0.70	0.21	0.03	1.70	10.09	1.99	0.34	7.09	0.90	0.70	0.11	2.24	13.37
	T50XX003	1.85	0.38	7.64	0.97	0.21	0.03	1.94	13.02	2.28	0.38	9.82	1.25	0.68	0.11	2.56	17.08
	T50XX004	1.58	0.33	5.51	0.70	0.34	0.05	1.67	10.18	1.94	0.34	7.09	0.90	1.18	0.19	2.20	13.84
	T50XX005	1.92	0.39	5.51	0.70	0.22	0.04	2.01	10.79	2.36	0.40	7.09	0.90	0.78	0.13	2.65	14.31
	T50XX006	1.99	0.40	7.64	0.97	0.22	0.04	2.09	13.35	2.45	0.41	9.82	1.25	0.76	0.12	2.75	17.56
	T50XX007	1.37	0.29	5.51	0.70	0.33	0.05	1.45	9.70	1.68	0.30	7.09	0.90	1.06	0.17	1.91	13.11
	T50XX008	1.72	0.35	5.51	0.70	0.21	0.03	1.80	10.32	2.11	0.36	7.09	0.90	0.70	0.11	2.38	13.65
	T50XX009	2.13	0.43	7.64	0.97	0.21	0.03	2.24	13.65	2.62	0.44	9.82	1.25	0.68	0.11	2.95	17.87
	T50XX010	1.90	0.39	5.51	0.70	0.34	0.05	2.00	10.89	2.34	0.40	7.09	0.90	1.18	0.19	2.64	14.74
	T50XX011	2.09	0.42	7.64	0.97	0.22	0.04	2.19	13.57	2.57	0.43	9.82	1.25	0.78	0.13	2.89	17.87
	T50XX012	2.20	0.44	7.64	0.97	0.22	0.04	2.30	13.81	2.70	0.45	9.82	1.25	0.76	0.12	3.04	18.14
T50XX013	1.71	0.36	1.45	0.16	0.33	0.05	1.81	5.87	2.11	0.37	2.07	0.23	1.06	0.17	2.38	8.39	
T50XX014	1.96	0.40	1.45	0.16	0.21	0.03	2.05	6.26	2.41	0.41	2.07	0.23	0.70	0.11	2.71	8.64	
T50XX015	2.27	0.46	2.51	0.27	0.21	0.03	2.38	8.13	2.79	0.47	3.59	0.39	0.68	0.11	3.14	11.17	

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T50</b>	<i>cont.</i>																
	T50XX016	2.07	0.43	2.51	0.27	0.34	0.05	2.18	7.85	2.54	0.44	3.59	0.39	1.18	0.19	2.87	11.20
	T50XX017	2.13	0.43	2.51	0.27	0.22	0.04	2.23	7.83	2.62	0.44	3.59	0.39	0.78	0.13	2.94	10.89
	T50XX018	2.56	0.51	2.51	0.27	0.22	0.04	2.69	8.80	3.16	0.53	3.59	0.39	0.76	0.12	3.54	12.09
	T50XX019	2.03	0.41	2.51	0.27	0.21	0.03	2.13	7.59	2.50	0.42	3.59	0.39	0.70	0.11	2.81	10.52
	T50XX020	2.47	0.50	2.51	0.27	0.22	0.04	2.59	8.60	3.04	0.51	3.59	0.39	0.78	0.13	3.41	11.85
	T50XX021	2.24	0.45	2.51	0.27	0.21	0.03	2.35	8.06	2.76	0.46	3.59	0.39	0.68	0.11	3.09	11.08
	T50XX022	3.54	0.88	8.45	1.00	0.46	0.07	3.45	17.85	4.42	0.90	10.93	1.29	1.78	0.29	4.64	24.25
	T50XX023	2.75	0.69	20.36	2.77	0.46	0.07	2.69	29.79	3.44	0.71	26.09	3.55	1.78	0.29	3.62	39.48
	T50XX024	2.37	0.60	20.36	2.77	0.46	0.07	2.32	28.95	2.96	0.62	26.09	3.55	1.78	0.29	3.12	38.41
	T50XX025	4.62	1.16	7.98	0.94	0.75	0.12	4.52	20.09	5.78	1.19	10.32	1.22	3.11	0.50	6.08	28.20
	T50XX026	4.70	1.18	9.85	1.16	0.73	0.12	4.59	22.33	5.88	1.21	12.75	1.51	2.81	0.45	6.18	30.79
	T50XX027	6.36	1.85	17.55	2.23	0.67	0.11	6.19	34.96	7.63	1.88	22.67	2.88	2.57	0.41	8.57	46.61
	T50XX028	6.26	1.85	15.24	1.94	1.02	0.16	6.11	32.58	7.52	1.88	19.68	2.50	3.96	0.64	8.47	44.65
	T50XX029	5.74	1.71	20.53	2.61	1.02	0.16	5.61	37.38	6.89	1.73	26.52	3.37	3.96	0.64	7.77	50.88
	T50XX030	7.40	2.17	23.18	2.95	1.02	0.16	7.22	44.10	8.88	2.21	29.95	3.81	3.96	0.64	9.99	59.44
	T50XX031	6.79	2.00	26.50	3.37	0.98	0.16	6.62	46.42	8.15	2.03	34.22	4.35	3.78	0.61	9.17	62.31
T50XX032	6.91	2.01	17.55	2.23	0.67	0.11	6.72	36.20	8.29	2.04	22.67	2.88	2.57	0.41	9.30	48.16	
T50XX033	7.42	2.18	26.50	3.37	0.98	0.16	7.23	47.84	8.91	2.21	34.22	4.35	3.78	0.61	10.01	64.09	
T50XX035	6.63	1.64	9.85	1.16	0.73	0.12	6.45	26.58	8.29	1.68	12.75	1.51	2.81	0.45	8.69	36.18	
<b>T55</b>	T55CA002	30.60	13.33	24.97	3.85	8.58	1.38	40.62	123.33	34.00	13.40	32.32	4.98	33.72	5.41	47.63	171.46
	T55CA003	41.99	18.42	36.04	5.55	13.31	2.14	55.80	173.25	46.66	18.51	46.64	7.19	52.37	8.41	65.43	245.21
	T55CA007	22.98	9.93	18.71	2.88	9.63	1.55	30.46	96.14	25.53	9.97	24.21	3.73	37.86	6.08	35.72	143.10
	T55CA008	21.98	6.41	14.10	1.21	7.36	1.18	25.95	78.19	23.32	6.44	17.04	1.46	28.47	4.57	29.26	110.56
	T55CA009	26.17	7.59	15.46	1.32	7.98	1.28	30.88	90.68	27.77	7.63	18.68	1.60	30.90	4.96	34.81	126.35
	T55CA010	22.41	6.38	11.61	0.99	4.49	0.72	26.37	72.97	23.78	6.42	14.03	1.20	17.67	2.84	29.73	95.67
	T55CA011	26.36	7.55	14.10	1.21	6.13	0.98	31.04	87.37	27.97	7.58	17.04	1.46	24.10	3.87	34.99	117.01
	T55CA012	31.88	9.31	19.26	1.65	11.30	1.81	37.65	112.86	33.83	9.35	23.27	1.99	44.44	7.13	42.44	162.45
	T55CA013	34.85	10.25	21.97	1.88	14.04	2.25	41.21	126.45	36.99	10.30	26.54	2.27	55.57	8.92	46.46	187.05
	T55JD001	17.07	4.99	14.37	1.23	6.13	0.98	20.16	64.93	18.11	5.01	17.37	1.49	24.10	3.87	22.73	92.68
	T55JD002	19.86	5.76	15.46	1.32	6.13	0.98	23.43	72.94	21.07	5.78	18.68	1.60	24.10	3.87	26.41	101.51
	T55JD003	25.23	7.46	20.61	1.76	10.99	1.76	29.86	97.67	26.77	7.50	24.91	2.13	43.24	6.94	33.66	145.15
	T55JD004	28.15	8.38	22.40	1.92	13.32	2.14	33.35	109.66	29.87	8.42	27.07	2.32	52.40	8.41	37.59	166.08
	T55KM009	23.04	9.95	18.75	2.89	9.63	1.55	30.54	96.35	25.60	10.00	24.26	3.74	37.86	6.08	35.82	143.36

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>T55</b>	<i>cont.</i>																
	T55KM012	32.70	14.58	40.03	6.17	13.31	2.14	43.56	152.49	36.33	14.65	51.81	7.98	52.37	8.41	51.09	222.64
	T55KM013	77.25	33.65	57.09	8.80	21.56	3.46	102.53	304.34	85.83	33.82	73.88	11.38	84.79	13.61	120.24	423.55
	T55KM014	87.52	39.73	76.84	11.84	44.36	7.12	116.93	384.34	97.24	39.93	99.44	15.32	174.48	28.00	137.12	591.53
	T55KM015	31.19	9.10	21.10	1.81	10.99	1.76	36.83	112.78	33.10	9.15	25.50	2.18	43.24	6.94	41.52	161.63
	T55KM016	35.51	10.40	23.32	2.00	13.32	2.14	41.96	128.65	37.68	10.45	28.18	2.41	52.40	8.41	47.30	186.83
	T55VO002	17.55	5.17	13.61	1.17	7.29	1.17	20.76	66.72	18.63	5.20	16.45	1.41	28.77	4.62	23.41	98.49
	T55VO003	18.71	5.46	13.61	1.17	6.54	1.05	22.10	68.64	19.86	5.49	16.45	1.41	25.75	4.13	24.91	98.00
	T55VO004	25.69	7.60	17.47	1.50	11.30	1.81	30.41	95.78	27.27	7.64	21.10	1.81	44.44	7.13	34.28	143.67
	T55VO005	22.46	6.40	16.06	1.37	3.97	0.64	26.43	77.33	23.84	6.43	19.40	1.66	15.63	2.51	29.80	99.27
T55VO006	28.48	8.56	21.42	1.83	15.23	2.44	33.79	111.75	30.22	8.60	25.89	2.22	59.92	9.62	38.09	174.56	
<b>T56</b>																	
	T56CA006	47.04	20.50	40.28	6.21	14.62	2.35	62.44	193.44	52.27	20.61	65.72	9.54	57.08	9.16	73.22	287.60
<b>T57</b>																	
	T57CU001	6.79	1.63	5.32	0.68	0.42	0.07	8.24	23.15								
	T57CU002	8.32	2.00	5.32	0.68	0.42	0.07	10.09	26.90								
	T57CU003	12.34	2.95	8.06	1.02	0.42	0.07	14.96	39.82								
	T57CU004	14.08	3.37	12.40	1.58	0.42	0.07	17.06	48.98								
	T57CU005	15.25	3.65	23.47	2.98	0.42	0.07	18.48	64.32								
<b>T60</b>																	
	T60KI001	14.65	4.31	12.26	1.78	3.03	0.49	16.08	52.60	17.59	4.38	16.22	2.35	11.52	1.85	22.07	75.98
	T60KI002	22.23	6.71	23.12	3.35	8.23	1.32	24.53	89.49	26.68	6.82	30.58	4.44	31.77	5.10	33.66	139.05
	T60KI003	36.67	10.85	31.53	4.57	9.48	1.52	40.28	134.90	44.00	11.01	41.70	6.05	36.59	5.87	55.28	200.50
	T60KI004	6.36	2.31	31.53	4.57	9.48	1.52	7.32	63.09	7.63	2.35	41.70	6.05	36.59	5.87	10.05	110.24
	T60KI006	43.03	13.20	38.53	5.59	19.72	3.17	47.64	170.88	51.64	13.40	50.96	7.39	76.10	12.21	65.38	277.08
	T60SO001	26.01	7.78	23.12	3.35	8.23	1.32	28.63	98.44	31.21	7.90	30.58	4.44	31.77	5.10	39.30	150.30
	T60SO002	35.26	10.81	31.53	4.57	15.96	2.56	39.03	139.72	42.32	10.97	41.70	6.05	61.60	9.89	53.56	226.09
	T60SO003	35.85	10.97	31.53	4.57	15.96	2.56	39.67	141.11	43.02	11.14	41.70	6.05	61.60	9.89	54.44	227.84
	T60SO004	45.78	13.64	38.53	5.59	13.55	2.17	50.37	169.63	54.94	13.85	50.96	7.39	52.31	8.40	69.12	256.97
	T60SO005	46.60	13.86	38.53	5.59	13.55	2.17	51.25	171.55	55.91	14.08	50.96	7.39	52.31	8.40	70.33	259.38
<b>T65</b>																	
	T65WG012	85.64	25.42	13.37	6.65	1.95	0.31	116.96	250.30								
	T65WG013	129.01	38.23	13.37	6.65	1.95	0.31	176.16	365.68								
	T65WG014	140.72	41.69	30.10	15.74	1.95	0.31	192.14	422.65								

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS								
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	
<b>W25</b>	W25AO002	0.72	0.08	0.08	0.79	0.00	0.00	1.20	2.87									
	W25AO003	1.04	0.11	0.08	0.79	0.00	0.00	1.73	3.75									
	W25AO004	1.01	0.11	0.17	1.08	0.00	0.00	1.68	4.05									
	W25AO005	2.07	0.22	0.34	1.65	0.00	0.00	3.45	7.73									
	W25AO006	1.59	0.17	0.08	0.79	0.00	0.00	2.65	5.28									
	W25CJ001	8.24	1.25	1.25	0.71	0.00	0.00	12.47	23.92									
	W25CJ002	13.02	1.97	1.50	0.85	0.00	0.00	19.71	37.05									
	W25CJ003	20.40	3.09	1.50	0.85	0.00	0.00	30.87	56.71									
	W25KZ001	1.20	0.39	0.00	0.00	0.00	0.00	0.89	2.48									
	W25KZ002	1.33	0.43	0.00	0.00	0.00	0.00	0.99	2.75									
	W25KZ003	1.36	0.44	0.00	0.00	0.00	0.00	1.01	2.81									
	W25KZ004	1.93	0.62	0.00	0.00	0.00	0.00	1.43	3.98									
	W25KZ005	2.28	0.73	0.00	0.00	0.00	0.00	1.69	4.70									
	W25KZ006	2.32	0.75	0.00	0.00	0.00	0.00	1.73	4.80									
	W25KZ007	2.47	0.80	0.00	0.00	0.00	0.00	1.84	5.11									
	W25NL001	12.58	1.36	16.91	7.67	0.00	0.00	22.85	61.37									
	W25NL002	21.28	2.30	34.07	4.33	0.00	0.00	38.65	100.63									
	W25NL003	13.65	1.47	15.26	1.94	0.00	0.00	24.80	57.12									
	W25NL004	27.52	3.03	3.46	0.44	0.58	0.09	50.20	85.32									
	W25NL005	52.43	5.66	71.19	9.05	0.00	0.00	95.22	233.55									
	W25SD001	1.13	0.12	0.42	0.19	0.00	0.00	1.88	3.74									
	W25SD002	2.16	0.23	0.25	0.11	0.00	0.00	3.59	6.34									
	W25SD003	1.89	0.20	3.65	0.40	0.00	0.00	3.14	9.28									
	W25SD004	1.47	0.16	2.08	0.23	0.04	0.01	2.47	6.46									
	W25SD005	1.59	0.17	2.87	0.31	0.00	0.00	2.65	7.59									
	W25SD006	0.80	0.09	0.08	4.04	0.00	0.00	1.33	6.34									
	W25SD007	0.84	0.09	0.08	5.04	0.00	0.00	1.40	7.45									
	W25SD008	0.90	0.10	0.08	6.04	0.00	0.00	1.49	8.61									
	W25SD009	2.10	0.23	0.93	6.42	0.00	0.00	3.50	13.18									
	W25XX005	0.34	0.04	1.30	0.14	0.00	0.00	0.57	2.39									
	W25XX006	0.48	0.05	1.30	0.14	0.00	0.00	0.80	2.77									
	W25XX007	0.65	0.07	2.08	0.23	0.00	0.00	1.08	4.11									
W25XX008	0.67	0.07	2.87	0.31	0.00	0.00	1.11	5.03										
W25XX009	1.35	0.15	2.08	0.23	0.00	0.00	2.25	6.06										

**Table 2-2 . HOURLY RATE ELEMENTS**

REGION 2		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
<b>W25</b>	<b>cont.</b>																
	W25XX010	2.07	0.22	6.25	0.68	0.00	0.00	3.44	12.66								
<b>W30</b>																	
	W30SO001	2.90	0.85	1.43	0.17	0.43	0.07	2.73	8.58								
	W30SO002	3.48	1.02	1.43	0.17	0.43	0.07	3.27	9.87								
	W30SO003	3.80	1.11	1.43	0.17	0.43	0.07	3.57	10.58								
	W30SO004	1.93	0.54	0.00	0.01	0.00	0.00	1.50	3.98								
	W30SO005	2.15	0.61	0.00	0.01	0.00	0.00	1.67	4.44								
	W30SO006	2.48	0.70	0.00	0.01	0.00	0.00	1.93	5.12								
<b>W35</b>																	
	W35LC010	0.07	0.01	0.40	0.18	0.00	0.00	0.05	0.71								
	W35LC011	0.36	0.05	0.72	0.33	0.00	0.00	0.27	1.73								
	W35LC012	0.42	0.06	0.93	0.42	0.00	0.00	0.32	2.15								
	W35LC013	0.42	0.06	1.09	0.49	0.00	0.00	0.32	2.38								
	W35LC018	0.12	0.02	0.13	0.06	0.00	0.00	0.09	0.42								
	W35LC020	0.47	0.07	0.69	0.31	0.00	0.00	0.36	1.90								
	W35XX020	0.20	0.04	2.40	0.26	0.00	0.00	0.24	3.14								
	W35XX021	0.51	0.11	3.71	0.40	0.03	0.00	0.62	5.38								
	W35XX022	0.53	0.12	3.93	0.43	0.03	0.00	0.64	5.68								
	W35XX023	0.92	0.20	9.82	1.07	0.03	0.00	1.12	13.16								
	W35XX024	1.37	0.30	4.12	0.45	0.03	0.00	1.66	7.93								
	W35XX025	1.31	0.29	3.61	0.39	0.03	0.00	1.60	7.23								

## CHAPTER 3.0 - ADJUSTMENTS TO HOURLY RATES

### SECTION I. GENERAL

#### 3.1 Contents

This chapter explains the procedures for adjusting the hourly rates shown in tables 2-1 and 2-2.

#### 3.2 Basis for Equipment Rates

The rates shown in tables 2-1 and 2-2 are based on the catalog list price of equipment manufactured in 2004 (3 years old). Area factors used to compute regional ownership and operating expenses are listed in appendix B. All equipment hourly rate elements for average and severe conditions are given in table 2-2. Individual cost elements, which comprise the total hourly rate, are shown in table 2-2. These hourly rate elements are listed by equipment ID No., which corresponds to the equipment shown in tables 2-1 and 2-2.

a. Ownership costs consist of two cost elements: depreciation (DEPR) and facilities capital cost of money (FCCM). These elements are located in tables 2-1 and 2-2.

b. Operating costs consist of five cost elements: fuel (FUEL); filters, oil, and grease (FOG); repairs (REPAIR); tire wear (TIRE WEAR); and tire repair (TIRE REPAIR). These elements are located in table 2-2.

#### 3.3 Equipment Rate Adjustment Tables

Table 3-1 is used to adjust the ownership (DEPR + FCCM) portion of the average hourly rate and table 3-2 is used to adjust the standby hourly rate shown in table 2-1.

#### 3.4 Determination for Use of Equipment Rates in Tables 2-1 and 2-2

The predetermined equipment rates in tables 2-1 and 2-2 may be used when the contractor's actual cost data (cost or pricing data) is insufficient to calculate the rates. If the contractor's actual equipment is listed in tables 2-1 and 2-2, the equipment must be equivalent. However, if the contractor's actual equipment is not listed in tables 2-1 and 2-2, an equivalent piece of equipment may be chosen from the tables. To be considered equivalent, the contractor's equipment must be no more or less than 10 percent of the configuration (size, capacity, and horsepower) and value as compared to the equipment in tables 2-1 and 2-2. In either case, if the equipment is not equivalent, the equipment rate must be calculated using the methodology in chapter 2.

## SECTION II. RATE ADJUSTMENTS

### 3.5 Rate Adjustments

The ownership and/or the operating portion of the hourly rates and standby hourly rates shall be adjusted whenever one or more of the following rate adjustment conditions exist (rate adjustments are explained in detail in the following paragraphs).

- Changes in operating conditions
- Changes in Cost of Money Rate
- Actual work hours (hrs) exceed 40 hr per week (wk)
- Changes in FUEL cost
- Adjustments to FOG cost
- Equipment of different age than table 2-1
- Rate adjustment for overage equipment
- Rate adjustment for overage equipment standby

There are no rate adjustments for appendix B factors except for fuel cost (electric, gas, diesel off-road, and diesel on-road) and the Cost of Money Rate. Also, there are no rate adjustments for repairs, tire wear, or tire repair.

### 3.6 Changes in Operating Conditions

If difficult or severe conditions are justified by the Contracting Officer, selection or calculation of the appropriate rate is necessary. See chapter 2, section II, for definition of average, difficult, or severe conditions and determination of condition.

### 3.7 Change in Cost of Money Rate (CMR)

The Department of the Treasury adjusts the CMR (Prompt Payment Interest Rate) on or about 1 January and 1 July each year; these revisions are printed in the Federal Register. The Internet address for Prompt Payment Interest Rate is [http://www.treasurydirect.gov/govt/rates/tcir/tcir\\_opdprmt2.htm](http://www.treasurydirect.gov/govt/rates/tcir/tcir_opdprmt2.htm).

If the CMR shown in chapter 2, section VII, is not the current rate, the FCCM portion of the total hourly rate shall be adjusted upward or downward to match the CMR for the period of equipment use. See appendix I for a listing of historical CMRs. The total hourly rate adjusted for a differing CMR is computed by the formula:

$$\text{Total Hourly Rate} = \text{DEPR/hr} + [(\text{FCCM/hr}) \times \frac{(\text{NEW CMR})}{(\text{Old CMR})}] + \text{Operating Costs/hr}$$

Example: Assume that table 2-1 includes a crane [*category (CAT) C80, subcategory (SUB) 0.02*] with hourly costs as shown in the following example. The CMR has increased from 5.00 percent to a current rate of 6.00 percent (increase of 20 percent). The total hourly rate for this piece of equipment is determined as follows:

Assumptions for Total Hourly Rate with CMR of 5.00 percent (per hour):

DEPR	\$30.00
FCCM	\$10.00
Operating Costs (FUEL, FOG, TIRE WEAR, TIRE REPAIR, and REPAIR)	<u>\$40.00</u>
Total Hourly Rate (Based on a 40 hr/wk)	\$80.00

Adjustment Calculation of Total Hourly Rate for New CMR of 6.00 percent (per hour):

$$\$30.00/\text{hr} + [(\$10.00/\text{hr}) \times \frac{(6.00\%)}{(5.00\%)}] + \$40.00/\text{hr} = \$82.00/\text{hr}$$

**3.8 Actual Work Hours Greater than 40 Hours per Week**

If the actual number of work hours per week is greater than 40 hours, an adjustment shall be made to the FCCM element of the ownership cost. The FCCM is to be paid up to a maximum of 40 hours per week (7 calendar days). To calculate a multi-shift rate, prorate the 40-hour FCCM over the actual hours per week, as follows:

$$\text{Total Hourly Rate} = \text{DEPR}/\text{hr} + [(\text{FCCM}/\text{hr}) \times \frac{(40 \text{ hr}/\text{wk})}{(\text{Actual Work hr}/\text{wk})}] + \text{Operating Costs}/\text{hr}$$

Example: Assume that table 2-1 includes a crane (*category C80, subcategory 0.02*) with the below hourly costs. This crane worked 10 hours per day, 6 days per week (60 hours per week). The total hourly rate for this piece of equipment is determined as follows:

Assumptions for Total Hourly Rate for 40 Hours/Week:

DEPR	\$30.00
FCCM	\$10.00
Operating Costs (FUEL, FOG, TIRE WEAR, TIRE REPAIR, and REPAIR)	<u>\$40.00</u>
Total Hourly Rate (Based on a 40 hr/wk)	\$80.00

Adjustment Calculation of Total Hourly Rate for 60 Hours/Week:

$$\$30.00/\text{hr} + [(\$10.00/\text{hr}) \times \frac{(40 \text{ hr}/\text{wk})}{(60 \text{ hr}/\text{wk})}] + \$40.00/\text{hr} = \$76.67/\text{hr}$$

**3.9 Changes in Fuel Cost**

Hourly fuel costs (including electricity) shall be adjusted in the event the average fuel prices at the jobsite vary by more than 10 percent above or below the price in appendix B. The contractor shall be required to furnish copies of all fuel supply contracts and invoices to the government to support fuel cost adjustment. Request for upward adjustment in the rates will be considered only when fuel is supplied by recognized distributors of bulk quantities. Mathematically, this is the ratio of the new fuel cost divided by the fuel cost (appendix B). To calculate the total hourly rate, apply the ratio of fuel cost, as follows:



$$\text{Total Hourly Rate} = (\text{DEPR/hr} + \text{FCCM/hr}) + (\text{FOG/hr} + \text{TIRE WEAR/hr} + \text{TIRE REPAIR/hr} + \text{REPAIR/hr}) + \left[ \frac{(\text{New Fuel Cost})}{(\text{Fuel Cost in Appendix B})} \times \text{FUEL/hr} \right]$$

Example: Assume that table 2-1 includes a crane (*category C80, subcategory 0.02*) with the below hourly costs. Assume the fuel cost (diesel off-road) in appendix B is \$2.50/gal and the current fuel cost has increased to \$3.00/gal (increase of 20.00 percent). The total hourly rate for this piece of equipment can be determined as follows:

Assumptions for Fuel Cost (based on \$2.50/gal from appendix B) per hour:

DEPR	\$30.00
FCCM	\$10.00
FOG, TIRE WEAR, TIRE REPAIR, and REPAIR)	\$30.00
FUEL	<u>\$10.00</u>
Total Hourly Rate	<u>\$80.00</u>

Adjustment Calculation for hourly FUEL cost using the new fuel cost of \$3.00/gal:

$$(\$30.00/\text{hr} + \$10.00/\text{hr}) + \$30.00/\text{hr} + \left[ \frac{(\$3.00/\text{gal})}{(\$2.50/\text{gal})} \times \$10.00/\text{hr} \right] = \$82.00/\text{hr}$$

### 3.10 Adjustments to Fuel, Oil, and Grease (FOG) Cost

The hourly FOG allowance shall also be adjusted upward or downward by applying the same ratio (new fuel cost divided by fuel cost shown in appendix B) as the fuel costs change using the methodology as shown in paragraph 3-9.

### 3.11 Equipment of Different Age than Table 2-1

When the age of the equipment is newer or older than the age of the equipment listed in table 2-1, table 3-1 factors may be used to adjust the hourly rate (see paragraph 3-12 for guidance on overage equipment), otherwise the step-by-step calculation method (as shown in figure 2-1) is necessary. To adjust the hourly rate using the tables, the factors given in table 3-1 are multiplied by the hourly ownership costs shown in table 2-1. The result is an ownership rate adjusted for the actual age of the equipment. Note: Age adjustment factors in tables 3-1 and 3-2 vary by region.

a. When the age of a unit of equipment is older than the age of the equipment listed in table 2-1 (purchased new in 2004) and does not exceed the years of economic life, adjust the hourly rate as shown in the next example. The years of economic life is determined by dividing hours of LIFE (from appendix D) by Working Hours Per Year (WHPY) (from appendix B).

Example: Assume that table 2-1 includes a crane (*category C80, subcategory 0.02*) manufactured in 2004 and has a total hourly rate of \$65 per hour and

an ownership rate of \$30 per hour. If an equivalent crane owned by a contractor was manufactured in 2000, the total hourly rate is determined as follows:

Table 2-1 Rate and Adjustment Calculation:

Total hourly rate	= \$65.00/hr
Ownership rate 2004 (DEPR + FCCM)	= -(\$30.00)/hr
Ownership rate 2000 adjusted for age (Ownership rate = \$30) x (0.89 the age adjustment factor from table 3-1, for category C80, subcategory 0.02, and for the year 2000.)	= <u>+\$26.70/hr</u>
Total hourly rate for equipment manufactured in 2000	= \$61.70/hr

b. When the unit of equipment is older than the age of equipment listed in table 2-1 (purchased new in 2004) and exceeds the years of economic life, adjust the hourly rate as shown in the example for overage equipment in paragraph 3-12.

c. When the unit of equipment is newer than the equipment listed in table 2-1 (purchased new in 2004), use the adjustment factor in table 3-1 for the year of manufacture. If the equipment is newer than the most recent year shown in table 3-1, use the adjustment factor in the column of the most recent year. Once the adjustment factor is determined from table 3-1, complete the adjustment calculation as shown in the example above. The step-by-step calculation method shown in figure 2-1 may also be used.

### **3.12 Rate Adjustment for Overage Equipment**

If the contractor's equipment exceeds the economic life in hours (from appendix D), it is considered overage, and the rates shall be adjusted.

a. The total hourly operating rate for overage equipment (no matter how old) shall be computed on the basis that the equipment is as old as possible "without" exceeding the hours of LIFE as shown in appendix D. Tables 3-1 and 3-2 show factors for the economic life for equipment based on the current pamphlet year (e.g., manufactured in 2004). Select a comparable unit of equipment (horsepower, value, capacity, and size) shown in table 2-1, the total hourly rate can be computed as shown in the following example. If there is no comparable unit of equipment in table 2-1, follow the methodology presented in figure 3-1.

b. The ownership portion of the rate shall be adjusted for equipment that is overage. This adjusted rate is not to exceed the rate for the same unit of equipment that is not overage.

Example: Assume that table 2-1 includes a crane (*category C80, subcategory 0.02*) manufactured in 2004, has a total hourly rate of \$65 per hour, and an ownership rate of \$30 per hour. If an equivalent crane owned by a contractor was

manufactured in 1990 (maximum life 1996), this crane is overage and the total hourly rate is determined as follows:

Table 2-1 Rate and Adjustment Calculation:

Total hourly rate	=	\$65.00/hr
Ownership rate 2004 (DEPR + FCCM)	=	-\$30.00/hr
Ownership rate 1990 adjusted for age (Ownership rate = \$30.00) x (0.84) use the oldest age adjustment factor from table 3-1, for category C80, subcategory 0.02, the last year shown.)	=	<u>+\$25.20/hr</u>
Total hourly rate for equipment manufactured in 1990	=	\$60.20/hr

**3.13 Standby Rate Adjustment for Equipment of a Different Age than Table 2-1**

If the equipment age is other than listed in table 2-1 (purchased new in 2004), adjustment to the hourly standby rate is required. When the age of the equipment is newer or older than the age of the equipment listed in table 2-1, table 3-2 factors may be used to adjust the hourly rate, otherwise the step-by-step calculation method is necessary. The result is a standby rate adjusted for the actual age of the equipment.

a. Standby rates for overage equipment are based on the actual age of the equipment. The age adjustment factor given in table 3-2 is multiplied by the hourly standby cost shown in table 2-1 for the listed or comparable unit of equipment. This results in a standby rate adjusted for the actual age of the unit of equipment being considered.

$$\text{Hourly Standby Rate Adjusted for Actual Age} = \text{Hourly Standby Rate} \times \text{Age Adjustment Factor}$$

Example: Assume that table 2-1 includes a crane (*category C80, subcategory 0.02*) manufactured in 2004 and has a standby rate of \$20.00 per hour. If an equivalent crane owned by a contractor was manufactured in 1996, the hourly standby rate is determined as follows:

Hourly Standby Rate (table 2-1)	=	\$20.00/hr
Age Adjustment Factor (table 3-2) for category C80, subcategory 0.02, and for 1996 (actual year of manufacture)	=	0.84

Adjustment Calculation:

Hourly Standby Rate Adjusted for Actual Age (Hourly Standby Rate) x 0.84 (Age Adjustment Factor)	=	\$20.00/hr =\$16.80/hr
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b. When the unit of equipment is newer than the equipment listed in table 2-1 (purchased new in 2004), use the adjustment factor in table 3-2 for the year of manufacture. Once the adjustment factor is determined from table 3-2, complete the

adjustment calculation as shown in the example above. The step-by-step calculation method shown in figure 3-2 may also be used.

c. When the equipment age is older than the last year shown in table 3-2 or newer than the first year shown in table 3-2, the standby rate must be calculated using the step-by-step methodology shown in figure 3-2.

### **3.14 Equipment Purchased Used**

A detailed methodology for computing a total hourly rate for equipment purchased used is not included in this pamphlet.

a. When actual cost data in accordance with chapter 1 is not available, an hourly rate and standby rate for equipment purchased used can be computed on the basis that the equipment was purchased new by the contractor in the year it was manufactured. Consideration for the actual age of used equipment may require an adjustment for overage.

b. The condition of the used equipment at the time of purchase should consider the extent of capital improvements, mechanical condition, and previous hours of operation. These conditions are difficult or impossible to determine and evaluate when computing a total hourly rate based on actual acquisition cost.

### **3.15 Rate Calculation Examples**

Figure 3-1 illustrates how total hourly rates are adjusted for overage equipment. Figure 3-2 gives a sample calculation for computing adjusted standby rates.

### **Table 3-1. Equipment Age Adjustment Factors**

for

Ownership Costs

The factors in this table are used when the age of a unit of equipment is other than the age of the equipment listed in table 2-1 (purchased new in 2004).

The factors are multiplied by the hourly ownership costs (shown in table 2-1) and result in an ownership rate adjusted for the actual age of the equipment being considered.

When the actual “life” in hours of the unit of equipment has exceeded the economic life given in appendix D, the age will be determined as discussed in chapter 3.

Refer to chapter 3, as follows:

**3-11. Equipment of Different Age than Table 2-1**

**3-12. Rate Adjustment for Overage Equipment**

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	<u>Life in Years</u>					<u>Year Purchased New</u>												
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
A10	0.00	AGGREGATE / CHIP SPREADERS																	
A10	0.10	SELF-PROPELLED	1.16	1.12	1.06	1.00	1.00	1.00											
A10	0.20	TOWED & TAILGATE	1.16	1.12	1.06	1.00	1.00												
A15	0.00	AIR COMPRESSORS, PORTABLE																	
A15	0.10	ROTARY SCREW	1.12	1.09	1.04	1.00	0.99	0.99	1.00										
A15	0.20	SHOP TYPE	1.12	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00								
A20	0.00	AIR HOSE, TOOLS & EQUIPMENT																	
A20	0.10	AIR DRILL HOSE	1.11	1.08	1.04	1.00													
A20	0.20	SANDBLAST HOSE	1.11	1.08	1.04	1.00													
A20	0.30	SANDBLASTERS, BREAKERS, & MISC. AIR TOOLS	1.11	1.08	1.04	1.00	0.99												
A25	0.00	ASPHALT PAVING DISTRIBUTORS	1.14	1.11	1.06	1.00	1.00												
A30	0.00	ASPHALT PAVERS & MISCELLANEOUS ROAD EQUIPMENT																	
A30	0.10	SELF PROPELLED	1.15	1.11	1.06	1.00	1.00	1.00											
A30	0.20	TOWED	1.16	1.12	1.06	1.00	1.00	1.00	1.00										
A30	0.30	SLURRY SEAL PAVERS (Cold mix)	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96								
A30	0.40	MISCELLANEOUS ROAD EQUIPMENT	1.16	1.12	1.06	1.00	1.00	1.00	1.00										
A35	0.00	ASPHALT PAVING KETTLES	1.16	1.12	1.06	1.00	1.00												
A40	0.00	ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS	1.16	1.12	1.06	1.00	1.00												
A45	0.00	ASPHALT RECYCLERS & SEALERS	1.16	1.12	1.06	1.00													
B10	0.00	BATCH PLANTS, ASPHALT & CONCRETE																	
B10	0.10	ASPHALT	1.16	1.12	1.06	1.00	1.00	1.00											
B10	0.20	CONCRETE	1.16	1.12	1.06	1.00	1.00	1.00											
B10	0.30	PUGMILL	1.16	1.12	1.06	1.00	1.00	1.00	1.00										
B15	0.00	BROOMS, STREET SWEEPERS & FLUSHERS	1.15	1.12	1.07	1.00	0.96	0.95											
B20	0.00	BRUSH CHIPPERS	1.15	1.12	1.07	1.00	0.96	0.95											
B25	0.00	BUCKETS, CLAMSHELL	1.15	1.13	1.06	1.00	0.97	0.95											
B30	0.00	BUCKETS, CONCRETE																	

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years							Year Purchased New										
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
B30 0.10	GENERAL PURPOSE, MANUAL TRIP	1.14	1.12	1.06	1.00	0.97	0.95												
B30 0.20	LAYDOWN	1.14	1.12	1.06	1.00	0.97	0.95												
B30 0.30	LOWBOY	1.14	1.12	1.06	1.00	0.97	0.95												
B30 0.40	LOW SLUMP	1.14	1.12	1.06	1.00	0.97	0.95												
B35 0.00	BUCKETS, DRAGLINE																		
B35 0.10	LIGHT WEIGHT	1.15	1.13	1.06	1.00	0.97	0.95												
B35 0.20	MEDIUM WEIGHT	1.15	1.13	1.06	1.00	0.97	0.95	0.88											
B35 0.30	HEAVY WEIGHT	1.15	1.13	1.06	1.00	0.97	0.95	0.88											
C05 0.00	CHAIN SAWS	1.15	1.12		1.00														
C10 0.00	COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER																		
C10 0.10	COMPACTORS, RAMMERS / TAMPERS & VIBRATORY PLATES	1.14	1.11	1.07	1.00														
C10 0.20	ROLLERS, VIBRATORY	1.16	1.13	1.07	1.00														
C15 0.00	CONCRETE CLEANERS / ABRASIVE BLASTERS																		
C15 0.10	WALK BEHIND	1.17	1.14	1.08	1.00														
C15 0.20	TRUCK/TRAILER MOUNTED	1.16	1.13	1.08	1.00	0.96	0.94												
C20 0.00	CONCRETE BUGGIES	1.17	1.14	1.08	1.00														
C25 0.00	CONCRETE FINISHERS/SCREEDS/SPREADERS																		
C25 0.10	FINISHERS/TROWELS	1.17	1.13	1.08	1.00														
C25 0.20	VIBRATORY SCREED	1.17	1.13	1.08	1.00														
C25 0.25	VIBRATORY LASER SCREED	1.18	1.15	1.09	1.00	0.95	0.93												
C25 0.30	MATERIAL/TOPPING SPREADERS	1.18	1.15	1.09	1.00	0.95	0.93												
C30 0.00	CONCRETE GRINDERS	1.17	1.13	1.08	1.00														
C35 0.00	CONCRETE GUNITERS / SHOTCRETERS	1.17	1.14	1.08	1.00	0.96													
C40 0.00	CONCRETE MIXING UNITS	1.17	1.13	1.08	1.00														
C45 0.00	CONCRETE PAVING MACHINES	1.16	1.12	1.06	1.00	1.00													
C55 0.00	CONCRETE PUMPS	1.15	1.12	1.07	1.00	0.96	0.95												
C60 0.00	CONCRETE SAWS (Add cost for sawblade wear)	1.15	1.12	1.07	1.00	0.96													

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years					Year Purchased New												
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
C65 0.00	CONCRETE VIBRATORS	1.11	1.08	1.04	1.00														
C70 0.00	CRANES, GANTRY & STRADDLE																		
C75 0.00	CRANES, HYDRAULIC, SELF-PROPELLED	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88								
C80 0.00	CRANES, HYDRAULIC, TRUCK MOUNTED																		
C80 0.01	UNDER 26 TON	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88								
C80 0.02	26 TON THRU 65 TON	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88	0.86	0.84						
C80 0.03	66 TON THRU 125 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81					
C80 0.04	OVER 125 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79				
C85 0.00	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED																		
C85 0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87								
C85 0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83						
C85 0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.89	0.87	0.85	0.83	0.80					
C85 0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.81	0.79				
C85 0.21	LIFTING, 0 THRU 25 TON	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83						
C85 0.22	LIFTING, 26 TON THRU 50 TON	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.89	0.87	0.85	0.83	0.80					
C85 0.23	LIFTING, 51 TON THRU 150 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79				
C85 0.24	LIFTING, OVER 150 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.81	0.80	0.79	0.75		
C90 0.00	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED																		
C90 0.01	UNDER 26 TON	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88								
C90 0.02	26 TON THRU 65 TON	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88	0.86	0.84						
C90 0.03	66 TON THRU 125 TON	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.89	0.87	0.85	0.83	0.80					
C90 0.04	OVER 125 TON	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.81	0.79				
C95 0.00	CRANES, TOWER	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.89	0.87	0.85	0.83	0.80					
D10 0.00	DRILLS, AIR/HYDRAULIC, CRWLR MTD, 0" THRU 6.5" DIA HOLE (Add cost for drill steel and bit wear)																		
D10 0.10	DRILLS, AIR TRACK (Add cost for drill steel and bit wear)	1.26	1.19	1.09	1.00	0.93	0.91	0.82	0.80	0.78	0.77								
D10 0.20	DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82											
D15 0.00	DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82											



**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years							Year Purchased New										
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
D20 0.00	DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)	1.27	1.20	1.10	1.00	0.92	0.90												
D25 0.00	DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82											
D30 0.00	DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82											
D35 0.00	DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)																		
D35 0.11	DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78								
D35 0.12	DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.24	1.18	1.08	1.00	0.93	0.91	0.83	0.81	0.80	0.78	0.77	0.76	0.72					
D35 0.21	ELECTRIC, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78								
D35 0.22	ELECTRIC, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.24	1.18	1.08	1.00	0.93	0.91	0.83	0.81	0.80	0.78	0.77	0.76	0.72					
F10 0.00	FORK LIFTS	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
G10 0.00	GENERATOR SETS																		
G10 0.10	PORTABLE	1.16	1.11	1.06	1.00	0.98	0.98												
G10 0.20	SKID MOUNTED	1.16	1.11	1.06	1.00	0.98	0.98	0.98											
G15 0.00	GRADERS, MOTOR	1.13	1.10	1.05	1.00	0.96	0.95	0.93	0.93	0.91	0.88								
H10 0.00	HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)	1.16	1.13	1.08	1.00	0.96													
H13 0.00	HAZARDOUS/TOXIC WASTE EQUIPMENT																		
H13 0.11	COMPACTORS (Compression force) 0 THRU 50 TONS	1.15	1.12	1.07	1.00	0.96	0.95	0.93											
H13 0.12	COMPACTORS (Compression force) OVER 50 TONS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91									
H13 0.21	FILTER PRESSES, STATIONARY	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
H13 0.22	FILTER PRESSES, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93											
H13 0.30	CENTRIFUGES	1.17	1.14	1.08	1.00														
H13 0.40	SHREDDERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93											
H13 0.51	SOIL TREATMENT PLANT, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93											
H13 0.61	SLUDGE PROCESSING EQUIP, SLUDGE DISPENSERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93											
H13 0.71	WASTE HANDLING EQUIPMENT, DRUM HANDLING	1.16	1.13	1.07	1.00														
H15 0.00	HEATERS, SPACE																		
H20 0.00	HOISTS & AIR WINCHES	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
H25 0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED																		

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years					Year Purchased New												
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
H25 0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	1.18	1.15	1.07	1.00	0.97	0.94												
H25 0.11	OVER 12,500 LBS THRU 40,000 LBS	1.18	1.15	1.07	1.00	0.97	0.94												
H25 0.12	OVER 40,000 LBS THRU 100,000 LBS	1.17	1.15	1.07	1.00	0.97	0.94	0.86	0.88	0.88									
H25 0.13	OVER 100,000 LBS THRU 160,000 LBS	1.17	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82						
H25 0.14	OVER 160,000 LBS	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.82	0.80	0.78				
H25 0.21	ATTACHMENTS, MOBILE SHEARS	1.15	1.13	1.07	1.00	0.96													
H25 0.22	ATTACHMENTS, MATERIAL HANDLING	1.16	1.13	1.08	1.00	0.96													
H25 0.23	ATTACHMENTS, CONCRETE PULVERIZERS	1.15	1.13	1.07	1.00	0.96													
H25 0.24	ATTACHMENTS, COMPACTORS	1.15	1.13	1.07	1.00	0.96													
H30 0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED																		
H30 0.01	0 THRU 1.0 CY	1.18	1.15	1.07	1.00	0.97	0.94												
H30 0.02	OVER 1.0 CY	1.17	1.15	1.07	1.00	0.97	0.94	0.86											
H35 0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED																		
H35 0.11	DIESEL, 0 CY THRU 5.0 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87								
H35 0.12	DIESEL, OVER 5.0 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83						
H35 0.21	ELECTRIC, OVER 2.5 CY	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.89	0.87	0.85	0.83	0.80					
L10 0.00	LAND CLEARING EQUIPMENT	1.13	1.11	1.06	1.00	0.97	0.95	0.94											
L15 0.00	LANDSCAPING EQUIPMENT	1.16	1.13	1.07	1.00														
L20 0.00	LIGHTING SETS, TRAILER MOUNTED																		
L20 0.10	METALLIC VAPOR	1.16	1.13	1.08	1.00	0.96	0.94												
L25 0.00	LINE STRIPING EQUIPMENT	1.16	1.13	1.08	1.00	0.96	0.94												
L30 0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
L35 0.00	LOADERS, FRONT END, CRAWLER TYPE	1.13	1.11	1.06	1.00	0.97	0.95	0.94											
L40 0.00	LOADERS, FRONT END, WHEEL TYPE																		
L40 0.11	ARTICULATED, 0 THRU 225 HP	1.14	1.11	1.06	1.00	0.97	0.95	0.94											
L40 0.12	ARTICULATED, OVER 225 HP	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91								
L40 0.20	SKID STEER	1.13	1.11	1.06	1.00	0.97	0.95												

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY	SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years					Year Purchased New												
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
L40	0.21	SKID STEER ATTACHMENTS	1.14	1.11	1.06	1.00														
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	1.14	1.11	1.06	1.00	0.97	0.95	0.94											
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93									
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	1.13	1.11	1.06	1.00	0.97	0.95												
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	1.14	1.11	1.06	1.00	0.97	0.95	0.94											
L55	0.00	LOADER / BACKHOE, ATTACHMENTS	1.16	1.13	1.08	1.00	0.96													
L60	0.00	LOG SKIDDERS	1.13	1.10	1.05	1.00	0.95	0.93	0.91											
M10	0.00	MARINE EQUIPMENT (NON DREDGING)																		
M10	0.11	AQUATIC MAINTENANCE	1.14	1.09	1.04	1.00	0.94	0.89	0.88											
M10	0.12	AQUATIC MAINTENANCE ATTACHMENTS	1.15	1.09	1.04	1.00	0.94													
M10	0.21	HYDRAULIC CUTTERHEAD DREDGE, 8" OR LESS, TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80						
M10	0.22	HYDRAULIC CUTTERHEAD DREDGE, 8" - 12", TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80						
M10	0.23	HYDRAULIC AUGERHEAD DREDGE, 12" OR LESS, TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80						
M10	0.24	HYDRAULIC FLOATING PUMPS, 12" OR LESS, TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90												
M10	0.25	HYDRUALIC DREDGE PUMPS, 12" OR LESS, TRANSPORTABLE	1.14	1.09	1.04	1.00	0.94													
M10	0.26	HYDRAULIC DREDGE / PUMP ATTACHMENTS	1.14	1.09	1.04	1.00	0.94													
M10	0.31	SMALL MECH DREDGES, CLAMSHELL, BARGE-MTD TO 5 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81					
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	1.16	1.13	1.07	1.00	0.97	0.94	0.88											
M10	0.33	SMALL MECH DREDGES, HOE-MOUNTED DREDGING ATTACH	1.14	1.08	1.04	1.00	0.94	0.90	0.89	0.86	0.85	0.84	0.83	0.80	0.76	0.74				
M10	0.41	WORK FLOATS (NON-DREDGING)	1.14	1.08	1.04	1.00	0.94													
M10	0.42	WORK BARGES (SECTIONAL, NON-DREDGING)	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.67	0.65
M10	0.45	FLAT-DECK OR CARGO BARGE (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.82	0.78	0.77	0.76	0.73	0.69	0.67
M10	0.46	DUMP SCOW (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.82	0.78	0.77	0.76	0.73	0.69	0.67
M10	0.47	DRILL BARGE (NON-DREDGING)	1.12	1.08	1.04	1.00	0.95	0.91	0.89	0.87	0.86	0.85	0.84	0.81	0.78	0.76	0.75	0.72	0.68	0.66
M10	0.48	ALL OTHER BARGES (NON-DREDGING)	1.12	1.08	1.04	1.00	0.95	0.91	0.89	0.87	0.86	0.85	0.84	0.81	0.78	0.76	0.75	0.72	0.68	0.66
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	1.14	1.08	1.04	1.00	0.94	0.90	0.88	0.86	0.85	0.84	0.82	0.79						
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80	0.77					

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years					Year Purchased New												
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
M10 0.54	TUGS, 501 THRU 1,000 HP	1.13	1.08	1.04	1.00	0.95	0.91	0.89	0.87	0.86	0.85	0.84	0.81	0.78	0.76	0.75	0.72	0.68	0.65
M10 0.55	TUGS, 1,000 THRU 2,000 HP	1.12	1.08	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.85	0.84	0.81	0.78	0.77	0.75	0.72	0.69	0.66
P10 0.00	PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS	1.20	1.16	1.09	1.00	0.95													
P20 0.00	PILE HAMMERS, DOUBLE ACTING																		
P20 0.10	DIESEL	1.18	1.14	1.08	1.00	0.96													
P20 0.20	PNEUMATIC (STEAM/AIR)	1.16	1.13	1.08	1.00	0.96													
P25 0.00	PILE HAMMERS, SINGLE ACTING																		
P25 0.10	DIESEL	1.16	1.13	1.08	1.00	0.96													
P25 0.20	PNEUMATIC (STEAM/AIR)	1.15	1.13	1.07	1.00	0.96													
P30 0.00	PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY	1.16	1.13	1.08	1.00	0.96													
P35 0.00	PIPELAYERS	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90								
P40 0.00	PLATFORMS & MAN-LIFTS	1.15	1.13	1.06	1.00	0.97	0.95												
P45 0.00	PUMPS, GROUT	1.15	1.12	1.07	1.00	0.96	0.95												
P50 0.00	PUMPS, WATER, CENTRIFUGAL, TRASH																		
P50 0.11	ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50 0.12	ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50 0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50 0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50 0.31	HOSES, PUMP, SUCTION & DISCHARGE	1.15	1.12	1.07	1.00														
P55 0.00	PUMPS, WATER, SUBMERSIBLE																		
P55 0.01	ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P55 0.02	ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P60 0.00	PUMPS, WATER, CENTRIFUGAL, DEWATERING																		
P60 0.11	SKID MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P60 0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P60 0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P60 0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years					Year Purchased New												
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
P65 0.00	PUMPS, WATER, DIAPHRAGM																		
P65 0.11	SKID MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P65 0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P65 0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P65 0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P70 0.00	PUMPS, WATER (For core drills)																		
P70 0.01	ENGINE DRIVE	1.17	1.14	1.08	1.00	0.96	0.94												
P70 0.02	ELECTRIC DRIVE	1.17	1.14	1.08	1.00	0.96	0.94												
R10 0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	1.13	1.11	1.06	1.00	0.97	0.95												
R15 0.00	ROLLERS, STATIC, TOWED, PNEUMATIC	1.14	1.11	1.05	1.00	0.95	0.92	0.91											
R20 0.00	ROLLERS, STATIC, TOWED, STEEL DRUM	1.14	1.11	1.05	1.00	0.95	0.92	0.91											
R30 0.00	ROLLERS, STATIC, SELF-PROPELLED																		
R30 0.01	PNEUMATIC	1.14	1.10	1.05	1.00	0.95	0.93												
R30 0.02	SMOOTH DRUM	1.13	1.10	1.05	1.00	0.95	0.93	0.91											
R30 0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	1.14	1.10	1.05	1.00	0.95	0.92	0.91	0.89	0.91									
R40 0.00	ROLLERS, VIBRATORY, TOWED	1.14	1.11	1.05	1.00	0.95	0.92												
R45 0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM	1.14	1.11	1.05	1.00	0.95	0.92												
R50 0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM	1.15	1.11	1.05	1.00	0.94	0.92												
R55 0.00	ROOFING EQUIPMENT	1.15	1.13	1.07	1.00	0.96													
S10 0.00	SCRAPERS, ELEVATING																		
S10 0.01	0 THRU 200 HP	1.12	1.10	1.05	1.00	0.96	0.95	0.94											
S10 0.02	OVER 200 HP	1.13	1.10	1.05	1.00	0.96	0.95	0.93	0.93	0.91									
S15 0.00	SCRAPERS, CONVENTIONAL	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.91	0.88	0.86							
S20 0.00	SCRAPERS, TANDEM POWERED	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.91	0.88	0.86							
S25 0.00	SCRAPERS, TRACTOR DRAWN	1.12	1.10	1.05	1.00	0.96	0.95	0.94	0.93	0.91									
S30 0.00	SCREENING & CRUSHING PLANTS																		
S30 0.10	CONVEYORS	1.14	1.12	1.07	1.00	0.96	0.95	0.93											

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years					Year Purchased New												
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
S30 0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	1.14	1.11	1.07	1.00	0.97	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
S30 0.21	CRUSHERS - CONE	1.14	1.11	1.07	1.00	0.97	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
S30 0.22	CRUSHERS - JAW	1.14	1.11	1.07	1.00	0.97	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
S30 0.30	SCREENING PLANT	1.14	1.12	1.07	1.00	0.96	0.95	0.93											
S35 0.00	SNOW REMOVAL EQUIPMENT	1.16	1.13	1.08	1.00	0.96	0.94												
S40 0.00	SOIL & ROAD STABILIZERS	1.12	1.10	1.05	1.00	0.96	0.95	0.94											
S45 0.00	SPLITTERS, ROCK & CONCRETE	1.16	1.13	1.08	1.00	0.96													
T10 0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	1.13	1.11	1.06	1.00	0.97	0.95	0.94											
T15 0.00	TRACTORS, CRAWLER (DOZER) (includes blade)																		
T15 0.01	0 THRU 225 HP	1.15	1.12	1.07	1.00	0.96	0.94	0.94											
T15 0.02	226 HP THRU 425 HP	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.92									
T15 0.03	OVER 425 HP	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88							
T20 0.00	TRACTORS, WHEEL TYPE (DOZER)	1.13	1.10	1.05	1.00	0.95	0.93	0.92	0.90	0.88	0.85								
T25 0.00	TRACTORS, AGRICULTURAL																		
T25 0.10	CRAWLER	1.13	1.10	1.05	1.00	0.95	0.93	0.91											
T25 0.20	WHEEL	1.14	1.10	1.05	1.00	0.95	0.93												
T30 0.00	TRENCHERS, CHAIN TYPE CUTTER	1.14	1.11	1.05	1.00	0.91	0.92												
T35 0.00	TRENCHERS, WHEEL TYPE CUTTER	1.14	1.11	1.05	1.00	0.91	0.92												
T40 0.00	TRUCK OPTIONS																		
T40 0.10	CRANES / HOISTS, PERSONNEL & MATERIAL HANDLING	1.16	1.13	1.08	1.00	0.96	0.94												
T40 0.20	DUMP BODY, REAR	1.15	1.12	1.07	1.00	0.96	0.95												
T40 0.30	FLATBEDS, WITH SIDES	1.16	1.13	1.08	1.00	0.96	0.94												
T40 0.41	HOIST, ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
T40 0.50	TRANSIT MIXERS	1.15	1.12	1.07	1.00	0.96	0.95												
T40 0.60	WATER TANKS	1.17	1.14	1.08	1.00	0.96	0.94												
T40 0.70	ALL OTHER OPTIONS	1.16	1.13	1.08	1.00	0.96	0.94												
T45 0.00	TRUCK TRAILERS																		

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years							Year Purchased New										
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T45 0.10	BOTTOM DUMP	1.14	1.12	1.07	1.00	0.96	0.95	0.93											
T45 0.20	END DUMP	1.14	1.12	1.07	1.00	0.96	0.95	0.93											
T45 0.30	PUP TRAILER	1.15	1.12	1.07	1.00	0.96	0.95												
T45 0.41	LOWBOY, RIGID NECK, DROP DECK	1.14	1.12	1.07	1.00	0.96	0.95	0.93											
T45 0.50	FLATBED TRAILER	1.14	1.12	1.07	1.00	0.96	0.95	0.93											
T45 0.60	MISCELLANEOUS / UTILITY	1.14	1.12	1.07	1.00	0.96	0.95	0.93											
T45 0.70	WATER TANKER TRAILER	1.17	1.14	1.08	1.00	0.96	0.94	0.92											
T45 0.80	DECONTAMINATION FACILITY	1.17	1.14	1.08	1.00	0.96	0.94												
T45 0.90	TANK TRAILERS	1.17	1.14	1.08	1.00	0.96	0.94	0.92											
T50 0.00	TRUCKS, HIGHWAY (Add attachments as required)																		
T50 0.01	0 THRU 10,000 GVW	1.14	1.10	1.05	1.00	0.97	0.96												
T50 0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	1.14	1.10	1.05	1.00	0.97	0.96	0.94											
T50 0.03	OVER 30,000 GVW (Chassis only - Add options)	1.13	1.10	1.05	1.00	0.97	0.96	0.94	0.94	0.96									
T55 0.00	TRUCKS, OFF-HIGHWAY																		
T55 0.10	RIGID FRAME	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.87	0.85	0.83	0.80	0.75				
T55 0.20	ARTICULATED FRAME	1.19	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87									
T56 0.00	TRUCKS, OFF-HIGHWAY/PRIME MOVER TRACTORS & WAGONS																		
T56 0.10	PRIME MOVER TRACTORS	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.87	0.85	0.83	0.80	0.75				
T56 0.20	WAGONS, BOTTOM DUMP	1.19	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87	0.86	0.84							
T56 0.30	WAGONS, REAR DUMP	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
T57 0.00	TRUCKS, VACUUM	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
T60 0.00	TRUCKS, WATER, OFF-HIGHWAY	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
T65 0.00	TUNNEL/MINING EQUIPMENT																		
T65 0.10	DRIFTING & TUNNELING DRILLS	1.23	1.17	1.08	1.00	0.94	0.92	0.84	0.82	0.80	0.79								
T65 0.20	TUNNEL BORING MACHINES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85					
T65 0.30	PRODUCTION DRILLING RIGS	1.24	1.17	1.08	1.00	0.93	0.91	0.84	0.82	0.80									
T65 0.40	ROADHEADERS & CONTINUOUS MINERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87						

**Table 3-1 Equipment Age Adjustment Factors for Ownership Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	<u>Life in Years</u>					<u>Year Purchased New</u>												
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T65 0.50	ROCK BOLTING EQUIPMENT	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
T65 0.61	LOADING & HAULING EQUIPMENT, DIESEL OR GAS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91									
T65 0.62	LOADING & HAULING EQUIPMENT, ELECTRIC	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.92	0.90								
T65 0.63	LOADING & HAULING EQUIPMENT, AIR-POWERED	1.17	1.14	1.08	1.00	0.96	0.94	0.92											
T65 0.70	LOCOMOTIVES	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91									
T65 0.90	OTHER TUNNELING EQUIPMENT	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
W10 0.00	WAGONS, BOTTOM DUMP	1.19	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87									
W15 0.00	WAGONS, REAR DUMP	1.19	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87									
W25 0.00	WATER & CO2 BLASTERS																		
W25 0.10	LOW PRESSURE, (< 5,000 PSI)	1.17	1.14	1.08	1.00														
W25 0.20	HIGH PRESSURE, (>= 5,000 PSI)	1.17	1.14	1.08	1.00														
W25 0.30	STEAM CLEANERS	1.17	1.14	1.08	1.00														
W25 0.40	CO2 BLASTERS	1.16	1.13	1.08	1.00	0.96													
W25 0.50	WET ABRASIVE BLASTING SYSTEM (TORBO)	1.19	1.15	1.09	1.00	0.95	0.93	0.91											
W30 0.00	WATER TANKS																		
W30 0.10	PORTABLE WITH WHEELS	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
W30 0.20	SKID MOUNTED	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
W35 0.00	WELDERS																		
W35 0.10	ENGINE DRIVEN	1.17	1.14	1.08	1.00	0.96	0.94												
W35 0.20	ELECTRIC DRIVEN	1.16	1.13	1.08	1.00	0.96													



## TOTAL HOURLY RATE CALCULATION FOR OVERAGE EQUIPMENT

### EXAMPLE

Assume the following set of given information for the rate calculation example:

1. The unit of equipment is not listed in table 2-1.
2. The equipment is contractor owned.
3. Data for the unit in question:
  - a. Caterpillar front-end wheel loader
  - b. Model 966E, 4WD, 4 CY capacity
  - c. Serial number indicates year of manufacture = 1991
  - d. Actual purchase price in 1991 = \$220,404  
(includes all regional discounts, sales tax and freight)
  - e. Horsepower is 200 hp (fuel is Diesel off-road)
  - f. Drive tire (DT) size = 23.50 x 25, 16 ply, L-3 (appendix F tire code ANNB5)  
DT cost (2007) = 4 tires x \$2,215 /tire = \$8,860
  - g. Weight = 444 cwt
4. Table 3-1, Age Adjustment Factors for Ownership Costs:
  - a. The category L40, subcategory 0.11 (wheel loaders < 225 hp)
  - b. The year corresponding to the last age adjustment factor = 2001
5. Adjust the actual purchase price:
  - a. Economic Indexes from appendix E (wheel loaders EK = 45)
    - (1) For 2001 (first year of economic life), the economic index = 5591
    - (2) For 1991 (year of manufacture), the economic index = 4640
  - b. Purchase price [total equipment value (TEV)] indexed to 2001 (first year of economic life): (Purchase price includes discount, sales tax, and freight for this region).  
  
$$(5591 / 4640) \times \$220,404 = \$265,577 \quad (= 2001 \text{ purchase price})$$
6. Hourly rate is computed as follows in accordance with figure 2-1, Equipment Rate Computation Worksheet.

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment

**Example:** *The piece of equipment shown in this example is based on a known piece of equipment for illustration purposes only.*

USE THIS WORKSHEET TO COMPUTE A HOURLY RATE FOR EQUIPMENT THAT IS NOT IN THIS PAMPHLET OR IS IN THE PAMPHLET BUT NOT EQUIVALENT IN SIZE, CAPACITY, HORSEPOWER OR VALUE. (See Appendix A for a blank form)

**Region 02**

**1. EQUIPMENT INFORMATION AND EXPENSE FACTORS**

ID No: \_\_\_\_\_

a. Equipment Specification Data:

- (1) Equipment Description: Loader, Front-end, Wheel, 4WD, 4 CY capacity
- (2) Model and Series: Caterpillar Model 966E
- (3) Present Year or Year of Use: \_\_\_\_\_ 2007
- (4) Year Manufactured: \_\_\_\_\_ 1991 indexed to \_\_\_\_\_ 2001
- (5) Horsepower - Equipment: \_\_\_\_\_ 200
- (6) Horsepower - Carrier: \_\_\_\_\_ 0
- (7) Fuel - **Equipment:** 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel  
 Enter number from 0 to 6 ==> 3 D-off
- **Carrier:** 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel  
 Enter number from 0 to 6 ==> 0 None
- (8) Shipping Weight (cwt): \_\_\_\_\_ 444 cwt

(9) Tire size and number of tires: (Cost of tires based on present year - see 1.a.(3) and Appendix F)

	Size/Ply	App F Code	No.	Unit Price	Cost
(a) Front (FT):	_____	_____	0	\$0	\$0
(b) Drive (DT):	23.5X25/16Ply	ANNB5	4	\$2,215	\$8,860
(c) Trailing (TT):	_____	_____	0	\$0	\$0
(d) Total Tire Cost:					\$8,860

- (10) List Price + Accessories: \_\_\_\_\_ \$0 OR actual purchase price: \$265,577  
 [at Year (yr) of Manufacture]

**USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:**

- b. Category and Subcategory Number: \_\_\_\_\_ L40 0.11
- c. Hourly Expense Calculation Factors:
  - (1) Economic Key (EK): \_\_\_\_\_ 45
  - (2) Condition (C): **A**=Average **D**=Difficult **S**=Severe \_\_\_\_\_ A AVERAGE
  - (3) Discount Code (DC): **B** = 7.5% (0.075) or **S** = 15.0% (0.15) \_\_\_\_\_ B 0.075
  - (4) Life in Hours (LIFE): \_\_\_\_\_ 9,250
  - (5) Salvage Value Percentage (SLV): \_\_\_\_\_ 0.25
  - (6) Fuel Factor - Equipment [Electric (E) Gas (G) Diesel (D)]: \_\_\_\_\_ 0.031
  - (7) Fuel Factor - Carrier (E G D): \_\_\_\_\_ 0.000
  - (8) Filter, Oil, and Grease (FOG) Factor (E G D): \_\_\_\_\_ 0.111
  - (9) Tire Wear Factor:
    - (a) Front (FT): \_\_\_\_\_ 0.83
    - (b) Drive (DT): \_\_\_\_\_ 0.54
    - (c) Trailing (TT): \_\_\_\_\_ 0.92
  - (10) Repair Cost Factor (RCF): \_\_\_\_\_ 0.70

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment

**Region 02**

**2. EQUIPMENT VALUE**

a. List Price + Accessories: [at Year (yr) of Manufacture]				=	<u>\$0</u>
(1) Discount:	(List Price + Accessories)	x	(Discount Code)		
	1.a.(10)		[1.c.(3)]		
	<u>(\$0)</u>	+	<u>\$0.00</u>	x	<u>(0.075)</u>
				=	<u>\$0</u>
(2) Subtotal [2.a.] - [2.a.(1)]				Subtotal =	<u><u>\$0</u></u>
(3) Sales or Import Tax:	(Subtotal)	x	(Tax Rate)		
	[2.a.(2)]		[Appendix B]		
	<u>(\$0)</u>	x	<u>(5.40%)</u>	=	<u>\$0</u>
(4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)]				Subtotal =	<u><u>\$0</u></u>
b. Freight:	(Shipping Weight)	x	(Freight Rate per cwt)		
	[1.a.(8)]		[Appendix B]		
	<u>(0,000 cwt)</u>	x	<u>(\$0.00 /cwt)</u>	=	<u>\$0</u>
c. <b>TOTAL EQUIPMENT VALUE (TEV):</b> [(2.a.(4)] + [ (2.b)] (See chapter 3 for used and overage equipment rate adjustments.)				<b>TOTAL[2.]: =</b>	<u><b>\$265,577</b></u>

**3. DEPRECIATION PERIOD (N)**

a.	(LIFE)	/	(Working Hours Per Year (WHPY))		
			= N		
	[1.c.(4)]		[Appendix B]		
	<u>(9,250 hr)</u>	/	<u>(1,450 hr/yr)</u>	=	<u>6.38 yrs (N)</u>

**4. OWNERSHIP COST**

a. Depreciation					
(1) Tire Cost Index (TCI):	(Tire Index, Year of Manufacture,	/	(Tire Index, Present Year or Year of Use,		Tire Cost Index (TCI)
	1.a.(4)		1.a.(3)		
	[Appendix E, EK=100]		[Appendix E, EK=100]		
	<u>(2401)</u>	/	<u>(3058)</u>	=	<u>0.785 (TCI)</u>
(2)	[(TEV) [2.c.]	x	[1.0-(SLV) [1.c.(5)]	-	[(TCI) [4.a.(1)] x (Tire Cost)] [1.a.(9)(d)] / (LIFE) [1.c.(4)]
	<u>[\$265,577]</u>	x	<u>[1.0-(0.25)]</u>	-	<u>[(0.785) x (\$8,860)] / (9,250 hr)</u>
				=	<u>\$20.78 /hr</u>

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment

**Region 02**

**4. OWNERSHIP COST (Continued)**

b. Facilities Capital Cost of Money (FCCM):

$$\begin{array}{rcl}
 (1) & \frac{[(N) - 1.0]}{[3.a.]} \times [1.0 + (SLV)] + 2.0}{\frac{[(6.38 \text{ yr}) - 1.0]}{[3.a.]} \times [1.0 + (0.25)] + 2.0} & / \frac{[2.0 \times (N)]}{[3.a.]} \\
 & & = \frac{\text{Avg Value Factor (AVF)}}{0.684 \text{ (AVF)}}
 \end{array}$$

$$\begin{array}{rcl}
 (2) & (TEV) \times (AVF) \times (\text{Adjusted Cost-of-Money}) & / (\text{WHPY}) \\
 & [2.c.] \times [4.b.(1)] \times [\text{Appendix B}] & / [\text{Appendix B}] \\
 & (\$265,577) \times (0.684) \times (4.20\%) & / (1,450 \text{ hr/yr}) = \underline{\underline{\$5.26 /hr}}
 \end{array}$$

c. **TOTAL HOURLY OWNERSHIP COST:** **TOTAL [4.]: = \$26.04 /hr**  
 [4.a.(2)] + [4.b.(2)]

**5. OPERATING COST**

a. Fuel Costs:

(1) Equipment:

$$\begin{array}{rcl}
 (\text{Fuel Factor}) \times (\text{Horsepower (hp)}) & \times & (\text{Fuel Cost per Gallon (gal)}) \\
 [1.c.(6)] \times [1.a.(5)] & \times & [\text{Appendix B}] \\
 (0.031) \times (200 \text{ hp}) & \times & (\$2.50 /gal) = \underline{\underline{\$15.50 /hr}}
 \end{array}$$

(2) Carrier:

$$\begin{array}{rcl}
 (\text{Fuel Factor}) \times (\text{hp}) & \times & (\text{Fuel Cost per gal}) \\
 [1.c.(7)] \times [1.a.(6)] & \times & [\text{Appendix B}] \\
 (0.000) \times (0 \text{ hp}) & \times & (\$0.00 /gal) = \underline{\underline{\$0.00 /hr}}
 \end{array}$$

(3) Total Hourly Fuel Cost: **Total [5.a.] = \$15.50 /hr**  
 [(5.a (1)) + [5.a (2)]

b. FOG Cost:

(1) Equipment:

$$\begin{array}{rcl}
 (\text{FOG Factor}) \times (\text{Equipment Hourly Fuel Cost}) & \times & (\text{Labor Adjustment Factor (LAF)}) \\
 [1.c.(8)] \times [5.a.(1)] & \times & [\text{Appendix B}] \\
 (0.111) \times (\$15.50 /hr) & \times & (\$ 1.07 /hr) = \underline{\underline{\$1.84 /hr}}
 \end{array}$$

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment

**Region 02**

**5. OPERATING COST (Continued)**

(2) Carrier:

$$\begin{array}{rclclcl}
 \text{(FOG Factor)} & & \text{(Carrier Hourly} & & \text{(LAF)} & & \\
 & \times & \text{Fuel Cost)} & \times & & & \\
 \text{[1.c.(8)]} & & \text{[5.a.(2)]} & & \text{[Appendix B]} & & \\
 \underline{(0.111)} & \times & \underline{(\$0.00/hr)} & \times & \underline{(1.07)} & = & \underline{\underline{\$0.00/hr}}
 \end{array}$$

(3) Total Hourly FOG Cost: Total [5.b.] = \$1.84/hr  
 [(5.b.(1)) + (5.b.(2))]

c. Alternative Fuel/FOG Cost: Total [5.c.] = \$0.00/hr  
 (See chapter 2, paragraph 2.24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):  
 (EK is from [1c. (1)])

$$\begin{array}{rclclcl}
 \text{(Economic Index,} & / & \text{(Economic Index, Year} & & & & \\
 \text{Present Year or Year} & & \text{of Manufacture, 1.a.(4))} & & & & \\
 \text{of Use, 1.a.(3))} & & & & & & \\
 \text{[Appendix E, EK=1.c.(1)]} & & \text{[Appendix E, EK=1.c.(1)]} & & & & \\
 \underline{(6489)} & / & \underline{(5591)} & & & = & \underline{\underline{1.161 (EAF)}}
 \end{array}$$

*(See table 3-1 for last year of economic life.)*

(2) Repair Factor (RF):

$$\begin{array}{rclclcl}
 \text{(RCF)} & \times & \text{(EAF)} & \times & \text{(LAF)} & = & \text{Repair Factor} \\
 & & & & & & \underline{\underline{\text{(RF)}}} \\
 \text{[1.c.(10)]} & & \text{[5.d.(1)]} & & \text{[Appendix B]} & & \\
 \underline{(0.70)} & \times & \underline{(1.161)} & \times & \underline{(1.07)} & = & \underline{\underline{0.870 (RF)}}
 \end{array}$$

(3) Repair Cost:

$$\begin{array}{rclclclcl}
 \text{[(TEV)} & - & \text{[(TCI)} & \times & \text{(Tire Cost)]} & \times & \text{(RF)} & / & \text{(LIFE)} \\
 \text{[2.c.] } & & \text{[4.a.(1)]} & & \text{[1.a.(9)(d)]} & & \text{[5.d.(2)]} & & \text{[1.c.(4)]} \\
 \underline{[\$265,577]} & - & \underline{[(0.785)} & \times & \underline{[\$8,860]} & \times & \underline{(0.870)} & / & \underline{(9,250)}
 \end{array}$$

(4) Total Hourly Repair Cost: Total [5.d.] = \$24.32/hr

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment

**Region 02**

**5. OPERATING COST (Continued)**

e. Tire Wear Cost: *(Use current price levels. See Appendix F.)*

(1) Front Tires (FT):

$$\frac{\begin{matrix} [1.5 \times (\text{FT Cost})] \\ [1.a.(9)(a)] \\ \underline{[1.5 \times (\$0)]} \end{matrix}}{\begin{matrix} [1.8 \times (\text{FT Wear Factor})] \\ [1.c.(9)(a)] \\ \underline{[1.8 \times (0.83)]} \end{matrix}} \times \begin{matrix} (\text{Maximum Tire Life Hours}) \\ [\text{Appendix F}] \\ \underline{(0 \text{ hr})} \end{matrix} = \underline{\underline{\$0.00 / \text{hr}}}$$

(2) Drive Tires (DT):

$$\frac{\begin{matrix} [1.5 \times (\text{DT Cost})] \\ [1.a.(9)(b)] \\ \underline{[1.5 \times (\$8,860)]} \end{matrix}}{\begin{matrix} [1.8 \times (\text{DT Wear Factor})] \\ [1.c.(9)(b)] \\ \underline{[1.8 \times (0.54)]} \end{matrix}} \times \begin{matrix} (\text{Maximum Tire Life Hours}) \\ [\text{Appendix F}] \\ \underline{(3,200 \text{ hr})} \end{matrix} = \underline{\underline{\$4.27 / \text{hr}}}$$

(3) Trailing Tires (TT):

$$\frac{\begin{matrix} [1.5 \times (\text{TT Cost})] \\ [1.a.(9)(c)] \\ \underline{[1.5 \times (\$0)]} \end{matrix}}{\begin{matrix} [1.8 \times (\text{TT Wear Factor})] \\ [1.c.(9)(c)] \\ \underline{[1.8 \times (0.92)]} \end{matrix}} \times \begin{matrix} (\text{Maximum Tire Life Hours}) \\ [\text{Appendix F}] \\ \underline{(0 \text{ hr})} \end{matrix} = \underline{\underline{\$0.00 / \text{hr}}}$$

(4) Total Tire Wear Cost:  
 [Sum 5.e.(1) through 5.e.(3)]

**Total [5.e.] = \$4.27 /hr**

f. Tire Repair Cost:

$$\begin{matrix} (\text{Total Tire Wear Cost} \\ \text{per Hour}) \\ [5.e.(4)] \\ \underline{(\$4.27 / \text{hr})} \end{matrix} \times \begin{matrix} 0.15 \times (\text{LAF}) \\ [\text{Appendix B}] \\ \underline{0.15 \times (1.07)} \end{matrix} = \underline{\underline{\text{Total [5.f.] = \$0.69 /hr}}}$$

**g. TOTAL HOURLY OPERATING COST:**  
 [Sum 5.a. through 5.f.]

**Total [5.] = \$46.62 /hr**

**Region 02**

**6. HOURLY RATES**

a. Total Hourly Rate: *[based on 40 hours per week (wk)]*

$$\begin{array}{l} \text{(Ownership Cost)} + \text{(Operating Cost)} \\ \text{[4.c.]} \qquad \qquad \qquad \text{[5.g.]} \\ \\ \underline{\$26.04 /hr} \quad + \quad \underline{\$46.62 /hr} \end{array}$$

$$= \underline{\$72.66 /hr}$$

b. Other Work Shifts Hourly Rate:

*(Refer to Chapter 3, Adjustments to Rates, for methodology.)*

$$\begin{array}{l} \text{[(Depreciation)} + \text{[(FCCM)} \quad \times \quad (40 \text{ hr/wk}) \quad / \quad (\text{Work hr/wk})] + \text{(Operating Cost)} \\ \text{[4.a.(2)]} \qquad \qquad \qquad \text{[4.b.(2)]} \qquad \qquad \qquad \text{(example:60 hr/wk)} \qquad \qquad \qquad \text{[5.g.]} \\ \\ \underline{\$0.00 /hr} \quad + \quad \underline{\$0.00 /hr} \quad \times \quad \underline{(40 \text{ hr/wk})} \quad / \quad \underline{( \text{hr/wk} )} \quad + \quad \underline{\$0.00 /hr} \\ \text{(example:60 hr/wk)} \end{array}$$

$$= \underline{\$0.00 /hr}$$

c. Standby Hourly Rate:

*(Refer to Chapter 2, paragraph 2.28 for guidance on use.)*

$$\begin{array}{l} \text{[(Depreciation)} \quad \times \quad 0.50] \qquad \qquad \qquad + \quad \text{(FCCM)} \\ \text{[4.a.(2)]} \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \text{[4.b.(2)]} \\ \\ \underline{\$0.00 /hr} \quad \times \quad 0.50] \qquad \qquad \qquad + \quad \underline{\$0.00 /hr} \end{array}$$

$$= \underline{\$0.00 /hr}$$

*(Refer to Chapter 3, paragraph 3.12 for guidance for overage equipment.)*

**See Figure 3-2 for standby calculations for overage equipment**

**See Chapter 3 if rate adjustments are necessary.**

**Figure 3-1. Total Hourly Rate Calculation for Overage Equipment**

**Table 3-2. Equipment Age Adjustment Factors**

for

Standby costs

The factors in this table are used when the age of a unit of equipment is other than the age of the equipment listed in table 2-1.

These factors are multiplied by the hourly standby costs shown in table 2-1 and result in a standby rate adjusted for the actual age of the equipment being considered.

When the actual "life" in hours of the unit of equipment has exceeded the economic life given in appendix D, the age will be determined as discussed in chapter 3.

Refer to chapter 3, as follows:

**3-13. Rate Adjustments Overage Equipment Standby**



**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																		
		Life in Years																		
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	
A10	0.00	AGGREGATE / CHIP SPREADERS																		
A10	0.10	SELF-PROPELLED	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.88	0.86	0.84	0.82	0.79	0.80	0.75
A10	0.20	TOWED & TAILGATE	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
A15	0.00	AIR COMPRESSORS, PORTABLE																		
A15	0.10	ROTARY SCREW	1.12	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.93	0.93
A15	0.20	SHOP TYPE	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.93
A20	0.00	AIR HOSE, TOOLS & EQUIPMENT																		
A20	0.10	AIR DRILL HOSE	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.94
A20	0.20	SANDBLAST HOSE	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.94
A20	0.30	SANDBLASTERS, BREAKERS, & MISC. AIR TOOLS	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.93
A25	0.00	ASPHALT PAVING DISTRIBUTORS	1.14	1.10	1.06	1.00	1.00	1.00	1.00	0.99	0.97	0.95	0.92	0.89	0.87	0.85	0.83	0.81	0.81	0.77
A30	0.00	ASPHALT PAVERS & MISCELLANEOUS ROAD EQUIPMENT																		
A30	0.10	SELF PROPELLED	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.85	0.83	0.80	0.80	0.76
A30	0.20	TOWED	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.84	0.83	0.80	0.80	0.76
A30	0.30	SLURRY SEAL PAVERS (Cold mix)	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.85	0.83	0.80	0.80	0.76
A30	0.40	MISCELLANEOUS ROAD EQUIPMENT	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.84	0.83	0.80	0.80	0.76
A35	0.00	ASPHALT PAVING KETTLES	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
A40	0.00	ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
A45	0.00	ASPHALT RECYCLERS & SEALERS	1.16	1.12	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.78	0.79	0.74
B10	0.00	BATCH PLANTS, ASPHALT & CONCRETE																		
B10	0.10	ASPHALT	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.88	0.86	0.84	0.82	0.79	0.80	0.75
B10	0.20	CONCRETE	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.88	0.86	0.84	0.82	0.79	0.80	0.75
B10	0.30	PUGMILL	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.84	0.83	0.80	0.80	0.76
B15	0.00	BROOMS, STREET SWEEPERS & FLUSHERS	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
B20	0.00	BRUSH CHIPPERS	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
B25	0.00	BUCKETS, CLAMHELL	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.86	0.86	0.86	0.82	0.76	0.72
B30	0.00	BUCKETS, CONCRETE																		

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																		
		Life in Years																		
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	
B30	0.10	GENERAL PURPOSE, MANUAL TRIP	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B30	0.20	LAYDOWN	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B30	0.30	LOWBOY	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B30	0.40	LOW SLUMP	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B35	0.00	BUCKETS, DRAGLINE																		
B35	0.10	LIGHT WEIGHT	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.86	0.86	0.86	0.82	0.76	0.72
B35	0.20	MEDIUM WEIGHT	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.87	0.86	0.86	0.82	0.76	0.72
B35	0.30	HEAVY WEIGHT	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.87	0.86	0.86	0.83	0.76	0.72
C05	0.00	CHAIN SAWS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
C10	0.00	COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER																		
C10	0.10	COMPACTORS, RAMMERS / TAMPERS & VIBRATORY PLATES	1.14	1.11	1.06	1.00	0.97	0.95	0.94	0.93	0.93	0.91	0.89	0.88	0.86	0.84	0.82	0.80	0.78	0.76
C10	0.20	ROLLERS, VIBRATORY	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
C15	0.00	CONCRETE CLEANERS / ABRASIVE BLASTERS																		
C15	0.10	WALK BEHIND	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
C15	0.20	TRUCK/TRAILER MOUNTED	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
C20	0.00	CONCRETE BUGGIES	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
C25	0.00	CONCRETE FINISHERS/SCREEDS/SPREADERS																		
C25	0.10	FINISHERS/TROWELS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.74	0.72
C25	0.20	VIBRATORY SCREED	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.74	0.72
C25	0.25	VIBRATORY LASER SCREED	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92	0.91	0.89	0.87	0.85	0.82	0.80	0.78	0.76	0.73	0.70
C25	0.30	MATERIAL/TOPPING SPREADERS	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92	0.91	0.89	0.87	0.85	0.82	0.80	0.78	0.76	0.73	0.70
C30	0.00	CONCRETE GRINDERS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.74	0.72
C35	0.00	CONCRETE GUNITERS / SHOTCRETTERS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.85	0.83	0.81	0.79	0.77	0.74	0.71
C40	0.00	CONCRETE MIXING UNITS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.74	0.72
C45	0.00	CONCRETE PAVING MACHINES	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
C55	0.00	CONCRETE PUMPS	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
C60	0.00	CONCRETE SAWS (Add cost for sawblade wear)	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years					Year Purchased New													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	
C65 0.00	CONCRETE VIBRATORS	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.93	
C70 0.00	CRANES, GANTRY & STRADDLE																			
C75 0.00	CRANES, HYDRAULIC, SELF-PROPELLED	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68	
C80 0.00	CRANES, HYDRAULIC, TRUCK MOUNTED																			
C80 0.01	UNDER 26 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68	
C80 0.02	26 TON THRU 65 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69	
C80 0.03	66 TON THRU 125 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.86	0.85	0.82	0.80	0.80	0.76	0.72	0.69	
C80 0.04	OVER 125 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.86	0.85	0.82	0.81	0.80	0.76	0.72	0.69	
C85 0.00	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED																			
C85 0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79	0.78	0.75	0.70	0.67	
C85 0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.81	0.80	0.79	0.75	0.71	0.68	
C85 0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68	
C85 0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69	
C85 0.21	LIFTING, 0 THRU 25 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.81	0.80	0.79	0.75	0.71	0.68	
C85 0.22	LIFTING, 26 TON THRU 50 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68	
C85 0.23	LIFTING, 51 TON THRU 150 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.86	0.85	0.82	0.81	0.80	0.76	0.72	0.69	
C85 0.24	LIFTING, OVER 150 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.89	0.87	0.85	0.82	0.81	0.80	0.76	0.72	0.69	
C90 0.00	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED																			
C90 0.01	UNDER 26 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68	
C90 0.02	26 TON THRU 65 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69	
C90 0.03	66 TON THRU 125 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68	
C90 0.04	OVER 125 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69	
C95 0.00	CRANES, TOWER	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68	
D10 0.00	DRILLS, AIR/HYDRAULIC, CRWLR MTD, 0" THRU 6.5" DIA HOLE (Add cost for drill steel and bit wear)																			
D10 0.10	DRILLS, AIR TRACK (Add cost for drill steel and bit wear)	1.24	1.18	1.08	1.00	0.93	0.91	0.84	0.82	0.80	0.79	0.77	0.76	0.73	0.71	0.69	0.67	0.67	0.64	
D10 0.20	DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.62	
D15 0.00	DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.62	

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																		
		Life in Years					Year Purchased New													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	
D20	0.00	DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)	1.26	1.19	1.09	1.00	0.93	0.91	0.82	0.80	0.79	0.77	0.76	0.74	0.71	0.68	0.67	0.65	0.64	0.61
D25	0.00	DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.62
D30	0.00	DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.62
D35	0.00	DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)																		
D35	0.11	DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.23	1.17	1.08	1.00	0.94	0.92	0.84	0.82	0.81	0.79	0.78	0.77	0.73	0.72	0.70	0.68	0.68	0.65
D35	0.12	DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.22	1.17	1.08	1.00	0.94	0.92	0.85	0.83	0.81	0.80	0.79	0.77	0.74	0.72	0.71	0.69	0.69	0.66
D35	0.21	ELECTRIC, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.23	1.17	1.08	1.00	0.94	0.92	0.84	0.82	0.81	0.79	0.78	0.77	0.73	0.72	0.70	0.68	0.68	0.65
D35	0.22	ELECTRIC, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.22	1.17	1.08	1.00	0.94	0.92	0.85	0.83	0.81	0.80	0.79	0.77	0.74	0.72	0.71	0.69	0.69	0.66
F10	0.00	FORK LIFTS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
G10	0.00	GENERATOR SETS																		
G10	0.10	PORTABLE	1.16	1.11	1.06	1.00	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.97	0.96	0.93	0.92	0.91	0.89	0.88
G10	0.20	SKID MOUNTED	1.16	1.11	1.06	1.00	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.97	0.96	0.93	0.92	0.91	0.89	0.88
G15	0.00	GRADERS, MOTOR	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.89	0.86	0.85	0.80	0.78	0.75	0.70	0.67	0.65
H10	0.00	HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
H13	0.00	HAZARDOUS/TOXIC WASTE EQUIPMENT																		
H13	0.11	COMPACTORS (Compression force) 0 THRU 50 TONS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.12	COMPACTORS (Compression force) OVER 50 TONS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.74
H13	0.21	FILTER PRESSES, STATIONARY	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
H13	0.22	FILTER PRESSES, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.30	CENTRIFUGES	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
H13	0.40	SHREDDERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.51	SOIL TREATMENT PLANT, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.61	SLUDGE PROCESSING EQUIP, SLUDGE DISPENSERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.71	WASTE HANDLING EQUIPMENT, DRUM HANDLING	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
H15	0.00	HEATERS, SPACE																		
H20	0.00	HOISTS & AIR WINCHES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
H25	0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED																		

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																	
		Life in Years																	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
H25 0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	1.17	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82	0.79	0.77	0.76	0.72	0.67	0.64
H25 0.11	OVER 12,500 LBS THRU 40,000 LBS	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82	0.79	0.77	0.76	0.72	0.67	0.64
H25 0.12	OVER 40,000 LBS THRU 100,000 LBS	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83	0.80	0.78	0.77	0.73	0.69	0.66
H25 0.13	OVER 100,000 LBS THRU 160,000 LBS	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79	0.78	0.74	0.70	0.67
H25 0.14	OVER 160,000 LBS	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.81	0.80	0.79	0.75	0.71	0.68
H25 0.21	ATTACHMENTS, MOBILE SHEARS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
H25 0.22	ATTACHMENTS, MATERIAL HANDLING	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
H25 0.23	ATTACHMENTS, CONCRETE PULVERIZERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
H25 0.24	ATTACHMENTS, COMPACTORS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
H30 0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED																		
H30 0.01	0 THRU 1.0 CY	1.17	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82	0.79	0.77	0.76	0.72	0.67	0.64
H30 0.02	OVER 1.0 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83	0.80	0.78	0.77	0.73	0.68	0.65
H35 0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED																		
H35 0.11	DIESEL, 0 CY THRU 5.0 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79	0.78	0.75	0.70	0.67
H35 0.12	DIESEL, OVER 5.0 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.81	0.80	0.79	0.75	0.71	0.68
H35 0.21	ELECTRIC, OVER 2.5 CY	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68
L10 0.00	LAND CLEARING EQUIPMENT	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.83	0.80	0.77	0.72	0.70	0.68
L15 0.00	LANDSCAPING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
L20 0.00	LIGHTING SETS, TRAILER MOUNTED																		
L20 0.10	METALLIC VAPOR	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
L25 0.00	LINE STRIPING EQUIPMENT	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
L30 0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
L35 0.00	LOADERS, FRONT END, CRAWLER TYPE	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.83	0.80	0.77	0.72	0.70	0.68
L40 0.00	LOADERS, FRONT END, WHEEL TYPE																		
L40 0.11	ARTICULATED, 0 THRU 225 HP	1.13	1.11	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.84	0.82	0.80	0.77	0.75	0.73
L40 0.12	ARTICULATED, OVER 225 HP	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.86	0.83	0.82	0.79	0.77	0.75
L40 0.20	SKID STEER	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.85	0.83	0.81	0.78	0.76	0.74

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years		Year Purchased New																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	
L40	0.21	SKID STEER ATTACHMENTS	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.88	0.87	0.84	0.82	0.80	0.77	0.75	0.72
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.85	0.82	0.80	0.78	0.75	0.73
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.95	0.94	0.92	0.90	0.89	0.86	0.84	0.82	0.79	0.77	0.75
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.86	0.83	0.80	0.76	0.72	0.69	0.67
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.85	0.82	0.80	0.78	0.75	0.73
L55	0.00	LOADER / BACKHOE, ATTACHMENTS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
L60	0.00	LOG SKIDDERS	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.82	0.81	0.78	0.77	0.75	0.74
M10	0.00	MARINE EQUIPMENT (NON DREDGING)																		
M10	0.11	AQUATIC MAINTENANCE	1.14	1.08	1.04	1.00	0.94	0.90	0.89	0.86	0.85	0.84	0.83	0.79	0.76	0.74	0.73	0.70	0.66	0.63
M10	0.12	AQUATIC MAINTENANCE ATTACHMENTS	1.15	1.09	1.04	1.00	0.94	0.89	0.88	0.85	0.84	0.83	0.81	0.78	0.74	0.72	0.71	0.67	0.63	0.60
M10	0.21	HYDRAULIC CUTTERHEAD DREDGE, 8" OR LESS, TRANSPORTABLE	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.68	0.65
M10	0.22	HYDRAULIC CUTTERHEAD DREDGE, 8" - 12", TRANSPORTABLE	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.68	0.65
M10	0.23	HYDRAULIC AUGERHEAD DREDGE, 12" OR LESS, TRANSPORTABLE	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.68	0.65
M10	0.24	HYDRAULIC FLOATING PUMPS, 12" OR LESS, TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80	0.77	0.75	0.74	0.71	0.66	0.64
M10	0.25	HYDRUALIC DREDGE PUMPS, 12" OR LESS, TRANSPORTABLE	1.14	1.08	1.04	1.00	0.94	0.90	0.88	0.86	0.84	0.84	0.82	0.79	0.75	0.74	0.72	0.69	0.65	0.62
M10	0.26	HYDRAULIC DREDGE / PUMP ATTACHMENTS	1.14	1.08	1.04	1.00	0.94	0.90	0.88	0.86	0.84	0.84	0.82	0.79	0.75	0.74	0.72	0.69	0.65	0.62
M10	0.31	SMALL MECH DREDGES, CLAMSHELL, BARGE-MTD TO 5 CY	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.86	0.85	0.82	0.80	0.80	0.76	0.72	0.69
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79	0.79	0.75	0.70	0.68
M10	0.33	SMALL MECH DREDGES, HOE-MOUNTED DREDGING ATTACH	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.67	0.65
M10	0.41	WORK FLOATS (NON-DREDGING)	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.84	0.83	0.80	0.76	0.75	0.74	0.70	0.66	0.63
M10	0.42	WORK BARGES (SECTIONAL, NON-DREDGING)	1.12	1.07	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.81	0.78	0.77	0.76	0.72	0.69	0.66
M10	0.45	FLAT-DECK OR CARGO BARGE (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.87	0.86	0.85	0.82	0.79	0.77	0.76	0.73	0.70	0.67
M10	0.46	DUMP SCOW (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.87	0.86	0.85	0.82	0.79	0.77	0.76	0.73	0.70	0.67
M10	0.47	DRILL BARGE (NON-DREDGING)	1.12	1.07	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.81	0.78	0.77	0.76	0.73	0.69	0.66
M10	0.48	ALL OTHER BARGES (NON-DREDGING)	1.12	1.07	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.81	0.78	0.77	0.76	0.73	0.69	0.66
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80	0.77	0.75	0.74	0.71	0.67	0.64
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.72	0.68	0.65

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																	
		Life in Years																	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
M10 0.54	TUGS, 501 THRU 1,000 HP	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.82	0.78	0.77	0.76	0.73	0.69	0.67
M10 0.55	TUGS, 1,000 THRU 2,000 HP	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.87	0.86	0.85	0.82	0.79	0.77	0.76	0.73	0.70	0.67
P10 0.00	PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS	1.19	1.15	1.09	1.00	0.95	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.78	0.76	0.73	0.70	0.67
P20 0.00	PILE HAMMERS, DOUBLE ACTING																		
P20 0.10	DIESEL	1.17	1.14	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.80	0.79	0.76	0.73	0.71
P20 0.20	PNEUMATIC (STEAM/AIR)	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
P25 0.00	PILE HAMMERS, SINGLE ACTING																		
P25 0.10	DIESEL	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
P25 0.20	PNEUMATIC (STEAM/AIR)	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
P30 0.00	PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
P35 0.00	PIPELAYERS	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.84	0.81	0.78	0.73	0.71	0.69
P40 0.00	PLATFORMS & MAN-LIFTS	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
P45 0.00	PUMPS, GROUT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P50 0.00	PUMPS, WATER, CENTRIFUGAL, TRASH																		
P50 0.11	ENGINE DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50 0.12	ELECTRIC DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50 0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50 0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50 0.31	HOSES, PUMP, SUCTION & DISCHARGE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.79	0.77	0.74
P55 0.00	PUMPS, WATER, SUBMERSIBLE																		
P55 0.01	ENGINE DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P55 0.02	ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P60 0.00	PUMPS, WATER, CENTRIFUGAL, DEWATERING																		
P60 0.11	SKID MOUNTED, ENGINE DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P60 0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P60 0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P60 0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.85	0.82	0.81	0.79	0.76	0.74

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																		
		Life in Years																		
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	
P65	0.00	PUMPS, WATER, DIAPHRAGM																		
P65	0.11	SKID MOUNTED, ENGINE DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P65	0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P65	0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P65	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P70	0.00	PUMPS, WATER (For core drills)																		
P70	0.01	ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
P70	0.02	ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
R10	0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.86	0.83	0.80	0.76	0.72	0.69	0.67
R15	0.00	ROLLERS, STATIC, TOWED, PNEUMATIC	1.13	1.10	1.05	1.00	0.95	0.93	0.91	0.89	0.91	0.89	0.87	0.86	0.84	0.81	0.76	0.76	0.80	0.79
R20	0.00	ROLLERS, STATIC, TOWED, STEEL DRUM	1.13	1.10	1.05	1.00	0.95	0.93	0.91	0.89	0.91	0.89	0.87	0.86	0.84	0.81	0.76	0.76	0.80	0.79
R30	0.00	ROLLERS, STATIC, SELF-PROPELLED																		
R30	0.01	PNEUMATIC	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.91	0.89	0.87	0.86	0.84	0.82	0.77	0.76	0.81	0.80
R30	0.02	SMOOTH DRUM	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.91	0.89	0.87	0.86	0.84	0.82	0.77	0.77	0.81	0.80
R30	0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	1.13	1.10	1.05	1.00	0.95	0.93	0.92	0.90	0.91	0.89	0.87	0.86	0.84	0.81	0.77	0.76	0.80	0.80
R40	0.00	ROLLERS, VIBRATORY, TOWED	1.14	1.10	1.05	1.00	0.95	0.93	0.91	0.89	0.91	0.88	0.87	0.86	0.83	0.81	0.76	0.75	0.80	0.79
R45	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM	1.14	1.10	1.05	1.00	0.95	0.93	0.91	0.89	0.91	0.88	0.87	0.86	0.83	0.81	0.76	0.75	0.80	0.79
R50	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM	1.14	1.11	1.05	1.00	0.95	0.92	0.91	0.89	0.90	0.88	0.86	0.85	0.83	0.80	0.75	0.74	0.79	0.78
R55	0.00	ROOFING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
S10	0.00	SCRAPERS, ELEVATING																		
S10	0.01	0 THRU 200 HP	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.88	0.86	0.85	0.79	0.78	0.75	0.70	0.67	0.64
S10	0.02	OVER 200 HP	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.88	0.86	0.84	0.79	0.78	0.75	0.70	0.67	0.64
S15	0.00	SCRAPERS, CONVENTIONAL	1.11	1.09	1.05	1.00	0.96	0.95	0.94	0.94	0.92	0.89	0.86	0.85	0.80	0.79	0.76	0.71	0.68	0.66
S20	0.00	SCRAPERS, TANDEM POWERED	1.11	1.09	1.05	1.00	0.96	0.95	0.94	0.94	0.92	0.89	0.86	0.85	0.80	0.79	0.76	0.71	0.68	0.66
S25	0.00	SCRAPERS, TRACTOR DRAWN	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.89	0.86	0.85	0.80	0.78	0.75	0.70	0.68	0.65
S30	0.00	SCREENING & CRUSHING PLANTS																		
S30	0.10	CONVEYORS	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75



**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Life in Years		Year Purchased New																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	
S30 0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.90	0.88	0.86	0.84	0.83	0.81	0.79	0.76	
S30 0.21	CRUSHERS - CONE	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.90	0.88	0.86	0.84	0.83	0.81	0.79	0.76	
S30 0.22	CRUSHERS - JAW	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.90	0.88	0.86	0.84	0.83	0.81	0.79	0.76	
S30 0.30	SCREENING PLANT	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75	
S35 0.00	SNOW REMOVAL EQUIPMENT	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73	
S40 0.00	SOIL & ROAD STABILIZERS	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.88	0.86	0.85	0.79	0.78	0.75	0.70	0.67	0.64	
S45 0.00	SPLITTERS, ROCK & CONCRETE	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72	
T10 0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.83	0.80	0.77	0.72	0.70	0.68	
T15 0.00	TRACTORS, CRAWLER (DOZER) (includes blade)																			
T15 0.01	0 THRU 225 HP	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.92	0.89	0.87	0.86	0.82	0.79	0.75	0.70	0.67	0.65	
T15 0.02	226 HP THRU 425 HP	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.86	0.83	0.80	0.77	0.72	0.69	0.67	
T15 0.03	OVER 425 HP	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.95	0.93	0.90	0.89	0.87	0.84	0.81	0.78	0.73	0.71	0.69	
T20 0.00	TRACTORS, WHEEL TYPE (DOZER)	1.13	1.09	1.04	1.00	0.95	0.93	0.92	0.90	0.89	0.86	0.84	0.83	0.83	0.82	0.79	0.77	0.76	0.74	
T25 0.00	TRACTORS, AGRICULTURAL																			
T25 0.10	CRAWLER	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.82	0.81	0.78	0.77	0.75	0.74	
T25 0.20	WHEEL	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.88	0.85	0.84	0.82	0.82	0.81	0.78	0.76	0.75	0.73	
T30 0.00	TRENCHERS, CHAIN TYPE CUTTER	1.14	1.10	1.05	1.00	0.92	0.92	0.91	0.89	0.87	0.84	0.81	0.79	0.78	0.75	0.70	0.67	0.66	0.65	
T35 0.00	TRENCHERS, WHEEL TYPE CUTTER	1.14	1.10	1.05	1.00	0.92	0.92	0.91	0.89	0.87	0.84	0.81	0.79	0.78	0.75	0.70	0.67	0.66	0.65	
T40 0.00	TRUCK OPTIONS																			
T40 0.10	CRANES / HOISTS, PERSONNEL & MATERIAL HANDLING	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73	
T40 0.20	DUMP BODY, REAR	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75	
T40 0.30	FLATBEDS, WITH SIDES	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73	
T40 0.41	HOIST, ELECTRIC DRIVE	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73	
T40 0.50	TRANSIT MIXERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.85	0.82	0.81	0.79	0.76	0.74	
T40 0.60	WATER TANKS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71	
T40 0.70	ALL OTHER OPTIONS	1.16	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73	
T45 0.00	TRUCK TRAILERS																			

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																	
		Life in Years																	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T45 0.10	BOTTOM DUMP	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45 0.20	END DUMP	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45 0.30	PUP TRAILER	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
T45 0.41	LOWBOY, RIGID NECK, DROP DECK	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45 0.50	FLATBED TRAILER	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45 0.60	MISCELLANEOUS / UTILITY	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45 0.70	WATER TANKER TRAILER	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
T45 0.80	DECONTAMINATION FACILITY	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
T45 0.90	TANK TRAILERS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
T50 0.00	TRUCKS, HIGHWAY (Add attachments as required)																		
T50 0.01	0 THRU 10,000 GVW	1.13	1.10	1.05	1.00	0.98	0.96	0.94	0.94	0.96	0.94	0.94	0.97	0.96	0.93	0.89	0.84	0.79	0.76
T50 0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	1.13	1.09	1.05	1.00	0.98	0.96	0.94	0.94	0.96	0.94	0.95	0.97	0.96	0.93	0.89	0.84	0.80	0.77
T50 0.03	OVER 30,000 GVW (Chassis only - Add options)	1.13	1.09	1.05	1.00	0.98	0.96	0.94	0.94	0.96	0.94	0.95	0.97	0.96	0.93	0.89	0.84	0.80	0.77
T55 0.00	TRUCKS, OFF-HIGHWAY																		
T55 0.10	RIGID FRAME	1.17	1.13	1.08	1.00	0.95	0.93	0.92	0.90	0.88	0.87	0.86	0.84	0.81	0.76	0.74	0.73	0.72	0.70
T55 0.20	ARTICULATED FRAME	1.18	1.14	1.08	1.00	0.94	0.93	0.92	0.90	0.88	0.87	0.86	0.83	0.80	0.75	0.73	0.72	0.71	0.69
T56 0.00	TRUCKS, OFF-HIGHWAY/PRIME MOVER TRACTORS & WAGONS																		
T56 0.10	PRIME MOVER TRACTORS	1.17	1.13	1.08	1.00	0.95	0.93	0.92	0.90	0.88	0.87	0.86	0.84	0.81	0.76	0.74	0.73	0.72	0.70
T56 0.20	WAGONS, BOTTOM DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.87	0.85	0.83	0.80	0.75	0.73	0.72	0.71	0.69
T56 0.30	WAGONS, REAR DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87	0.86	0.85	0.83	0.80	0.74	0.72	0.71	0.70	0.68
T57 0.00	TRUCKS, VACUUM	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
T60 0.00	TRUCKS, WATER, OFF-HIGHWAY	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87	0.86	0.85	0.83	0.80	0.74	0.72	0.71	0.70	0.68
T65 0.00	TUNNEL/MINING EQUIPMENT																		
T65 0.10	DRIFTING & TUNNELING DRILLS	1.22	1.16	1.08	1.00	0.94	0.92	0.85	0.83	0.81	0.80	0.79	0.77	0.74	0.72	0.71	0.69	0.69	0.66
T65 0.20	TUNNEL BORING MACHINES	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
T65 0.30	PRODUCTION DRILLING RIGS	1.23	1.17	1.08	1.00	0.94	0.92	0.84	0.82	0.81	0.80	0.78	0.77	0.74	0.72	0.71	0.69	0.68	0.66
T65 0.40	ROADHEADERS & CONTINUOUS MINERS	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75

**Table 3-2 Equipment Age Adjustment Factors for Standby Cost**

CATEGORY SUB	REGION 2 TYPE OF EQUIPMENT	Year Purchased New																	
		Life in Years																	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T65 0.50	ROCK BOLTING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
T65 0.61	LOADING & HAULING EQUIPMENT, DIESEL OR GAS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.74
T65 0.62	LOADING & HAULING EQUIPMENT, ELECTRIC	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
T65 0.63	LOADING & HAULING EQUIPMENT, AIR-POWERED	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
T65 0.70	LOCOMOTIVES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.74
T65 0.90	OTHER TUNNELING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
W10 0.00	WAGONS, BOTTOM DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.92	0.90	0.88	0.87	0.86	0.83	0.80	0.75	0.73	0.72	0.71	0.69
W15 0.00	WAGONS, REAR DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.92	0.90	0.88	0.87	0.86	0.83	0.80	0.75	0.73	0.72	0.71	0.69
W25 0.00	WATER & CO2 BLASTERS																		
W25 0.10	LOW PRESSURE, (< 5,000 PSI)	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
W25 0.20	HIGH PRESSURE, (>= 5,000 PSI)	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
W25 0.30	STEAM CLEANERS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
W25 0.40	CO2 BLASTERS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
W25 0.50	WET ABRASIVE BLASTING SYSTEM (TORBO)	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92	0.91	0.89	0.87	0.85	0.82	0.80	0.78	0.76	0.73	0.70
W30 0.00	WATER TANKS																		
W30 0.10	PORTABLE WITH WHEELS	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87	0.86	0.85	0.83	0.80	0.74	0.72	0.71	0.70	0.68
W30 0.20	SKID MOUNTED	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87	0.86	0.85	0.83	0.80	0.74	0.72	0.71	0.70	0.68
W35 0.00	WELDERS																		
W35 0.10	ENGINE DRIVEN	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
W35 0.20	ELECTRIC DRIVEN	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72

## STANDBY HOURLY RATE CALCULATION FOR OVERAGE EQUIPMENT

### EXAMPLE

Assume the following set of given information for the rate calculation.

1. The unit of equipment is not listed in table 2-1.
2. The equipment is contractor owned.
3. Data for the unit in question:
  - a. Caterpillar front-end wheel loader
  - b. Model 966E, 4WD, 4 CY capacity
  - c. Serial number indicates year of manufacture = 1991
  - d. Actual purchase price in 1991 = \$220,404  
(includes all regional discounts, sales tax and freight)
  - e. Horsepower is 200 hp (fuel is Diesel off-road)
  - f. Drive tire (DT) size = 23.50 x 25, 16 ply, L-3 (appendix F tire code ANNB5)  
DT cost (2007) = 4 tires x \$2,215 /tire = \$8,860
  - g. Weight = 44,400 lbs
4. Use the actual cost data as follows:
  - a. Purchase price (TEV) = \$220,404
  - b. Year of manufacture = 1991
5. Hourly rate is computed as follows:

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment

**Example:** *The piece of equipment shown in this example is based on a known piece of equipment for illustration purposes only.*

**USE THIS WORKSHEET TO COMPUTE A HOURLY RATE FOR EQUIPMENT THAT IS NOT IN THIS PAMPHLET OR IS IN THE PAMPHLET BUT NOT EQUIVALENT IN SIZE, CAPACITY, HORSEPOWER OR VALUE. (See Appendix A for a blank form)**

**Region 02**

**1. EQUIPMENT INFORMATION AND EXPENSE FACTORS**

ID No: \_\_\_\_\_

a. Equipment Specification Data:

(1) Equipment Description:	Loader, Front-end, Wheel, 4WD, 4 CY capacity			
(2) Model and Series:	Caterpillar Model 966E			
(3) Present Year or Year of Use:			2007	
(4) Year Manufactured:			1991	
(5) Horsepower - Equipment:			200	
(6) Horsepower - Carrier:			0	
(7) Fuel	<p><b>- Equipment:</b> 0-None; 1-electric; 2-gasoline;          3-diesel off-road; 4-diesel on-road; 5-marine gas;          6-marine diesel</p> <p><b>- Carrier:</b> 0-None; 1-electric; 2-gasoline;          3-diesel off-road; 4-diesel on-road; 5-marine gas;          6-marine diesel</p>	<p>Enter number from 0 to 6 ==&gt;</p> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">3</div>	<p style="text-align: right;"><b>D-off</b></p> <hr style="width: 100%;"/>	
		<p>Enter number from 0 to 6 ==&gt;</p> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">0</div>	<p style="text-align: right;"><b>None</b></p> <hr style="width: 100%;"/>	
(8) Shipping Weight (cwt):			444 cwt	

(9) Tire size and number of tires: (Cost of tires based on present year - see 1.a.(3) and Appendix F)

	<u>Size/Ply</u>	<u>App F Code</u>	<u>No.</u>	<u>Unit Price</u>	<u>Cost</u>
(a) Front (FT):			0	\$0	\$0
(b) Drive (DT):	23.5X25/16Ply	ANNB5	4	\$2,215	\$8,860
(c) Trailing (TT):			0	\$0	\$0
(d) Total Tire Cost:					\$8,860

(10) List Price + Accessories:  
 [at Year (yr) of Manufacture]      \$0      OR      actual purchase price:      \$220,404

**USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:**

b. Category and Subcategory Number:		L40	0.11
c. Hourly Expense Calculation Factors:			
(1) Economic Key (EK):			45
(2) Condition (C): <b>A</b> =Average <b>D</b> =Difficult <b>S</b> =Severe		A	AVERAGE
(3) Discount Code (DC): <b>B</b> = 7.5% (0.075) or <b>S</b> = 15.0% (0.15)		B	0.075
(4) Life in Hours (LIFE):			9,250
(5) Salvage Value Percentage (SLV):			0.25
(6) Fuel Factor - Equipment [Electric (E) Gas (G) Diesel (D)]:			0.031
(7) Fuel Factor - Carrier (E G D):			0.000
(8) Filter, Oil, and Grease (FOG) Factor (E G D):			0.111
(9) Tire Wear Factor:			
(a) Front (FT):			0.83
(b) Drive (DT):			0.54
(c) Trailing (TT):			0.92
(10) Repair Cost Factor (RCF):			0.70

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment

**Region 02**

**2. EQUIPMENT VALUE**

a. List Price + Accessories: [at Year (yr) of Manufacture]				=	<u>\$0</u>
(1) Discount:	(List Price + Accessories) x (Discount Code)				
	1.a.(10) [1.c.(3)]				
	<u>(\$0)</u> + <u>\$0.00</u> x <u>(0.075)</u>			=	<u>\$0</u>
(2) Subtotal [2.a.] - [2.a.(1)]				Subtotal	= <u><u>\$0</u></u>
(3) Sales or Import Tax:	(Subtotal) x (Tax Rate)				
	[2.a.(2)] [Appendix B]				
	<u>(\$0)</u> x <u>(5.40%)</u>			=	<u>\$0</u>
(4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)]				Subtotal	= <u><u>\$0</u></u>
b. Freight:	(Shipping Weight) x (Freight Rate per cwt)				
	[1.a.(8)] [Appendix B]				
	<u>(0,000 cwt)</u> x <u>(\$0.00 /cwt)</u>			=	<u>\$0</u>
c. <b>TOTAL EQUIPMENT VALUE (TEV):</b>				<b>TOTAL[2.]:</b>	= <u><u>\$220,404</u></u>
	[(2.a.(4))] + [(2.b)]				
	(See chapter 3 for used and overage equipment rate adjustments.)				

**3. DEPRECIATION PERIOD (N)**

a.	(LIFE) / (Working Hours Per Year (WHPY)) = N				
	[1.c.(4)] [Appendix B]				
	<u>(9,250 hr)</u> / <u>(1,450 hr/yr)</u>			=	<u>6.38 yrs (N)</u>

**4. OWNERSHIP COST**

a. Depreciation					
(1) Tire Cost Index (TCI):	(Tire Index, Year of Manufacture, 1.a.(4)) [Appendix E, EK=100]	(Tire Index, Present Year or Year of Use, 1.a.(3)) [Appendix E, EK=100]			Tire Cost Index (TCI)
	<u>(2506)</u>	<u>(3058)</u>	/		= <u>0.819 (TCI)</u>
(2)	[(TEV) x [1.0-(SLV)] - [(TCI) x (Tire Cost)]] / (LIFE)				
	[2.c.] [1.c.(5)] [4.a.(1)] [1.a.(9)(d)] [1.c.(4)]				
	<u>[(220,404) x [1.0-(0.25)] - [(0.819) x (\$8,860)]] / (9,250 hr)</u>			=	<u>\$17.09 /hr</u>

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment

**Region 02**

**4. OWNERSHIP COST (Continued)**

b. Facilities Capital Cost of Money (FCCM):

(1)	[[ ( N ) - 1.0 ] [3.a.]	x	[1.0 + (SLV)] [1.c.5.]	+	2.0]	/	[2.0 x (N)] [3.a.]	=	Avg Value Factor (AVF)	
	[[ (6.38 yr) - 1.0 ]	x	[1.0 + (0.25)]	+	2.0]	/	[2.0 x (6.38 yr)]	=	0.684 (AVF)	
(Adjusted Cost-of-Money) / (WHPY)										
(2)	(TEV) [2.c.]	x	(AVF) [4.b.(1)]	x	(Adjusted Cost-of-Money) [Appendix B]	/	(WHPY) [Appendix B]	=		
	(\$220,404)	x	(0.684)	x	(4.20%)	/	(1,450 hr/yr)	=	<u>\$4.37 /hr</u>	

c. **TOTAL HOURLY OWNERSHIP COST:**  
 [4.a.(2)] + [4.b.(2)]

**TOTAL [4.]: = \$21.46 /hr**

**5. OPERATING COST**

a. Fuel Costs:

(1) Equipment:

(Fuel Factor) [1.c.(6)]	x	(Horsepower (hp)) [1.a.(5)]	x		(Fuel Cost per Gallon (gal)) [Appendix B]				
(0.000)	x	(0 hp)	x		(\$0.00 /gal)	=	<u>\$0.00 /hr</u>		

(2) Carrier:

(Fuel Factor) [1.c.(7)]	x	(hp) [1.a.(6)]	x		(Fuel Cost per gal) [Appendix B]				
(0.000)	x	(0 hp)	x		(\$0.00 /gal)	=	<u>\$0.00 /hr</u>		

(3) Total Hourly Fuel Cost:  
 [(5.a (1)) + (5.a (2))]

**Total [5.a.] = \$0.00 /hr**

b. FOG Cost:

(1) Equipment:

(FOG Factor) [1.c.(8)]	x	(Equipment Hourly Fuel Cost) [5.a.(1)]	x		(Labor Adjustment Factor (LAF)) [Appendix B]				
(0.000)	x	(\$0.00 /hr)	x		(0.00)	=	<u>\$0.00 /hr</u>		

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment

Region 02

5. **OPERATING COST (Continued)**

(2) Carrier:

$$\begin{array}{rclclcl}
 \text{(FOG Factor)} & \times & \text{(Carrier Hourly Fuel Cost)} & \times & \text{(LAF)} & \\
 \text{[1.c.(8)]} & & \text{[5.a.(2)]} & & \text{[Appendix B]} & \\
 \underline{\text{(0.000)}} & \times & \underline{\text{(\$0.00 /hr)}} & \times & \underline{\text{(0.00)}} & = \underline{\underline{\text{\$0.00 /hr}}}
 \end{array}$$

(3) Total Hourly FOG Cost: Total [5.b.] = \\$0.00 /hr  
 [(5.b.(1)) + (5.b.(2))]

c. Alternative Fuel/FOG Cost: Total [5.c.] = \\$0.00 hr  
 (See chapter 2, paragraph 2.24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):  
 (EK is from [1c. (1)])

$$\begin{array}{rclcl}
 \text{(Economic Index, Present Year or Year of Use, 1.a.(3))} & / & \text{(Economic Index, Year of Manufacture, 1.a.(4))} & & \\
 \text{[Appendix E, EK=1.c.(1)]} & & \text{[Appendix E, EK=1.c.(1)]} & & \\
 \underline{\text{(0000)}} & / & \underline{\text{(0000)}} & & = \underline{\underline{\text{0.000 (EAF)}}}
 \end{array}$$

*(See table 3-1 for last year of economic life.)*

(2) Repair Factor (RF):

$$\begin{array}{rclclcl}
 \text{(RCF)} & \times & \text{(EAF)} & \times & \text{(LAF)} & = \text{Repair Factor (RF)} \\
 \text{[1.c.(10)]} & & \text{[5.d.(1)]} & & \text{[Appendix B]} & \\
 \underline{\text{(0.00)}} & \times & \underline{\text{(0.000)}} & \times & \underline{\text{(0.00)}} & = \underline{\underline{\text{0.000 (RF)}}}
 \end{array}$$

(3) Repair Cost:

$$\begin{array}{rclclclcl}
 \text{[(TEV)]} & - & \text{[(TCI)]} & \times & \text{(Tire Cost)]} & \times & \text{(RF)} & / & \text{(LIFE)} \\
 \text{[2.c.]} & & \text{[4.a.(1)]} & & \text{[1.a.(9)(d)]} & & \text{[5.d.(2)]} & & \text{[1.c.(4)]} \\
 \underline{\text{[(\$0)]}} & - & \underline{\text{[(0.000)]}} & \times & \underline{\text{[(\$0)]}} & \times & \underline{\text{(0.000)}} & / & \underline{\text{(0)}}
 \end{array}$$

(4) Total Hourly Repair Cost: Total [5.d.] = \\$0.00 /hr



**Region 02**

**5. OPERATING COST (Continued)**

e. Tire Wear Cost: *(Use current price levels. See Appendix F.)*

(1) Front Tires (FT):

$$\frac{[1.5 \times (\text{FT Cost})]}{[1. \text{a.}(9)(\text{a})]} \div \frac{[1.8 \times (\text{FT Wear Factor})]}{[1. \text{c.}(9)(\text{a})]} \times (\text{Maximum Tire Life Hours})$$

$$\frac{[1.5 \times (\$0)]}{[1. \text{a.}(9)(\text{a})]} \div \frac{[1.8 \times (0.00)]}{[1. \text{c.}(9)(\text{a})]} \times \text{[Appendix F]} = \underline{\underline{\$0.00/\text{hr}}}$$

(2) Drive Tires (DT):

$$\frac{[1.5 \times (\text{DT Cost})]}{[1. \text{a.}(9)(\text{b})]} \div \frac{[1.8 \times (\text{DT Wear Factor})]}{[1. \text{c.}(9)(\text{b})]} \times (\text{Maximum Tire Life Hours})$$

$$\frac{[1.5 \times (\$0)]}{[1. \text{a.}(9)(\text{b})]} \div \frac{[1.8 \times (0.00)]}{[1. \text{c.}(9)(\text{b})]} \times \text{[Appendix F]} = \underline{\underline{\$0.00/\text{hr}}}$$

(3) Trailing Tires (TT):

$$\frac{[1.5 \times (\text{TT Cost})]}{[1. \text{a.}(9)(\text{c})]} \div \frac{[1.8 \times (\text{TT Wear Factor})]}{[1. \text{c.}(9)(\text{c})]} \times (\text{Maximum Tire Life Hours})$$

$$\frac{[1.5 \times (\$0)]}{[1. \text{a.}(9)(\text{c})]} \div \frac{[1.8 \times (0.00)]}{[1. \text{c.}(9)(\text{c})]} \times \text{[Appendix F]} = \underline{\underline{\$0.00/\text{hr}}}$$

(4) Total Tire Wear Cost:  
 [Sum 5.e.(1) through 5.e.(3)]

**Total [5.e.] = \$0.00/hr**

f. Tire Repair Cost:

$$\begin{array}{l} \text{(Total Tire Wear Cost} \\ \text{per Hour)} \\ [5. \text{e.}(4)] \\ \underline{\$0.00/\text{hr}} \end{array} \times \begin{array}{l} 0.15 \times (\text{LAF}) \\ [Appendix B] \\ \underline{0.15 \times (0.00)} \end{array} = \underline{\underline{\$0.00/\text{hr}}}$$

**Total [5.f.] = \$0.00/hr**

**g. TOTAL HOURLY OPERATING COST:**  
 [Sum 5.a. through 5.f.]

**Total [5.] = \$0.00/hr**

**Region 02**

**6. HOURLY RATES**

a. Total Hourly Rate: *[based on 40 hours per week (wk)]*

$$\begin{array}{l} \text{(Ownership Cost)} + \text{(Operating Cost)} \\ \text{[4.c.]} \qquad \qquad \qquad \text{[5.g.]} \\ \\ \underline{(\$0.00 /hr)} \quad + \quad \underline{(\$0.00 /hr)} \end{array}$$

$$= \underline{\underline{\$0.00 /hr}}$$

**See Figure 3-1 for hourly rate calculations for overage equipment**

b. Other Work Shifts Hourly Rate:  
*(Refer to Chapter 3, Adjustments to Rates, for methodology.)*

$$\begin{array}{l} \text{[(Depreciation)]} + \text{[(FCCM)} \times \text{(40 hr/wk)} / \text{(Work hr/wk)]} + \text{(Operating Cost)} \\ \text{[4.a.(2)]} \qquad \qquad \qquad \text{[4.b.(2)]} \qquad \qquad \qquad \text{(example:60 hr/wk)} \qquad \qquad \text{[5.g.]} \\ \\ \underline{[(\$0.00 /hr)]} \quad + \quad \underline{[(\$0.00 /hr)]} \times \underline{(40 hr/wk)} / \underline{(60 hr/wk)} + \underline{(\$0.00 /hr)} \end{array}$$

(example:60 hr/wk)

$$= \underline{\underline{\$0.00 /hr}}$$

c. Standby Hourly Rate:  
*(Refer to Chapter 2, paragraph 2.28 for guidance on use.)*

$$\begin{array}{l} \text{[(Depreciation)} \times \text{0.50]} + \text{(FCCM)} \\ \text{[4.a.(2)]} \qquad \qquad \qquad \text{[4.b.(2)]} \\ \\ \underline{[(\$17.09 /hr)]} \times \text{0.50} \quad + \quad \underline{(\$4.37 /hr)} \end{array}$$

$$= \underline{\underline{\$12.92 /hr}}$$

*(Refer to Chapter 3, paragraph 3.12 for guidance for overage equipment.)*

**See Chapter 3 if rate adjustments are necessary.**

**Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment**

## CHAPTER 4.0 - METHODOLOGY FOR DREDGING PLANT AND MARINE EQUIPMENT

### SECTION I. GENERAL

#### 4.1 Contents

This chapter contains the methodology used to compute ownership and operating rates for dredging plant and permanent floating plant such as floating pile-driving equipment. Dredging plant is marine equipment used for dredging operations for the majority of its life or designed and built for marine/dredging use.

#### 4.2 General

a. The ownership and operating rates provided in table 2-1, category M-10, are based on the methodology in chapter 2 for nondredging equipment. However, the cost data (Acquisition Cost, Horsepower, and Fuel Type) may be used for calculation of dredging plant and marine equipment rates, provided they are calculated in accordance with the methodology provided in this chapter.

b. Table 4-1 shows ownership and operating cost factors for various types of dredging plant. When a type of plant is not listed, the cost is estimated by using the factors listed in this table for a similar type of plant.

c. The methodology for determining operating rates for hopper dredges was omitted from this pamphlet due to the limited number of hopper dredges and the complexity of the methods used to calculate the rates. Further information on hopper dredges can be found in Engineer Regulation (ER) 1110-2-1302, *Engineering and Design, Civil Works Cost Engineering*, and on the Internet at <http://www.usace.army.mil/inet/usace-docs/eng-regs/er1110-2-1302/toc.htm>. The methodology for calculating ownership cost is in section V of this chapter.

d. For mechanical dredges, the cost of the bucket is typically included in the plant value; therefore, no additional allowance should be made for ownership cost. If the bucket cost is not included in the plant value, the bucket may be treated as a separate unit of equipment.

### SECTION II. ANNUAL USE

#### 4.3 Time Available to Dredge

a. The number of months available per calendar year (yr) for dredging shall be based on the work time available to dredge, excluding downtime for major repairs, work in dry dock, bad weather, and environmental restrictions. Figure 4-1 depicts months available for dredging, including mobilization and demobilization, based on historic data collected by the U.S. Army Corps of Engineers' regional dredge estimating teams.

The data in figure 4-1 shall be used for computing the ownership costs unless specified otherwise in the contract documents.

<b>AVAILABLE TIME TO DREDGE BY REGION (In Months)</b>			
<u>Region</u>	<u>Type of Dredging Operation</u>		
	<u>Pipeline</u>	<u>Bucket</u>	<u>Hopper</u>
Atlantic Coast and tributaries	9	10	10
Gulf Coast, Lower Mississippi, and Tributaries	10	10	11
Great Lakes, Upper Mississippi, and Tributaries	8	8	8
West Coast and Tributaries	9	9	9

**Figure 4-1. Months Available by Region**

### **SECTION III. LIFE**

#### **4.4 Life**

The life for determining ownership and operating costs is defined as follows:

a. The Useful Life is expressed in years in table 4-1. It is the economic life of the equipment and is used to develop ownership rates for various types of dredging plant.

b. The Physical Life is expressed in hours (hrs) in table 4-1. It is the life of the unit based on effective working time and is used to develop operating rates for various types of dredging plant.

#### **4.5 Annual Hours Available**

The annual hours available to dredge can be established for each type of plant based on the months available and the estimated effective monthly hours worked. Dredging time is defined as effective plus noneffective working time. "Effective working time" is defined as time during the dredging operation when actual production is taking place. "Noneffective working time" is defined as time during the dredging operation when the dredge is operational but no production is taking place. For complete definition of terms see ER 1110-2-1302, *Engineering and Design, Civil Works Cost Engineering*. The total annual hours available can be expressed by formula, as follows:

Available Hours per yr = Months Available/yr x Effective Hours/Month

Where:

- Months Available/yr is found in figure 4-1.
- Effective Hours/Month is the effective working time.

## SECTION IV. SALVAGE VALUE

### 4.6 Salvage Value (SLV)

The salvage value, expressed as a decimal, is shown in table 4-1 for different types of plant.

## SECTION V. OWNERSHIP COST

### 4.7 Ownership Cost

Ownership cost is calculated based on a percent of plant value. Plant value is the acquisition cost plus the cost of any initial capital improvements. The value of initial capital improvements is based on those betterments, which were made within 1 year of purchase. Capital improvements do not include any replacement or repair work. Repairs or replacements are an operating cost and are covered in the repair cost allowance. Capital improvements are considered betterments, where the plant has been improved (*e.g.*, adding radar or upgrade of engines). (Note: Only the cost difference between replacement of existing similar engines and actual cost for upgrading engines should be considered as capital improvement). For capital improvements not made within the first year after the initial acquisition, see section VIII.

a. The ownership cost is determined from the plant value and is the total expense rate based on depreciation and CMR. When cost or pricing data is available, the actual acquisition price shall be used. Otherwise, the value of a similar piece of plant is used and, if necessary, adjusted so that capacity, size, and horsepower are properly considered.

b. Ownership rate is determined on a yearly basis and distributed over a monthly basis. The monthly rate is calculated based on the available use months by using the following formula:

$$\text{Monthly Ownership Cost} = \frac{\text{Plant Value} \times (\text{Yearly DEPR Percent} + \text{Yearly CMR Percent})}{\text{Available Use Months}}$$

Where:

- Plant Value = Acquisition price plus initial capital improvements.
- Yearly DEPR Percent = Ownership percent per year for depreciation.

- Yearly CMR Percent = Ownership percent per year for cost of money rate.
- Available Use Months is from figure 4-1.

#### 4.8 Depreciation Factor

Depreciation is computed using the straight-line method. The depreciable value is the acquisition cost, plus initial capital improvements, less estimated salvage. The basis for determining the yearly percentage factor for depreciation is expressed by the following formula:

$$\text{Yearly DEPR Percent} = (1 - \text{SLV}) / N$$

Where:

- N = Useful Life from table 4-1.
- SLV = Salvage Value from table 4-1.

#### 4.9 The Cost of Money Rate (CMR) Factor

The CMR factor is calculated on a yearly basis and is expressed here as an annual percentage factor. The CMR used in the calculation is the rate in effect at the time the work was performed. This formula is expressed as follows:

$$\text{Yearly CMR Percent} = \frac{[(N - 1)(1 + \text{SLV}) + 2](\text{discounted CMR})}{2N}$$

Where:

- N = Useful Life from table 4-1.
- SLV = Salvage Value from table 4-1.
- Discounted CMR = Cost of money rate (appendix I) reduced by 25 percent for overhead and profit allowance.

#### 4.10 Other Ownership Elements

Taxes, storage (lay up), and insurance are considered indirect (overhead) costs as defined in ER 1110-2-1302, appendix D. These costs are not included in ownership rates since they vary by geographic area and with individual contractors. These costs are considered as overhead costs and are, therefore, not included here so they will not be duplicated in the overhead in the estimate or submitted proposal.

## SECTION VI. OPERATING FACTORS

### 4.11 Hourly Operating Cost

Operating cost is based on effective working time. Dredging plant operating factors are shown in table 4-1. These factors, which are described in paragraph 4.12, are not intended to replace historical data but shall be used when historical data is limited or nonexistent.

### 4.12 Prime and Secondary Power

Prime power refers to the primary operating engine for the dredge or other piece of attendant plant. Secondary power refers to all other secondary engines or power plants. If more than one secondary power engine is present, the horsepower is totaled. Fuel consumption factors are prepared on the same basis as in chapter 2. Hourly fuel costs are calculated separately for the primary and secondary engines. The formula used is expressed as follows:

$$\text{Hourly Fuel Cost} = \text{Horsepower} \times \text{Fuel Cost/Gallon} \times \text{Engine Fuel Factor}$$

Where:

- Horsepower is the engines rated horsepower.
- Fuel Cost/Gallon is based on values shown in appendix B. See chapter 3 for fuel cost adjustments.
- Fuel Factor - Gas or Diesel Fuel. The fuel factor is listed in table 4-1 for the primary and secondary engines.

### 4.13 Water, Lube, and Supplies (WLS)

This factor is similar to the filters, oil, and grease (FOG) factor described in chapter 2. This item is computed as either a percentage of the hourly fuel costs or, if the type of plant has no engine, a reasonable hourly cost should be included.

This factor does not include an allowance for the oiler normally assigned to the dredge or other piece of dredging plant. The formula is expressed as follows:

$$\text{Water, Lube, and Supply Cost} = \text{WLS factor} \times \text{Hourly Fuel Cost}$$

Where:

- WLS Factor is obtained from table 4-1.
- Hourly Fuel cost is calculated as shown in paragraph 4-12.

### 4.14 Repairs (RPR)

This factor includes an allowance for all major and minor repairs and is similar to the maintenance and repair cost factor (RCF) described in chapter 2. The economic

adjustment factor (EAF) and the labor adjustment factor (LAF) are required to develop this cost. The formula is expressed as follows:

$$\text{Repair Cost} = \frac{(\text{Total Plant Value} \times \text{RPR} \times \text{EAF} \times \text{LAF})}{\text{Life in hr}}$$

Where:

- Total Plant Value = Acquisition price plus Initial capital improvements.
- RPR = Repair Factor from table 4-1.
- EAF = Economic Index (present year)/ Economic Index (acquisition year).
- LAF = Labor Adjustment Factor from appendix B.
- Life in hrs = Physical Life from table 4-1.

It should be noted that the repair allowance does not include the following estimated additive items:

a. Excessive dredge wear for parts (e.g., cutter teeth and main suction pumps) is not included due to the wide variety of materials being dredged. The original cost of the bucket and normal wear are typically included in the plant value covered in the plant rate. Excessive bucket wear for mechanical dredges is estimated as an additive item or treated as a separate unit of equipment from table 2-1. Allowances for wear due to abrasive material should only be included as an additive item if it is warranted and is not considered elsewhere in the estimate.

b. Dry docking costs, which represent an allowance for rental of the dry dock facility, are not included because they vary greatly depending on the facilities available. Repairs incurred while in dry dock, which occur periodically, are in the repairs. Dry docking costs will be allocated on an average annual basis over the years between such occurrences in accordance with Cost Accounting Standards and Generally Accepted Accounting Practices.

c. There is no predetermined allowance in the dredging plant methodology for jobsite yard costs, mobilization, or demobilization. All of these cost elements must be separately estimated to match each project's construction conditions.

## **SECTION VII. STANDBY**

### **4.15 Standby Rate**

The standby rate is computed by allowing the full ownership cost. In addition to the standby ownership rate, it may be necessary on dredges to include operating costs. Examples of allowable operating cost are as follows: a generator fuel allowance to account for operation of a diesel engine generator for power to operate pumps; navigation lights; minimum crew; etc.



a. Standby is a directed delay by the Government and will not be allowed during periods when the plant would have otherwise been in idle status, such as noneffective working time. Since ownership is calculated based on life in years computed monthly, standby should be paid only when additional time has been directed by the Government. Standby is to be paid on a 24-hour basis.

b. Standby for pipeline and accessories shall be based on pumping mud in determining values from table 4-1.

## **SECTION VIII. NEGOTIATED PROCUREMENT**

### **4.16 Rates**

The calculated dredging plant rates based on the methodology presented in this chapter should be used for preparing a reasonable contract estimate. When adequate cost or pricing data is available and submitted by the contractor for negotiated procurement, the rates may be adjusted in accordance with the methodology in this chapter. Cost or pricing data is defined in FAR 15.4, *Contract Pricing*.

### **4.17 Allowance for Additional Capital Improvements**

Allowance for additional capital improvements shall be calculated in accordance with accepted general accounting principles. When adequate cost or pricing data is not available, factors for a similar unit of equipment may be used for determining the ownership rate for overage equipment and plant.

### **4.18 Overage Plant**

When the plant has exceeded the useful life given in table 4-1, it is considered overage. The ownership rate for overage plant should be determined with the same methodology described in section V.

a. When actual cost or pricing data is available to adjust the operating rate, the data must be accurate, complete, and established in accordance with accepted general accounting principles.

b. When actual cost or pricing data is not available, the total hourly operating rate for overage equipment shall be computed on the basis that the equipment is equal to the useful life as shown in table 4-1.

### **4.19 Dredging Plant Purchased Used**

For plant purchased used, the ownership and operating rate must be calculated on an individual case, due to the varying conditions. When actual cost or pricing data is not available, the methodology from this chapter shall be used and values for life and salvage from table 4-1 can be adjusted. Support for adjustments can be obtained by calling the Chief, Cost Engineering Branch, Engineering and Construction Division,

Walla Walla District, U.S. Army Corps of Engineers (CENWW-EC-X), telephone 509-527-7511 or 509-527-7510.

## **SECTION IX. RATE CALCULATION EXAMPLE**

### **4.20 Rate Calculation Example**

The example shown in figure 4-2 illustrates the use of figure 4-1, table 4-1, and the regional data from appendix B to generate a rate. For illustration purposes, assume that a 24-inch hydraulic dredge (pipeline) was purchased new in 1991 for \$3,700,000, including tax and delivery, and there were no initial capital improvements. This example uses 500 hours per month and a discounted CMR of 4.20 percent.

**Table 4-1. Dredging Plant Cost Factors**

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
<u>Hydraulic Dredges - Pipeline</u>												
(Cutterhead or Dustpan)												
(Based on Discharge Diameter)												
(Non-Truckable)												
8 inch and under	5	10,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	70
9 inch through 10 inch	6	12,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	80
11 inch through 12 inch	8	16,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	90
13 inch through 15 inch	15	40,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	100
16 inch through 17 inch	20	80,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	110
18 inch through 20 inch	20	100,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	120
21 inch through 22 inch	25	120,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
23 inch through 24 inch	25	130,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
25 inch through 29 inch	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
30 inch or larger	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
<u>Barge Mounted Booster Pump</u>												
(For Pipeline Dredges)												
16 inch through 17 inch	20	80,000	0.05	80	0.083	0.045	70	0.072	0.039	22	24	80
18 inch through 20 inch	20	100,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	90
21 inch through 22 inch	25	120,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	100
23 inch through 24 inch	25	130,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	110
25 inch through 29 inch	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	120
30 inch or larger	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	120

SLV = Salvage Value  
 WLS = Water, Lube and Supplies

HPF = Horsepower Factor  
 RPR = Repairs

G = Gas

D = Diesel

**Table 4-1. Dredging Plant Cost Factors (Continued)**

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
<u>Mechanical Dredges (Large)<sup>1</sup></u>												
Clamshell - under 5 cy	8	18,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	90
Clamshell - 6 cy to 10 cy	13	26,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	100
Clamshell - 11 cy to 15 cy	20	40,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	110
Clamshell - 16 cy to 20 cy	25	75,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	120
Clamshell - 20 cy and over	30	90,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	130
All Other Types (Bucket or Dipper)	25	90,000	0.10	70	0.072	0.039	60	0.062	0.033	22	24	120
<u>Barge Mounted Crane with Clamshell Bucket</u>												
<u>Non - Dredging</u>												
Clamshell - under 6 cy	9	18,000	0.05	55	0.055	0.031	45	0.045	0.025	22	24	85
Clamshell - 6 cy to 10 cy	14	28,000	0.05	55	0.055	0.031	45	0.045	0.025	22	24	95
Clamshell - 11 cy to 15 cy	21	42,000	0.05	55	0.055	0.031	45	0.045	0.025	22	24	105
<u>Barge Mounted Lifting Crane</u>												
25 Ton to 75 Ton, 45' Boom	9	18,000	0.05	40	0.040	0.022	30	0.030	0.017	22	24	80
75 Ton to 125 Ton, 60' Boom	14	28,000	0.05	40	0.040	0.022	30	0.030	0.017	22	24	90
Over 125 Ton, over 60' Boom	21	42,000	0.05	40	0.040	0.022	30	0.030	0.017	22	24	100
<u>Barges (Used with Dredging)</u>												
Fuel or Water	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Equipment or Work	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Derrick	20	90,000	0.10	20	0.021	0.011	20	0.021	0.011	18	20	70
Anchor	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Mooring Barge	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Dump Scow	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	70

SLV = Salvage Value

WLS = Water, Lube and Supplies

<sup>1</sup> Sized by the largest bucket used (normally a mud bucket)

HPF = Horsepower Factor

RPR = Repairs

G = Gas

D = Diesel

**Table 4-1. Dredging Plant Cost Factors (Continued)**

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
<b>Boats – See Category M10.50</b>												
<b>Tugs and Tenders (Used with Dredging)</b>												
Under 500 hp	8	18,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	80
501 through 1,000 hp	10	40,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	90
1,001 through 2,000 hp	15	55,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	100
2,001 through 3,000 hp	20	100,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	110
Over 3,000 hp	25	120,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	120
<b>Pipeline and Accessories (Inland Environment)</b>												
<b>Metal Pipeline (under 20 inch)</b>												
Pumping Mud	2	9,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1	4,500	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.3	1,500	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Joints	3	12,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	30
Pontoons/Floats	12	60,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
<b>Metal Pipeline (20 inch and Larger)</b>												
Pumping Mud	3	12,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1.5	6,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.5	2,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Joints	3	12,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	30
Pontoons/Floats	12	60,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5

SLV = Salvage Value  
 WLS = Water, Lube and Supplies

HPF = Horsepower Factor  
 RPR = Repairs

G = Gas

D = Diesel

**Table 4-1. Dredging Plant Cost Factors (Continued)**

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
<u>Pipeline and Accessories (Ocean Environment)</u>												
<u>Metal Pipeline (All sizes)</u>												
Pumping Mud	2	9,000	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1	4,500	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.3	1,500	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Joints	1	4,500	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Pontoons/Floats	2	9,000	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
<u>Metal Pipeline On-Shore</u>												
Pumping Mud	3	12,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1.5	6,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.5	2,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Standby Calculation: Standby for pipeline and accessories shall be based on pumping mud.												

SLV = Salvage Value  
 WLS = Water, Lube and Supplies

HPF = Horsepower Factor  
 RPR = Repairs

G = Gas

D = Diesel

**Example:** The piece of equipment shown is based on a known piece of equipment for illustration purposes only.

**USE THIS WORKSHEET TO COMPUTE A MONTHLY AND HOURLY RATE FOR MARINE AND DREDGING PLANT**

Region 02

ID No: \_\_\_\_\_

**1. MARINE AND DREDGING PLANT INFORMATION AND EXPENSE FACTORS**

a. Plant Pertinent Data:		
(1)	Equipment Description:	<u>24" Hydraulic Cutter Suction Dredge</u>
(2)	Model and Series:	<u>Ellicott Series 4900 Super Dragon</u>
(3)	Present Year or Year of Use:	<u>2007</u>
(4)	Acquisition Year:	<u>1991</u>
(5)	Horsepower (hp) - Prime	<u>3,730 hp</u>
(6)	Horsepower (hp) - Secondary Engine (s):	
	(a) Electrical Generators	<u>200 hp</u>
	(b) Hydraulic System	<u>1,325 hp</u>
	(c) Cutter Head Drive	<u>750 hp</u>
	(d) Hydraulic Water Jet	<u>200 hp</u>
	<b>Total Secondary hp</b>	<b><u>2,475 hp</u></b>
(7)	Plant Value:	
	(a) Acquisition Costs	<u>\$3,700,000</u>
	(b) Capital Improvements	<u>\$0</u>
	<b>Total Plant Value</b>	<b><u>\$3,700,000</u></b>
(8)	Hours Worked per Month (Effective Time)	<u>500 hrs/mo</u>
(9)	Additive Item(s) (Monthly Costs To be Estimated)	
	(a) <u>Excessive Dredge Wear (Gravel)</u>	<u>\$8,000 /mo</u>
	(b) _____	<u>\$0 /mo</u>
	(c) _____	<u>\$0 /mo</u>
	(d) _____	<u>\$0 /mo</u>
	(e) _____	<u>\$0 /mo</u>
	<b>Total Additive Items</b>	<b><u>\$8,000 /mo</u></b>
b.	Appendix B, Area Factors Data	
	(1) Labor Adjustment Factor (LAF)	<u>1.07</u>
	(2) Fuel type	<u>Marine Diesel</u>
	Fuel Cost Per Gallon	<u>\$2.50</u>
	(3) Cost of Money Rate (undiscounted)	<u>5.25%</u>
	(4) Cost of Money Rate (discounted)	<u>4.20%</u>
c.	Appendix E, Economic Index Data (EK 105)	
	(1) Economic Index, Acquisition Year	<u>4438</u>
	(2) Economic Index, Present Year or Year of Use	<u>7221</u>

Input data, methodology and notes used in the following sections of this form are or have reference to EP 1110-1-8, CONSTRUCTION EQUIPMENT OWNERSHIP AND EXPENSE SCHEDULE (see chapter 4).

**Region 02**

**1. MARINE AND DREDGING PLANT INFORMATION AND EXPENSE FACTORS (Continued)**

d. Figure 4-1, Available Time to Dredge By Region Data (See Chapter 4, paragraph 4.3 for guidance)	
(1) Months Available Per Year (9 months is used for this example)	<u>9 months/yr</u>
e. Table 4-1, Dredging Plant Cost Factors Data	
(1) Useful Life (in Years) for Ownership (N)	<u>25 yrs</u>
(2) Physical Life (in Hours) for Repairs	<u>130,000 hrs</u>
(3) SLV (Salvage Value Factor)	<u>0.10</u>
(4) Prime Engine Fuel Factor (gal/bhp-hr)	<u>0.045</u>
(5) Secondary Engine Fuel Factor (gal/bhp-hr)	<u>0.039</u>
(6) WLS (Water, Lube & Supplies Factor) percent	<u>22%</u>
(7) RPR (Repair Cost Factor)	<u>1.30</u>

**2. ANNUAL OWNERSHIP PERCENTAGE FACTORS**

a. Depreciation Percent Per Year (DEPR)	
$\frac{(1.0 - \text{SLV})}{1.e.(3)} \div \frac{(N)}{1.e.(1)}$	= <u>3.60% /yr</u>
b. Facilities Capital Cost of Money Percent Per Year (FCCM)	
$\frac{[(N-1) \times (1+SLV)+2]}{1.e.(1)} \times \frac{(\text{Discounted Money Rate})}{[Appendix B]} \div \frac{2N}{1.e.(1)}$	= <u>2.39% /yr</u>
c. Total Ownership Percent Per Year (DEPR + FCCM)	= <u>5.99% /yr</u>

**3. OWNERSHIP COSTS**

a. Ownership per Year	
$[\text{Plant Value}] \times \text{Total Ownership Percent Per Year (DEPR + FCCM)}$	= <u>\$221,630.00 /yr</u>
b. Monthly Ownership Expense	
$\frac{\text{Ownership per Year}}{3.a.} \div \frac{\text{Months Available per Year}}{1.d.(1)}$	rounded = <u>\$24,626.00 /mo</u>



**Region 02**

**4. OPERATING COSTS**

a. Fuel Cost

(1) Prime Engine Fuel

$$\begin{array}{rclclcl} \text{(Fuel Factor)} & \times & \text{(HP)} & \times & \text{(Fuel Cost per Gallon)} & \\ \text{1.e.(4)} & & \text{1.a.(5)} & & \text{1.b.(2)} & \\ \underline{(0.045 \text{ gal/bhp-hr})} & \times & \underline{(3,730)} & \times & \underline{(\$2.50)} & = \underline{\$419.63 /hr} \end{array}$$

(2) Secondary Engine Fuel

$$\begin{array}{rclclcl} \text{(Fuel Factor)} & \times & \text{(HP)} & \times & \text{(Fuel Cost per Gallon)} & \\ \text{1.e.(5)} & & \text{1.a.(6)} & & \text{1.b.(2)} & \\ \underline{(0.039 \text{ gal/bhp-hr})} & \times & \underline{(2,475)} & \times & \underline{(\$2.50)} & = \underline{\$241.31 /hr} \end{array}$$

(3) Total Fuel (Prime Engine Fuel + Secondary Engine Fuel) = \$660.94 /hr

b. Water, Lube, and Supply (WLS) Cost

(1) Prime Engine WLS

$$\begin{array}{rclcl} \text{(WLS Factor)} & \times & \text{(Hourly Fuel Cost)} & & \\ \text{1.e.(6)} & & \text{4.a.(1)} & & \\ \underline{(0.22)} & \times & \underline{(\$419.63 /hr)} & & = \underline{\$92.32 /hr} \end{array}$$

(2) Secondary Engine WLS

$$\begin{array}{rclcl} \text{(WLS Factor)} & \times & \text{(Hourly Fuel Cost)} & & \\ \text{1.e.(6)} & & \text{4.a.(2)} & & \\ \underline{(0.22)} & \times & \underline{(\$241.31 /hr)} & & = \underline{\$53.09 /hr} \end{array}$$

(3) Total Fuel (Prime Engine WLS + Secondary Engine WLS) = \$145.41 /hr

c. Repair Cost

(1) Economic Adjustment Factor (EAF)

$$\begin{array}{rclcl} \text{(Economic Index for Present Year or Year of Use)} & / & \text{(Economic Index for Acquisition Year)} & & \\ \text{1.c.(2)} & & \text{1.c.(1)} & & \\ \underline{(7221)} & / & \underline{(4438)} & & = \underline{1.627} \end{array}$$

(2) Repair Cost

$$\begin{array}{rclclclcl} \text{(Total Plant Value)} & \times & \text{(RPR)} & \times & \text{EAF} & \times & \text{LAF} & / & \text{Life in Hrs} & \\ \text{1.a.(7)} & & \text{1.e.(7)} & & \text{4.c.(1)} & & \text{1.b.(1)} & & \text{1.e.(2)} & \\ \underline{(\$3,700,000)} & \times & \underline{(1.30)} & \times & \underline{(1.627)} & \times & \underline{(1.07)} & / & \underline{(130,000)} & = \underline{\$64.41 /hr} \end{array}$$

**Region 02**

**4. OPERATING COSTS (Continued)**

d. Total Hourly Operating Cost (Fuel + WLS + Repairs)

(Fuel	+	WLS	+	Repairs)	
4.a.(3)		4.b.(3)		4.c.(2)	
<u>(\$660.94 /hr</u>	+	<u>\$145.41 /hr</u>	+	<u>\$64.41 /hr</u>	= <u>\$870.76 /hr</u>

e. Monthly Operating Cost

(Total Hourly		(Hrs Worked per		
Operating Cost)	x	Mo)		
4.d.		1.a.(8)		
<u>(\$870.76 /hr)</u>	x	<u>(500 hrs/mo)</u>	rounded =	<u>\$435,380.00 /mo</u>

**5. TOTAL MONTHLY RATE**

a. Ownership (3.b.) = \$24,626.00 /mo

b. Operating (4.e.) = \$435,380.00 /mo

c. Total Estimated Additive Items (1.a.(9)): = \$8,000.00 /mo

**d. TOTAL MONTHLY RATE** = **\$468,006.00 /mo**

**6. STANDBY ALLOWANCE**

a. Standard Hourly Standby Expense

(Monthly		Maximum		
Ownership		hrs/mo = 30.4		
Expense	/	days/mo x 24		
3.b.		hrs/day)		
<u>(\$24,626.00 /mo</u>	/	<u>730 hrs/mo)</u>	=	<u>\$33.73 /hr</u>

b. Generator Fuel Allowance for Dredge *(An additional generator fuel allowance may be allowed under certain circumstances. This allowance is applicable to dredges only.)*

((Generator HP	/	Total Secondary	x	Secondary Fuel	
1.a.(6)		HP)		Cost)	
<u>((200 hp</u>	/	<u>2,475 hp)</u>	x	<u>\$241.31)</u>	= <u>\$19.50 /hr</u>

**c. TOTAL HOURLY STANDBY ALLOWANCE FOR DREDGE**

(Standard Hourly		Generator Fuel		
Standby Expense	+	Allowance)		
6.a.		6.b.		
<u>(\$33.73 /hr</u>	+	<u>\$19.50 /hr</u>	=	<u>\$53.23 /hr</u>

## **APPENDIX A REFERENCES**

Section I: Required Publications  
Section II: Related Publications  
Section III. EFAR Reference  
Section IV: Government Bookstores

Sample Equipment Rate Computation Worksheet

## APPENDIX A

### REFERENCES

#### SECTION I: REQUIRED PUBLICATIONS

Public Law 92-41. *The Renegotiation Act of 1971* [PL 92-41 (85 Stat. 97)].

Federal Acquisition Regulation 15.400. *Contract Pricing*, Government Printing Office, Washington, DC.

\_\_\_\_\_. 30.101. *Cost Accounting Standards*, Part 30, Government Printing Office, Washington, DC.

\_\_\_\_\_. 31.105. *Construction and Architect-Engineer Contracts*, Government Printing Office, Washington, DC.

\_\_\_\_\_. 31.205-10. *Cost of Money*, Government Printing Office, Washington, DC.

\_\_\_\_\_. 31.205-36. *Rental Costs*, Government Printing Office, Washington, DC.

\_\_\_\_\_. 49.000. *Termination of Contracts*, Government Printing Office, Washington, DC.

\_\_\_\_\_. 52.230-2. *Cost Accounting Standards*, Government Printing Office, Washington, DC.

Engineer Federal Acquisition Regulation Supplement (EFARS). 31.105 *Construction and Architect-Engineer Contracts*, Regulation Supplement, Government Printing Office, Washington, DC.

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U.S. Department of Labor, Bureau of Labor Statistics. *Producer Prices and Price Indexes*, Government Printing Office, Washington, DC.

FAR 31.105(d)(2)(i).

## SECTION II: RELATED PUBLICATIONS

\_\_\_\_\_. 2000. *Caterpillar Performance Handbook*, 31st ed, Peoria, Illinois.

\_\_\_\_\_. 2001. *Caterpillar Performance Handbook*, 32nd ed, Peoria, Illinois.

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*Electric Power Monthly*, Washington, DC.

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\_\_\_\_\_. 2006. *Cost Reference Guide*.

Euclid, Inc. 1982. *Euclid Hauler Handbook*, 15th ed, Cleveland, Ohio.

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Koehring Company. 1981. *Application Manual for Hydraulic Excavators and Shovels*, 1st ed, Milwaukee, Wisconsin.

Nichols, H L Jr. 2005. *Moving the Earth*, 5th ed, McGraw-Hill Professional; 5 edition (March 28, 2005).

R S Means Company, Inc. 2007. *Labor Rates for the Construction Industry*, 34th ed., Kingston, Massachusetts.

Terex Corporation. 1981. *Production and Cost Estimating of Material Movement with Earthmoving Equipment*, Hudson, Ohio.

## **SECTION III: EFAR REFERENCE**

### **EFARS PART 31 CONTRACT COST PRINCIPLE AND PROCEDURES**

#### **EAC 95-6**

#### **SUBPART 31.1 -- APPLICABILITY**

##### **31.105 Construction and Architect-Engineer Contracts.**

(d)(2)(i)(b) In this case, equipment ownership and operating costs shall be determined using the Construction Equipment Ownership and Operating Expense Schedule published by the U.S. Army Corps of Engineers.

##### **31.105-100 Contract Clause.**

The contracting officer shall insert the statement at 52.231-5000 in all solicitations and contracts for construction within the United States that are expected to exceed the small purchase threshold.

#### **EFARS Clause - 52.231-5000 Equipment Ownership and Operating Expense Schedule.**

As prescribed in 31.105-100, insert the following clause in all solicitations and contracts for construction that are expected to exceed the small purchase threshold.

EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995) – EFARS.

(a) This clause does not apply to terminations. See 52.249-5000, *Basis for Settlement of Proposals*, and FAR Part 49, *Termination of Contracts*.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, *Construction Equipment Ownership and Operating Expense Schedule*, Region [Insert roman numeral for the appropriate region of the schedule]. Working conditions shall be considered to

### **SECTION III: EFAR REFERENCE (Continued)**

be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105, *Construction and Architect-Engineer Contract*, and FAR 31.205-36, *Rental Costs*. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment or unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.



#### **SECTION IV. GOVERNMENT BOOKSTORES**

U.S. Government periodicals are sold by the Office of the Superintendent of Documents. Orders may be placed by telephone or fax (Visa/Mastercard is accepted). Telephone: toll free 866-512-1800 (D.C. area: 202-512-1800). Fax: 202-512-2104.

Orders may also be placed electronically at Internet address <http://bookstore.gpo.gov/>.

**RETURN POLICY**: Publications are not accepted for exchange or credit unless an error was made in filling your order.

When ordering, please give the following information:

Title of Publication:	EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule
Region:	Region I through XII
Volume No.	Volume No. 1 through No. 12
Media:	CD-ROM

Use this worksheet to compute rates for equipment that is not in this pamphlet.

1. **EQUIPMENT INFORMATION AND EXPENSE FACTORS**

ID No.: \_\_\_\_\_

a. Equipment Specification Data:

- (1) Equipment Description: \_\_\_\_\_
- (2) Model and Series: \_\_\_\_\_
- (3) Year of Use: \_\_\_\_\_
- (4) Year Manufactured: \_\_\_\_\_
- (5) Horsepower - Equipment: \_\_\_\_\_
- (6) Horsepower - Carrier: \_\_\_\_\_
- (7) Fuel type: - Equipment: gas/diesel off-road/diesel on-road/electric/air \_\_\_\_\_  
 - Carrier: gas/diesel off-road/diesel on-road/electric/air \_\_\_\_\_
- (8) Shipping Weight (cwt): \_\_\_\_\_
- (9) Tire size and number of tires: (Cost of tires based on year of use – see 1.a.(3) and appendix F)

	<u>No.</u>	<u>Size/Ply</u>	<u>Unit Price</u>	<u>Cost</u>
(a) Front (FT):	_____	_____	\$ _____	\$ _____
(b) Drive (DT):	_____	_____	\$ _____	\$ _____
(c) Trailing (TT):	_____	_____	\$ _____	\$ _____
(d) Total Tire Cost:				\$ _____

**USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:**

- b. Category and Subcategory Number: \_\_\_\_\_
- c. Hourly Expense Calculation Factors:
  - (1) Economic Key (EK): \_\_\_\_\_
  - (2) Condition (C): \_\_\_\_\_ Average or Severe or Difficult
  - (3) Discount Code (DC): B = 7.5% (0.075) – or – S = 15.0% (0.15) \_\_\_\_\_
  - (4) Life in Hours (LIFE): \_\_\_\_\_
  - (5) Salvage Value Percentage (SLV): \_\_\_\_\_
  - (6) Fuel Factor – Equipment [Electric (E) Gas (G) Diesel (D)]: \_\_\_\_\_
  - (7) Fuel Factor – Carrier (E G D): \_\_\_\_\_
  - (8) Filters, Oil, and Grease (FOG) Factor (E G D): \_\_\_\_\_
  - (9) Tire Wear Factor:
    - (a) Front (FT): \_\_\_\_\_
    - (b) Drive (DT): \_\_\_\_\_
    - (c) Trailing (TT): \_\_\_\_\_
  - (10) Repair Cost Factor (RCF): \_\_\_\_\_

**2. EQUIPMENT VALUE**

- a. List Price + Accessories: *[at Year of Manufacture]* = \$ \_\_\_\_\_
- (1) Discount: (List Price + Accessories) x (Discount Code)  
 (\$ \_\_\_\_\_ + \$ \_\_\_\_\_) x ( \_\_\_\_\_ )<sup>[1.c.(3)]</sup> = -(\$ \_\_\_\_\_)
- (2) Subtotal [2.a.] – [2.a.(1)] Subtotal=\$ \_\_\_\_\_
- (3) Sales or Import Tax: (Subtotal) x (Tax Rate)  
<sup>[2.a.(2)]</sup> <sup>[Appendix B]</sup>  
 (\$ \_\_\_\_\_) x ( \_\_\_\_\_ ) = +\$ \_\_\_\_\_
- (4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)] Subtotal=\$ \_\_\_\_\_
- b. Freight: (Shipping Weight) x (Freight Rate per cwt)  
<sup>[1.a.(8)]</sup> <sup>[Appendix B]</sup>  
 ( \_\_\_\_\_ cwt) x (\$ \_\_\_\_\_ /cwt) = +\$ \_\_\_\_\_
- c. **TOTAL EQUIPOMENT VALUE (TEV):** **TOTAL[2.] := \$ \_\_\_\_\_**  
<sup>[(2.a.(4)) + [(2.b)]]</sup>  
*(See chapter 3 for used and overage equipment rate adjustments.)*

**3. DEPRECIATION PERIOD (N)**

- a. (LIFE hours (hr)) / (Working Hours Per Year (WHPY)) = N  
<sup>[1.c.(4)]</sup> <sup>[Appendix B]</sup>  
 ( \_\_\_\_\_ hr) / ( \_\_\_\_\_ hr/yr) = \_\_\_\_\_

**4. OWNERSHIP COST**

- a. Depreciation
- (1) Tire Cost Index (TCI):  
 (Tire Index, Yr of Mfg) / (Tire Index, Based on 1.a.(3)) =  Tire Cost Index (TCI)  
<sup>[Appendix E, EK=100]</sup> <sup>[Appendix E, EK=100]</sup>  
 ( \_\_\_\_\_ ) / ( \_\_\_\_\_ ) = \_\_\_\_\_ (TCI)
- (2) [(TEV) x [1.0 - (SLV)] - [(TCI) x (Tire Cost)]] / (LIFE )  
<sup>[2.c.]</sup> <sup>[1.c.(5)]</sup> <sup>[4.a.(1)]</sup> <sup>[1.a.(9)(d)]</sup> <sup>[1.c.(4)]</sup>  
 [(\$ \_\_\_\_\_) x [1.0 - ( \_\_\_\_\_ )] - [( \_\_\_\_\_ ) x (\$ \_\_\_\_\_ )]] / ( \_\_\_\_\_ hr)  
 = \$ \_\_\_\_\_ /hr

4. **OWNERSHIP COST (Continued)**

b. Facilities Capital Cost of Money (FCCM):

(1) 
$$\frac{[(N) - 1.0] \times [1.0 + (SLV)] + 2.0}{[2.0 \times (N)]} = \text{Avg Value Factor}$$
[3.a.] [1.c.5.] [3.a.] (AVF)

$$\frac{[(\text{_____ yr}) - 1.0] \times [1.0 + (\text{_____})] + 2.0}{[2.0 \times (\text{_____ yr})]} = \text{_____ (AVF)}$$

(2) 
$$(\text{TEV}) \times (\text{AVF}) \times (\text{Adjusted Cost - of - Money}) / (\text{WHPY})$$
[2.c.] [4.b.(1)] [Appendix B] [Appendix B]

$$(\$ \text{_____}) \times (\text{_____}) \times (\text{_____}) / (\text{_____ hr/yr}) = \$ \text{_____} / \text{hr}$$

c. **TOTAL HOURLY OWNERSHIP COST: TOTAL [4.]:** 
$$= \$ \text{_____} / \text{hr}$$
[4.a.(2)] + [4.b.(2)]

5. **OPERATING COST**

a. Fuel Costs:

(1) Equipment:

$$(\text{Fuel Factor} \times (\text{Horsepower (hp)}) \times (\text{Fuel Cost Per Gallon (gal)}))$$
[1.c.(6)] [1.a.(5)] [Appendix B]

$$(\text{_____}) \times (\text{_____ hp}) \times (\$ \text{_____} / \text{gal}) = \$ \text{_____} / \text{hr}$$

(2) Carrier:

$$(\text{Fuel Factor}) \times (\text{Horsepower}) \times (\text{Fuel Cost Per Gallon})$$
[1.c.(7)] [1.a.(6)] [Appendix B]

$$(\text{_____}) \times (\text{_____ hp}) \times (\$ \text{_____} / \text{gal}) = \$ \text{_____} / \text{hr}$$

(3) **Total Hourly Fuel Cost:** 
$$\text{Total [5.a.]} = \$ \text{_____} / \text{hr}$$
[(5.a.(1)) + (5.a.(2))]

b. FOG Cost:

(1) Equipment:

$$(\text{FOG Factor}) \times (\text{Equipment Fuel Cost}) \times (\text{Labor Adjustment Factor (LAF)})$$
[1.c.(8)] [5.a.(1)] [Appendix B]

$$(\text{_____}) \times (\$ \text{_____} / \text{hr}) \times (\text{_____}) = \$ \text{_____} / \text{hr}$$

**5. OPERATING COST (Continued)**

(2) Carrier:

$$\text{(FOG Factor)} \times \text{(Carrier Fuel Cost)} \times \text{(LAF)}$$

[1.c.(8)]
[5.a.(2)]
[Appendix B]

$$(\text{_____}) \times (\$ \text{_____} / \text{hr}) \times (\text{_____}) = \$ \text{_____} / \text{hr}$$

(3) Total Hourly FOG Cost: **Total [5.b.] = \$\_\_\_\_\_ /hr**  
 [(5.b.(1)) + (5.b.(2))]

c. Alternative Fuel/FOG Cost: **Total [5.c.] = \$\_\_\_\_\_ /hr**

(See chapter 2, paragraph 24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):  
 (EK is from [1.c.(1)])

$$\text{(Economic Index for Year 1.a.(3))} / \text{(Economic Index for Year 1.a.(4))}$$

[Appendix E]
[Appendix E]

$$(\text{_____}) / (\text{_____}) = \text{_____ (EAF)}$$

(See table 3-1 for last year of economic life.)

(2) Repair Factor (RF):

$$\text{(RCF)} \times \text{(EAF)} \times \text{(LAF)} = \text{_____ Repair Factor (RF)}$$

[1.c.(10)]
[5.d.(1)]
[Appendix B]

$$(\text{_____}) \times (\text{_____}) \times (\text{_____}) = \text{_____ (RF)}$$

(3) Repair Cost:

$$[(\text{TEV}) - [(\text{TCI}) \times (\text{Tire Cost})]] \times (\text{RF}) / (\text{LIFE})$$

[2.c.]
[4.a.(1)]
[1.a.(9)(d)]
[5.d.(2)]
[1.c.(4)]

$$[(\$ \text{_____}) - [(\text{_____}) \times (\$ \text{_____})]] \times (\text{_____}) / (\text{_____})$$

(4) Total Hourly Repair Cost: **Total [5.d.] = \$\_\_\_\_\_ /hr**

5. **OPERATING COST** (Continued)

e. Tire Wear Cost: (Use current price levels. See Appendix F)

(1) Front Tires (FT):

$$\frac{[1.5 \times \text{(FT Cost)}]}{[1.8 \times \text{(FT Wear Factor)} \times \text{(Maximum Tire Life Hours)}]}$$

[1.a.(9)(a)]
[1.c.(9)(a)]
[Appendix G]

$$[1.5 \times (\$ \underline{\hspace{2cm}})] / [1.8 \times (\underline{\hspace{2cm}}) \times (\underline{\hspace{2cm}} / \text{hr})]$$

$$= \$ \underline{\hspace{2cm}} / \text{hr}$$

(2) Drive Tires (DT):

$$\frac{[1.5 \times \text{(DT Cost)}]}{[1.8 \times \text{(DT Wear Factor)} \times \text{(Maximum Tire Life Hours)}]}$$

[1.a.(9)(b)]
[1.c.(9)(b)]
[Appendix G]

$$[1.5 \times (\$ \underline{\hspace{2cm}})] / [1.8 \times (\underline{\hspace{2cm}}) \times (\underline{\hspace{2cm}} / \text{hr})]$$

$$= \$ \underline{\hspace{2cm}} / \text{hr}$$

(3) Trailing Tires (TT):

$$\frac{[1.5 \times \text{(TT Cost)}]}{[1.8 \times \text{(TT Wear Factor)} \times \text{(Maximum Tire Life Hours)}]}$$

[1.a.(9)(c)]
[1.c.(9)(c)]
[Appendix G]

$$[1.5 \times (\$ \underline{\hspace{2cm}})] / [1.8 \times (\underline{\hspace{2cm}}) \times (\underline{\hspace{2cm}} / \text{hr})]$$

$$= \$ \underline{\hspace{2cm}} / \text{hr}$$

(4) Total Tire Wear Cost:  
 [Sum 5.e.(1) through 5.e.(3)]

**Total [5.e.] =** \$                      /hr

f. Tire Repair Cost:

$$\text{(Total Tire Wear Cost)} \times 0.15 \times \text{(LAF)}$$

[5.e.(4)]
[Appendix B]

$$(\$ \underline{\hspace{2cm}} / \text{hr}) \times 0.15 \times (\underline{\hspace{2cm}})$$

**Total [5.f.] =** \$                      /hr

g. **TOTAL HOURLY OPERATING COST:**  
 [Sum 5.a. through 5.f.]

**TOTAL [5.] =** \$                      /hr

6. **HOURLY RATES**

a. Total Hourly Rate: *[based on 40 hours per week (wk)]*

(Ownership Cost) + (Operating Cost)

(\$ \_\_\_\_\_/hr) + (\$ \_\_\_\_\_/hr)

=\$ _____ /hr
---------------

b. Other Work Shifts Hourly Rate:  
*(Refer to Chapter 3, Adjustments to Rates, for methodology.)*

[(Depreciation) + [(FCCM) x (40 hr/wk) / (Work hr/wk)] + (Operating Cost)]  
[4.a.(2)]                      [4.b.(2)]                      (example: 60 hr/wk)                      [5.g.]

[( \$ \_\_\_\_\_/hr) + [( \$ \_\_\_\_\_/hr) x (40 hr/wk) / ( \_\_\_\_\_ hr/wk)] + ( \$ \_\_\_\_\_/hr)]

=\$ _____ /hr
---------------

c. Standby Hourly Rate:

[(Depreciation) x 0.50] + (FCCM)  
[4.a.(2)]                      [4.b.(2)]

[( \$ \_\_\_\_\_/hr) x 0.50] + ( \$ \_\_\_\_\_/hr)

=\$ _____ /hr
---------------

**See Chapter 3 if rate adjustments are necessary.**

## **APPENDIX B AREA FACTORS**



**APPENDIX B**  
**AREA FACTORS**

MIDEAST

**Region:** 2

---

Total State Sales or Import Tax Rate:	5.40%
Working Hours Per Year (WHPY):	1,450 hrs/yr
Labor Adjustment Factor (LAF):	1.07
Electricity Cost Per Kilowatt-Hour:	\$0.089 /kW-Hr
Gasoline Cost Per Gallon:	\$3.03 /gal
Diesel Cost Per Gallon (Off-Road Use):	\$2.26 /gal
Diesel Cost Per Gallon (On-Road Use):	\$2.76 /gal
Cost-of-Money Rate (Full Rate):	5.250%
Cost-of-Money Rate (Adjusted):	4.200%

**Freight Rates**

over	0	cwt	thru	240	\$7.31
over	240	cwt	thru	300	\$7.32
over	300	cwt	thru	400	\$6.32
over	400	cwt	thru	500	\$5.97
over	500	cwt	thru	700	\$3.56
over	700	cwt	thru	800	\$3.56
over	800	cwt	thru	99,999	\$4.88

## APPENDIX B AREA FACTORS (for all regions)

**Below is a listing of all regional area factors for reference only. The area factor's used for this pamphlet are located on previous page B-1.**

										Freight Cost													
Reg	SST	WHPY	LAF	Elec	Gas	D-Off	D-On	Thru CWT \$	Thru CWT \$	Thru CWT \$	Thru CWT \$	Thru CWT \$	Thru CWT \$	Thru CWT \$	Thru CWT \$	Thru CWT \$							
1	NORTHEAST	2007	5.60%	1360	1.18	\$0.147	\$3.03	\$2.33	\$2.85	240	\$12.35	300	\$12.07	400	\$10.39	500	\$9.36	700	\$5.30	800	\$5.30	99,999	\$7.27
2	MIDEAST	2007	5.40%	1450	1.07	\$0.089	\$3.03	\$2.26	\$2.76	240	\$7.31	300	\$7.32	400	\$6.32	500	\$5.97	700	\$3.56	800	\$3.56	99,999	\$4.88
3	SOUTHEAST	2007	7.40%	1530	0.83	\$0.090	\$2.90	\$2.26	\$2.72	240	\$10.26	300	\$9.59	400	\$8.41	500	\$7.64	700	\$4.49	800	\$4.36	99,999	\$4.99
4	NORTHCENTRAL	2007	5.10%	1260	1.08	\$0.088	\$3.06	\$2.35	\$2.83	240	\$13.74	300	\$13.53	400	\$11.81	500	\$10.48	700	\$5.92	800	\$5.36	99,999	\$4.04
5	MIDWEST	2007	6.70%	1400	1	\$0.083	\$2.98	\$2.31	\$2.80	240	\$10.65	300	\$10.00	400	\$8.23	500	\$7.51	700	\$4.48	800	\$4.15	99,999	\$3.18
6	SOUTHWEST	2007	7.60%	1590	0.86	\$0.102	\$3.01	\$2.28	\$2.71	240	\$14.74	300	\$14.51	400	\$12.25	500	\$10.94	700	\$5.87	800	\$5.39	99,999	\$4.17
7	WEST	2007	7.40%	1630	1.17	\$0.107	\$3.11	\$2.43	\$2.87	240	\$22.36	300	\$22.27	400	\$18.78	500	\$16.17	700	\$8.90	800	\$7.79	99,999	\$5.62
8	NORTHWEST	2007	4.80%	1540	1.06	\$0.068	\$3.13	\$2.30	\$2.82	240	\$27.58	300	\$26.71	400	\$22.79	500	\$19.45	700	\$11.26	800	\$9.51	99,999	\$6.48
9	ALASKA	2007	1.25%	1040	1.21	\$0.148	\$3.02	\$2.49	\$2.81	240	\$37.93	300	\$37.12	400	\$33.03	500	\$29.12	700	\$20.50	800	\$18.63	99,999	\$15.34
10	HAWAII	2007	4.40%	1480	1.22	\$0.236	\$3.46	\$2.34	\$3.00	240	\$100.12	300	\$77.63	400	\$51.16	500	\$48.93	700	\$43.16	800	\$32.39	99,999	\$20.03
11	PUERTO RICO	2007	6.60%	1560	0.74	\$0.202	\$2.97	\$2.28	\$2.72	240	\$47.05	300	\$37.33	400	\$25.74	500	\$23.70	700	\$22.47	800	\$19.33	99,999	\$16.35
12	KWAJALEIN	2007	4.40%	1390	1.1	\$0.202	\$2.84	\$2.34	\$2.34	240	\$27.87	300	\$27.70	400	\$23.56	500	\$20.21	700	\$12.23	800	\$10.61	99,999	\$8.09

**SST = State Sales tax**      **WHPY = Work Hours Per Year**      **LAF = Labor Adjustment Factor**      **Elec = Electricity Cost Per kW-Hr**  
**Gas = Gasoline Cost per Gal**      **D-Off = Diesel-Off Road Cost per Gal**      **D-On = Diesel-On Road Cost per Gal**      **CWT = Hundred Pounds**

## **APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS**

<b>APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS</b>		
<b>EQUIPMENT TYPE</b>	<b>AVERAGE</b>	<b>SEVERE</b>
<p><b><u>B25 and B35:</u></b>            Buckets                Clamshell or                Dragline</p> <p>Depreciation Period:</p>	<p>Working in gravels, silts,            and sands at low impact            freshwater environment.</p> <p>8,000 - 10,000 hours</p>	<p>Working in rock, hard            digging, high impact, or            saltwater environment.</p> <p>6,500 - 8,000 hours</p>
<p><b><u>C80 and C90:</u></b>            Cranes                Hydraulic, Truck                Mounted                Mechanical, Truck                Mounted</p> <p>Depreciation Period:</p>	<p>Lift less than rated capacity,            intermittent duty.</p> <p>14,000 - 20,000 hours</p>	<p>Continuous lift near rated            capacity, excessive swing,            abrasive materials, sloped            surfaces, and saltwater            environment.</p> <p>12,000 - 18,000 hours</p>
<p><b><u>C85:</u></b>            Cranes                Mechanical Dragline,                Lifting, or Clamshell</p> <p>    Crawler Mounted</p> <p>Depreciation Period:</p>	<p>Gravels, silts, pull, and lift            less than rated capacity.</p> <p>14,000 - 22,000 hours</p>	<p>Highly abrasive materials,            impact breakout,            continuous load near rated            capacity, and saltwater            environment.</p> <p>12,000 - 18,000 hours</p>
<p><b><u>G10:</u></b>            Generators</p> <p>Depreciation Period:</p>	<p>Working below rated            capacity, good field            conditions.</p> <p>8,000 - 10,000 hours</p>	<p>Working at or above rated            capacity, poor field            conditions, such as            saltwater.</p> <p>7,000 - 8,000 hours</p>

<b>APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS</b>		
<b>EQUIPMENT TYPE</b>	<b>AVERAGE</b>	<b>SEVERE</b>
<p><b><u>G15:</u></b>            Graders, Motor</p> <p>Depreciation Period:</p>	<p>Haul road maintenance; road construction, ditching; loose fill spreading; landforming, landleveling; summer road maintenance with medium to heavy winter snow removal; and elevating grader use.</p> <p>14,500 hours</p>	<p>Maintenance of hard-packed roads with embedded rock; heavy fill spreading; ripping scarifying of asphalt or concrete; continuous high load factor; and high impact.</p> <p>13,500 hours</p>
<p><b><u>H25:</u></b>            Hydraulic Excavators            Crawler Mounted</p> <p>Depreciation Period:</p>	<p>Mass excavation or trenching where machine digs all the time in natural bed clay soils; some traveling and steady, full throttle operation; and most log loading operations.</p> <p>8,500 - 19,000 hours</p>	<p>Continuous trenching or truck loading in rock or shot rock soils; large amount of travel over rough ground; machine continuously working on rock floor with constant high load factor and high impact; and saltwater environment.</p> <p>7,000 – 15,000 hours</p>
<p><b><u>H30:</u></b>            Hydraulic Excavators            Wheel Mounted</p> <p>Depreciation Period:</p>	<p>Continuous digging in sandy clay/sandy gravel, site development, and lumber yard applications.</p> <p>8,000 - 10,000 hours</p>	<p>Continuous digging in rock/natural bed clay, high impact, using hammer, and working in forests or quarries.</p> <p>6,500 - 8,000 hours</p>
<p><b><u>H35:</u></b>            Hydraulic Shovels            Crawler Mounted            (nonelectric)</p>	<p>Continuous loading in well shot rock or fairly tight bank. Good underfoot conditions: dry floor, little</p>	<p>Continuous loading in poorly shot rock, virgin, or lightly blasted tight banks. Adverse underfoot</p>

<b>APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS</b>		
<b>EQUIPMENT TYPE</b>	<b>AVERAGE</b>	<b>SEVERE</b>
	impact, or sliding on undercarriage.	conditions: rough floors, high impact sliding on undercarriage; and saltwater environment.
Depreciation Period:	14,000 - 18,000 hours	12,000 - 16,000 hours
<b><u>L10:</u></b> Land Clearing Equipment	Working in low impact conditions at or below rated capacity.	High impact conditions working at or above rated capacity.
Depreciation Period:	10,000 hours	7,000 hours
<b><u>L30:</u></b> Loaders, Belt (conveyors)	Working below rated capacity, with intermittent service.	Working at or above rated capacity with continuous service.
Depreciation Period:	10,000 hours	8,000 hours
<b><u>L35:</u></b> Loaders, Front End Crawler Type	Bank excavation, intermittent ripping, basement digging of natural bed clays, sands, silts, and gravels; some traveling; and steady full throttle operations.	Loading shot rock, cobbles, glacial till, and caliche; steel millwork; high density materials in standard bucket; continuous work on rock surfaces; large amount of ripping of tight rock materials; high impact conditions; and saltwater environment.
Depreciation Period:	10,000 hours	8,000 hours
<b><u>L40:</u></b> Loaders, Front End Wheel Type (does not include	Continuous truck loading from stockpile; low to medium density materials in	Loading shot rock (large loaders); handling high density materials with

<b>APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS</b>		
<b>EQUIPMENT TYPE</b>	<b>AVERAGE</b>	<b>SEVERE</b>
skid steer and tool carriers)	properly sized bucket; hopper charging in low to medium rolling resistance; loading from bank in good digging; and load and carry on poor surfaces and slight adverse grades.  9,250 - 13,500 hours	counterweighted machine; steady loading from very tight banks; continuous work on rough or very soft surfaces; load and carry in hard digging; travel longer distances on poor surfaces with adverse grades and saltwater environment.  8,750 - 12,000 hours
Depreciation Period:		
<b><u>L45 and L50:</u></b> Loaders with Backhoe Crawler Type and Wheel Type	Utility applications in medium to heavy soil; occasional use of constant flow implements and dig depths to 3.05 meters (10 feet).  8,000 hours	Production applications or digging in rock; regular use of constant flow implements; and dig depths over 3.05 meters (10 feet).  6,000 hours
Depreciation Period:		
<b><u>L60:</u></b> Log Skidders	Continuous turning, steady skidding for medium distances with moderate decking. Good underfooting: dry floor with few stumps and gradual rolling terrain.	Continuous turning, steady skidding for long distances with frequent decking; poor underfoot conditions: wet floor, steep slopes, and numerous stumps; and saltwater environment.  8,000 hours
Depreciation Period:	10,000 hours	
<b><u>M10 - .31 and .32:</u></b> Clamshell dredges < 5 cy Amphibious Excavator	Gravel, silts, breakout force at less than capacity, freshwater conditions.	Rock, abrasive materials, load at rated capacity, saltwater conditions.

<b>APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS</b>		
<b>EQUIPMENT TYPE</b>	<b>AVERAGE</b>	<b>SEVERE</b>
Depreciation Period:	10,000 - 20,000 hours	9,000 - 18,000 hours
<b><u>M10 - .51 and .53:</u></b> Boats, Skiffs, Crew Boats, Work Boats, Survey Boats, and Launches	Freshwater applications, light waves, and steady to light use.	Saltwater use, medium to high waves, heavy use.
Depreciation Period:	16,000 - 18,000 hours	13,000 - 15,000 hours
<b><u>P35:</u></b> Pipelayers	Typical pipelayer use in operating conditions ranging from very good to severe.	Continuous use in deep mud or water or on rock surfaces.
Depreciation Period:	14,000 hours	11,500 hours
<b><u>R10:</u></b> Rippers and Bank Slopers	Light rock, medium breakout force required.	Hard rock, excessive wear due to high breakout force.
Depreciation Period:	8,000 hours	6,500 hours
<b><u>S10, S15, S20, and S25:</u></b> Scrapers Self-Propelled Tractor Drawn Soil Stabilizers	Varying loading and haul road conditions; long and short hauls; adverse and favorable grades; some impact; and typical road- building use on a variety of jobs.	High impact conditions, such as loading ripped rock; overloading, continuous high total resistance conditions; and rough haul roads.
Depreciation Period:	10,000 - 15,000 hours	8,000 - 13,500 hours
<b><u>T15:</u></b> Tractors Crawler (Dozer)	Production dozing in clays, sands, gravels, and talus rock. Push-loading scrapers, borrow pit ripping,	Heavy rock ripping; tandem ripping; pushloading and dozing in hard rock; work on rock surfaces;



<b>APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS</b>		
<b>EQUIPMENT TYPE</b>	<b>AVERAGE</b>	<b>SEVERE</b>
	most land clearing and skidding applications. Medium impact conditions. Production landfill work.	continuous high impact conditions; and saltwater environment.
Depreciation Period:	10,000 - 15,000 hours	8,000 - 12,500 hours
<b>T20:</b> Tractors Wheel Type (Dozer)	Production dozing, push loading in clays, sands, silts, loose gravels; and shovel cleanup.	Production dozing in rock; push loading in rocky, boulder strewn borrow pits; high impact conditions; and landfill compactor work.
Depreciation Period:	14,000 hours	13,000 hours
<b>T30:</b> Trenchers Chain and Wheel Type	Working in sands and silts below rated capacity of the machine.	Working in gravels and abrasive materials at or above the rated capacity of the machine.
Depreciation Period:	8,000 hours	6,000 hours
<b>T45 and T50:</b> Truck Trailers Trucks, Highway	Varying loading and road conditions; and typical construction use on a variety of jobs.	Consistently poor road conditions; and oversized loading equipment.
Depreciation Period:	8,000 - 12,000 hours	6,500 - 10,000 hours
<b>T55 and T60:</b> Truck, Off-Highway Trucks, Water, Off-Highway (Articulated and Rigid)	Varying load and haul road conditions; high rolling resistance and poor traction during part of the job; some adverse grades; some	Continuous use on very poorly maintained haul roads, high rolling resistance, and poor traction; frequent adverse

<b>APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS</b>		
<b>EQUIPMENT TYPE</b>	<b>AVERAGE</b>	<b>SEVERE</b>
	impact loads; and typical use in road building, dam construction, open-pit mining, <i>etc.</i>	grades and high impact loads; and poorly matched loading equipment with continuous overloading.
Depreciation Period:	12,000 - 20,000 hours	10,000 - 18,000 hours
<b><u>W10 and W15:</u></b> Wagons Bottom Dump Rear Dump  Chapter 1	Varying load and haul road conditions; long and short hauls; high rolling resistance and poor traction during part of the job; some adverse grades; some impact; typical road building use in a variety of jobs; and dam construction, open-pit mining, <i>etc.</i>  12,000 hours	Continuous use on very poorly maintained haul roads, high rolling resistance, and poor traction; high impact conditions, such as loading ripped rock; frequent adverse grades and high impact loads; and poorly matched loading equipment with continuous overloading.  10,000 hours
Depreciation Period:		

## **APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS**

## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
A10	0.00	AGGREGATE / CHIP SPREADERS	1																			
A10	0.10	SELF-PROPELLED	10	A	B	8,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.102	.102	0.83	0.72	0.92	0.75
A10	0.20	TOWED & TAILGATE	10	A	B	6,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.73	0.00	0.82	0.60
A15	0.00	AIR COMPRESSORS, PORTABLE	1																			
A15	0.10	ROTARY SCREW	5	A	B	10,000	0.20	75	.750	.068	.036	0	.000	.000	.000	.477	.136	.119	0.66	0.00	0.73	0.75
A15	0.20	SHOP TYPE	5	A	B	12,000	0.15	75	.750	.068	.036	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.65
A20	0.00	AIR HOSE, TOOLS & EQUIPMENT	1																			
A20	0.10	AIR DRILL HOSE	5	A	B	3,500	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.50
A20	0.20	SANDBLAST HOSE	5	A	B	3,500	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.65
A20	0.30	SANDBLASTERS, BREAKERS, & MISC. AIR TOOLS	5	A	B	6,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.96	0.84	1.07	1.50
A25	0.00	ASPHALT PAVING DISTRIBUTORS	10	A	B	6,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	0.96	0.63	1.07	0.85
A30	0.00	ASPHALT PAVERS & MISCELLANEOUS ROAD EQUIPMENT	1																			
A30	0.10	SELF PROPELLED	10	A	B	8,000	0.15	70	.700	.063	.034	0	.000	.000	.000	.000	.136	.119	1.08	0.72	1.20	1.00
A30	0.20	TOWED	10	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.00	1.20	0.80
A30	0.30	SLURRY SEAL PAVERS (Cold mix)	10	A	B	12,000	0.20	60	.600	.054	.029	13	.130	.012	.006	.000	.100	.100	1.08	0.71	1.20	0.55
A30	0.40	MISCELLANEOUS ROAD EQUIPMENT	10	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	0.80
A35	0.00	ASPHALT PAVING KETTLES	10	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	0.80
A40	0.00	ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS	10	A	B	6,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	1.00
A45	0.00	ASPHALT RECYCLERS & SEALERS	10	A	B	5,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	0.90
B10	0.00	BATCH PLANTS, ASPHALT & CONCRETE	1																			
B10	0.10	ASPHALT	10	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.72	1.20	1.00
B10	0.20	CONCRETE	10	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.71	1.20	1.00
B10	0.30	PUGMILL	10	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.71	1.20	1.00
B15	0.00	BROOMS, STREET SWEEPERS & FLUSHERS	95	A	B	8,000	0.10	65	.650	.059	.031	13	.130	.012	.006	.000	.102	.119	0.96	0.63	1.07	0.80
B20	0.00	BRUSH CHIPPERS	95	A	B	8,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	0.00	0.00	0.92	0.90
B25	0.00	BUCKETS, CLAMSHELL	15	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B25	0.00	BUCKETS, CLAMSHELL	15	S	B	6,500	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80

EK=Economic Key (Appendix E)  
 C=Operating Conditions (A=average, S=severe)  
 DC=Discount Code (B=basic 7.5%, S=special 15%)  
 RCF=Repair Cost Factor

LIFE=Economic Life  
 SLV=Salvage Value  
 HPF=Horsepower Factor

E=Electric Powered  
 G=Gas Powered  
 D=Diesel Powered

FT=Front Tire  
 DT=Drive Tire  
 TT=Trailing Tire

## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
B30	0.00	BUCKETS, CONCRETE	1																			
B30	0.10	GENERAL PURPOSE, MANUAL TRIP	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B30	0.20	LAYDOWN	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.75
B30	0.30	LOWBOY	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B30	0.40	LOW SLUMP	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B35	0.00	BUCKETS, DRAGLINE	1																			
B35	0.10	LIGHT WEIGHT	15	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B35	0.10	LIGHT WEIGHT	15	S	B	6,500	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B35	0.20	MEDIUM WEIGHT	15	A	B	9,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B35	0.20	MEDIUM WEIGHT	15	S	B	7,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B35	0.30	HEAVY WEIGHT	15	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B35	0.30	HEAVY WEIGHT	15	S	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
C05	0.00	CHAIN SAWS	95	A	B	2,000	0.10	90	.900	.081	.043	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	2.50
C10	0.00	COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER	1																			
C10	0.10	COMPACTORS, RAMMERS / TAMPERS & VIBRATORY PLATES	95	A	B	4,000	0.05	90	.900	.081	.043	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.20
C10	0.20	ROLLERS, VIBRATORY	95	A	B	4,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.20
C15	0.00	CONCRETE CLEANERS / ABRASIVE BLASTERS	1	A																		
C15	0.10	WALK BEHIND	95	A	B	4,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.90
C15	0.20	TRUCK/TRAILER MOUNTED	95	A	B	8,000	0.20	95	.950	.086	.045	50	.500	.045	.024	.000	.136	.119	0.72	0.66	0.79	0.90
C20	0.00	CONCRETE BUGGIES	95	A	B	4,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.96	0.63	1.07	0.70
C25	0.00	CONCRETE FINISHERS/SCREEDS/SPREADERS	1																			
C25	0.10	FINISHERS/TROWELS	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.80
C25	0.20	VIBRATORY SCREED	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.96	0.84	1.07	0.80
C25	0.25	VIBRATORY LASER SCREED	95	A	B	8,000	0.30	65	.000	.059	.031	0	.000	.000	.000	.000	.180	.160	0.96	0.84	1.07	0.60
C25	0.30	MATERIAL/TOPPING SPREADERS	95	A	B	8,000	0.30	65	.000	.059	.031	0	.000	.000	.000	.000	.180	.160	0.96	0.84	1.07	0.60
C30	0.00	CONCRETE GRINDERS	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.90
C35	0.00	CONCRETE GUNITERS / SHOTCRETTERS	95	A	B	7,000	0.25	75	.750	.068	.036	0	.000	.000	.000	.477	.136	.119	0.96	0.86	1.07	0.90

EK=Economic Key (Appendix E)  
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 SLV=Salvage Value  
 HPF=Horsepower Factor

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 G=Gas Powered  
 D=Diesel Powered

FT=Front Tire  
 DT=Drive Tire  
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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
C40	0.00	CONCRETE MIXING UNITS	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.92	0.80
C45	0.00	CONCRETE PAVING MACHINES	10	A	B	6,000	0.20	75	.750	.068	.036	0	.000	.000	.000	.000	.136	.119	1.08	0.72	1.20	1.00
C55	0.00	CONCRETE PUMPS	95	A	B	8,000	0.10	70	.700	.063	.034	10	.100	.009	.005	.477	.136	.119	0.96	0.86	1.07	1.00
C60	0.00	CONCRETE SAWS (Add cost for sawblade wear)	95	A	B	6,000	0.10	90	.900	.081	.043	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	1.00
C65	0.00	CONCRETE VIBRATORS	5	A	B	4,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	2.50
C70	0.00	CRANES, GANTRY & STRADDLE	1																			
C75	0.00	CRANES, HYDRAULIC, SELF-PROPELLED	20	A	B	14,000	0.15	75	.750	.068	.036	0	.000	.000	.000	.000	.136	.127	0.66	0.59	0.73	0.80
C80	0.00	CRANES, HYDRAULIC, TRUCK MOUNTED	1																			
C80	0.01	UNDER 26 TON	20	A	B	14,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.161	.153	0.66	0.58	0.73	0.60
C80	0.01	UNDER 26 TON	20	S	B	12,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.161	.153	0.18	0.14	0.20	0.65
C80	0.02	26 TON THRU 65 TON	20	A	B	16,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.70
C80	0.02	26 TON THRU 65 TON	20	S	B	14,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.75
C80	0.03	66 TON THRU 125 TON	20	A	B	18,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.80
C80	0.03	66 TON THRU 125 TON	20	S	B	16,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.85
C80	0.04	OVER 125 TON	20	A	B	20,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.90
C80	0.04	OVER 125 TON	20	S	B	18,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.95
C85	0.00	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED	1																			
C85	0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	20	A	B	14,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.80
C85	0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	20	S	B	12,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.90
C85	0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	20	A	B	16,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.144	.144	0.00	0.00	0.00	0.85
C85	0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	20	S	B	13,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.144	.144	0.00	0.00	0.00	0.95
C85	0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	20	A	B	18,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	0.95
C85	0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	20	S	B	15,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	1.05
C85	0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	20	A	B	20,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	1.05
C85	0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	20	S	B	16,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	1.15

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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
C85	0.21	LIFTING, 0 THRU 25 TON	20	A	B	16,000	0.20	40	.400	.036	.019	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.65
C85	0.21	LIFTING, 0 THRU 25 TON	20	S	B	13,000	0.20	52	.520	.047	.025	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.70
C85	0.22	LIFTING, 26 TON THRU 50 TON	20	A	B	18,000	0.20	40	.400	.036	.019	0	.000	.000	.000	.000	.085	.085	0.00	0.00	0.00	0.75
C85	0.22	LIFTING, 26 TON THRU 50 TON	20	S	B	15,000	0.20	52	.520	.047	.025	0	.000	.000	.000	.000	.085	.085	0.00	0.00	0.00	0.80
C85	0.23	LIFTING, 51 TON THRU 150 TON	20	A	B	20,000	0.15	40	.400	.036	.019	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	0.85
C85	0.23	LIFTING, 51 TON THRU 150 TON	20	S	B	16,000	0.15	52	.520	.047	.025	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	0.90
C85	0.24	LIFTING, OVER 150 TON	20	A	B	22,000	0.15	40	.400	.036	.019	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.95
C85	0.24	LIFTING, OVER 150 TON	20	S	B	18,000	0.15	52	.520	.047	.025	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	1.00
C90	0.00	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED	1																			
C90	0.01	UNDER 26 TON	20	A	B	14,000	0.15	50	.500	.045	.024	10	.100	.009	.005	.000	.161	.153	0.66	0.58	0.73	0.60
C90	0.01	UNDER 26 TON	20	S	B	12,000	0.15	65	.650	.059	.031	13	.130	.012	.006	.000	.161	.153	0.18	0.14	0.20	0.65
C90	0.02	26 TON THRU 65 TON	20	A	B	16,000	0.15	50	.500	.045	.024	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.70
C90	0.02	26 TON THRU 65 TON	20	S	B	14,000	0.15	65	.650	.059	.031	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.75
C90	0.03	66 TON THRU 125 TON	20	A	B	18,000	0.20	50	.500	.045	.024	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.80
C90	0.03	66 TON THRU 125 TON	20	S	B	16,000	0.20	65	.650	.059	.031	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.85
C90	0.04	OVER 125 TON	20	A	B	20,000	0.20	50	.500	.045	.024	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.90
C90	0.04	OVER 125 TON	20	S	B	18,000	0.20	65	.650	.059	.031	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.95
C95	0.00	CRANES, TOWER	20	A	B	18,000	0.20	65	.650	.059	.031	10	.100	.009	.005	.530	.127	.110	0.00	0.00	0.92	0.85
D10	0.00	DRILLS, AIR/HYDRAULIC, CRWLR MTD, 0" THRU 6.5" DIA HOLE (Add cost for drill steel and bit wear)	1																			
D10	0.10	DRILLS, AIR TRACK (Add cost for drill steel and bit wear)	25	A	B	14,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
D10	0.20	DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)	25	A	B	10,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
D15	0.00	DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)	25	A	B	10,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.90
D20	0.00	DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)	25	A	B	8,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.068	.102	0.00	0.00	0.00	0.85

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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
D25	0.00	DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)	25	A	B	10,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.068	.102	0.00	0.00	0.92	1.00
D30	0.00	DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)	25	A	B	10,000	0.25	80	.800	.072	.038	10	.100	.009	.005	.477	.136	.119	0.96	0.86	1.07	1.00
D35	0.00	DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)	1																			
D35	0.11	DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	25	A	B	14,000	0.20	80	.800	.072	.038	10	.100	.009	.005	.005	.161	.161	0.00	0.00	0.00	1.00
D35	0.12	DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	25	A	B	18,000	0.20	80	.800	.072	.038	10	.100	.009	.005	.011	.136	.136	0.96	0.86	1.07	1.00
D35	0.21	ELECTRIC, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	25	A	B	14,000	0.20	70	.700	.063	.034	10	.100	.009	.005	.530	.000	.000	0.00	0.00	0.00	0.55
D35	0.22	ELECTRIC, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	25	A	B	18,000	0.20	70	.700	.063	.034	10	.100	.009	.005	.530	.000	.000	0.00	0.00	0.00	0.55
F10	0.00	FORK LIFTS	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.102	.102	0.83	0.46	0.92	0.75
G10	0.00	GENERATOR SETS	1																			
G10	0.10	PORTABLE	30	A	B	8,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.73	0.60
G10	0.10	PORTABLE	30	S	B	7,000	0.10	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.20	0.70
G10	0.20	SKID MOUNTED	30	A	B	10,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.70
G10	0.20	SKID MOUNTED	30	S	B	8,000	0.10	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80
G15	0.00	GRADERS, MOTOR	35	A	B	14,500	0.25	60	.600	.054	.029	0	.000	.000	.000	.000	.085	.144	0.83	0.54	0.92	0.75
G15	0.00	GRADERS, MOTOR	35	S	B	13,500	0.25	78	.780	.070	.037	0	.000	.000	.000	.000	.085	.144	0.27	0.16	0.30	0.85
H10	0.00	HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
H13	0.00	HAZARDOUS/TOXIC WASTE EQUIPMENT	1																			
H13	0.11	COMPACTORS (Compression force) 0 THRU 50 TONS	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	1.08	0.86	1.20	0.80
H13	0.12	COMPACTORS (Compression force) OVER 50 TONS	95	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	1.08	0.86	1.20	0.90
H13	0.21	FILTER PRESSES, STATIONARY	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	0.00	0.00	0.00	0.90
H13	0.22	FILTER PRESSES, MOBILE	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	0.66	0.59	0.73	0.80
H13	0.30	CENTRIFUGES	95	A	B	4,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.70

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									E	G	D		E	G	D	E	G	D	FT	DT	TT	
H13	0.40	SHREDDERS	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.90
H13	0.51	SOIL TREATMENT PLANT, MOBILE	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.77	0.69	0.86	1.00
H13	0.61	SLUDGE PROCESSING EQUIP, SLUDGE DISPENSERS	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
H13	0.71	WASTE HANDLING EQUIPMENT, DRUM HANDLING	95	A	B	4,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
H15	0.00	HEATERS, SPACE	1																			
H20	0.00	HOISTS & AIR WINCHES	95	A	B	9,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80
H25	0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED	1																			
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	A	B	8,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.70
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	S	B	7,000	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.80
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	65	A	B	8,500	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.70
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	65	S	B	7,000	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.85
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	65	A	B	12,000	0.25	65	.600	.059	.031	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.80
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	65	S	B	10,000	0.25	85	.800	.077	.041	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.95
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	65	A	B	16,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.00
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	65	S	B	13,500	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.10
H25	0.14	OVER 160,000 LBS	65	A	B	19,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.10
H25	0.14	OVER 160,000 LBS	65	S	B	15,000	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.25
H25	0.21	ATTACHMENTS, MOBILE SHEARS	95	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.90
H25	0.22	ATTACHMENTS, MATERIAL HANDLING	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.80
H25	0.23	ATTACHMENTS, CONCRETE PULVERIZERS	95	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
H25	0.24	ATTACHMENTS, COMPACTORS	95	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
H30	0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED	1																			
H30	0.01	0 THRU 1.0 CY	65	A	B	8,000	0.25	60	.600	.054	.029	10	.100	.009	.005	.000	.149	.141	0.83	0.54	0.92	0.50
H30	0.01	0 THRU 1.0 CY	65	S	B	6,500	0.25	78	.780	.070	.037	13	.130	.012	.006	.000	.149	.141	0.25	0.15	0.28	0.55
H30	0.02	OVER 1.0 CY	65	A	B	10,000	0.25	60	.600	.054	.029	10	.100	.009	.005	.000	.149	.141	0.83	0.54	0.92	0.60
H30	0.02	OVER 1.0 CY	65	S	B	8,000	0.25	78	.780	.070	.037	13	.130	.012	.006	.000	.149	.141	0.25	0.15	0.28	0.65
H35	0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED	1																			

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 SLV=Salvage Value  
 HPF=Horsepower Factor

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 G=Gas Powered  
 D=Diesel Powered

FT=Front Tire  
 DT=Drive Tire  
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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	65	A	B	14,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.00
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	65	S	B	12,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.10
H35	0.12	DIESEL, OVER 5.0 CY	65	A	B	16,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.20
H35	0.12	DIESEL, OVER 5.0 CY	65	S	B	14,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.30
H35	0.21	ELECTRIC, OVER 2.5 CY	65	A	B	18,000	0.20	50	.500	.045	.024	0	.000	.000	.000	.265	.000	.000	0.00	0.00	0.00	0.80
H35	0.21	ELECTRIC, OVER 2.5 CY	65	S	B	16,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.265	.000	.000	0.00	0.00	0.00	0.90
L10	0.00	LAND CLEARING EQUIPMENT	70	A	B	10,000	0.20	60	.600	.054	.029	10	.100	.009	.005	.000	.127	.110	0.83	0.54	0.92	0.90
L10	0.00	LAND CLEARING EQUIPMENT	70	S	B	7,000	0.20	78	.780	.070	.037	13	.130	.012	.006	.000	.127	.110	0.25	0.15	0.28	1.00
L15	0.00	LANDSCAPING EQUIPMENT	95	A	B	4,000	0.15	80	.800	.072	.038	13	.130	.012	.006	.477	.102	.102	0.59	0.30	0.66	0.70
L20	0.00	LIGHTING SETS, TRAILER MOUNTED	1																			
L20	0.10	METALLIC VAPOR	95	A	B	8,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.102	0.66	0.58	0.73	1.50
L25	0.00	LINE STRIPING EQUIPMENT	95	A	B	8,000	0.20	85	.850	.077	.041	13	.130	.012	.006	.000	.102	.102	0.66	0.58	0.73	1.20
L30	0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.119	.119	0.66	0.58	0.73	1.00
L30	0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	95	S	B	8,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.477	.119	.119	0.21	0.16	0.23	1.10
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	40	A	B	10,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.170	.101	0.00	0.00	0.00	1.10
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	40	S	B	8,000	0.20	91	.910	.082	.044	0	.000	.000	.000	.000	.170	.101	0.00	0.00	0.00	1.25
L40	0.00	LOADERS, FRONT END, WHEEL TYPE	1																			
L40	0.11	ARTICULATED, 0 THRU 225 HP	45	A	B	9,250	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.111	0.83	0.54	0.92	0.70
L40	0.11	ARTICULATED, 0 THRU 225 HP	45	S	B	8,750	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.111	0.25	0.15	0.28	0.80
L40	0.12	ARTICULATED, OVER 225 HP	45	A	B	13,500	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.080	0.83	0.54	0.92	0.70
L40	0.12	ARTICULATED, OVER 225 HP	45	S	B	12,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.080	0.25	0.15	0.28	0.75
L40	0.20	SKID STEER	45	A	B	8,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.170	.111	0.57	0.29	0.63	0.80
L40	0.21	SKID STEER ATTACHMENTS	45	A	B	4,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.170	0.00	0.00	0.00	1.00
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	A	B	10,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.111	0.83	0.54	0.92	0.85
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	S	B	9,250	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.111	0.25	0.15	0.28	0.90
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	A	B	12,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.080	0.83	0.54	0.92	0.85

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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	S	B	10,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.080	0.25	0.15	0.28	0.90
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	A	B	8,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.441	.524	0.00	0.00	0.00	1.35
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	S	B	6,000	0.20	91	.910	.082	.044	0	.000	.000	.000	.000	.441	.524	0.00	0.00	0.00	1.40
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	45	A	B	10,000	0.25	50	.500	.045	.024	0	.000	.000	.000	.000	.441	.441	0.83	0.54	0.92	0.80
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	45	S	B	6,000	0.25	70	.700	.063	.034	0	.000	.000	.000	.000	.441	.441	0.25	0.15	0.28	0.85
L55	0.00	LOADER / BACKHOE, ATTACHMENTS	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.441	.441	0.00	0.00	0.00	1.00
L60	0.00	LOG SKIDDERS	75	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.83	0.54	0.92	0.70
L60	0.00	LOG SKIDDERS	75	S	B	8,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.119	0.25	0.15	0.28	0.80
M10	0.00	MARINE EQUIPMENT (NON DREDGING)	1																			
M10	0.11	AQUATIC MAINTENANCE	105	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.12	AQUATIC MAINTENANCE ATTACHMENTS	105	A	B	6,000	0.20	80	.800	.072	.038	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.60
M10	0.21	HYDRAULIC CUTTERHEAD DREDGE, 8" OR LESS, TRANSPORTABLE	105	A	B	16,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.22	HYDRAULIC CUTTERHEAD DREDGE, 8" - 12", TRANSPORTABLE	105	A	B	16,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.80
M10	0.23	HYDRAULIC AUGERHEAD DREDGE, 12" OR LESS, TRANSPORTABLE	105	A	B	16,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.80
M10	0.24	HYDRAULIC FLOATING PUMPS, 12" OR LESS, TRANSPORTABLE	105	A	B	8,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.25	HYDRUALIC DREDGE PUMPS, 12" OR LESS, TRANSPORTABLE	105	A	B	6,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.26	HYDRAULIC DREDGE / PUMP ATTACHMENTS	105	A	B	6,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.60
M10	0.31	SMALL MECH DREDGES, CLAMSHELL, BARGE-MTD TO 5 CY	20	A	B	18,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.00
M10	0.31	SMALL MECH DREDGES, CLAMSHELL, BARGE-MTD TO 5 CY	20	S	B	16,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.05
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	65	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.161	.161	0.00	0.00	0.00	1.00
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	65	S	B	9,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.477	.161	.161	0.00	0.00	0.00	1.10

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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
M10	0.33	SMALL MECH DREDGES,HOE-MOUNTED DREDGING ATTACH	105	A	B	20,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.90
M10	0.41	WORK FLOATS (NON-DREDGING)	105	A	B	6,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.50
M10	0.42	WORK BARGES (SECTIONAL, NON-DREDGING)	105	A	B	30,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.60
M10	0.45	FLAT-DECK OR CARGO BARGE (NON-DREDGING)	105	A	B	90,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.60
M10	0.46	DUMP SCOW (NON-DREDGING)	105	A	B	90,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.70
M10	0.47	DRILL BARGE (NON-DREDGING)	105	A	B	30,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.70
M10	0.48	ALL OTHER BARGES (NON-DREDGING)	105	A	B	30,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.70
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	105	A	B	16,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.70
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	105	S	B	13,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.75
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	105	A	B	18,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.80
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	105	S	B	15,000	0.10	85	.850	.077	.041	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.85
M10	0.54	TUGS, 501 THRU 1,000 HP	105	A	B	40,000	0.10	60	.600	.054	.029	50	.500	.045	.024	.477	.136	.161	0.00	0.00	0.00	0.90
M10	0.55	TUGS, 1,000 THRU 2,000 HP	105	A	B	55,000	0.10	60	.600	.054	.029	50	.500	.045	.024	.477	.136	.161	0.00	0.00	0.00	1.00
P10	0.00	PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS	50	A	B	6,000	0.35	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.80
P20	0.00	PILE HAMMERS, DOUBLE ACTING	1																			
P20	0.10	DIESEL	50	A	B	6,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.10
P20	0.20	PNUEMATIC (STEAM/AIR)	50	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.10
P25	0.00	PILE HAMMERS, SINGLE ACTING	1																			
P25	0.10	DIESEL	50	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
P25	0.20	PNUEMATIC (STEAM/AIR)	50	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
P30	0.00	PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY	50	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	1.00
P35	0.00	PIPELAYERS	70	A	B	14,000	0.20	35	.350	.032	.017	0	.000	.000	.000	.000	.000	.170	0.00	0.00	0.00	0.95
P35	0.00	PIPELAYERS	70	S	B	11,500	0.20	46	.460	.041	.022	0	.000	.000	.000	.000	.000	.170	0.00	0.00	0.00	1.10
P40	0.00	PLATFORMS & MAN-LIFTS	20	A	B	8,000	0.10	50	.500	.045	.024	50	.500	.045	.024	.477	.136	.119	0.66	0.33	0.73	0.80
P45	0.00	PUMPS, GROUT	95	A	B	8,000	0.15	95	.950	.086	.045	0	.000	.000	.000	.477	.136	.119	0.66	0.59	0.73	1.00
P50	0.00	PUMPS, WATER, CENTRIFUGAL, TRASH	1																			
P50	0.11	ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.66	0.00	0.73	0.90

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									E	G	D		E	G	D	E	G	D	FT	DT	TT	
P50	0.12	ELECTRIC DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.66	0.00	0.73	0.50
P50	0.21	WHEEL MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.66	0.00	0.73	0.90
P50	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.66	0.00	0.73	0.50
P50	0.31	HOSES, PUMP, SUCTION & DISCHARGE	95	A	B	4,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.50
P55	0.00	PUMPS, WATER, SUBMERSIBLE	1																			
P55	0.01	ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	1.00
P55	0.02	ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.60
P60	0.00	PUMPS, WATER, CENTRIFUGAL, DEWATERING	1																			
P60	0.11	SKID MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	0.90
P60	0.12	SKID MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.50
P60	0.21	WHEEL MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.73	0.90
P60	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.73	0.50
P65	0.00	PUMPS, WATER, DIAPHRAGM	1																			
P65	0.11	SKID MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	0.90
P65	0.12	SKID MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.50
P65	0.21	WHEEL MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.73	0.80
P65	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.73	0.40
P70	0.00	PUMPS, WATER (For core drills)	1																			
P70	0.01	ENGINE DRIVE	95	A	B	8,000	0.25	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	0.80
P70	0.02	ELECTRIC DRIVE	95	A	B	8,000	0.25	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.40
R10	0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	70	A	B	8,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.90
R10	0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	70	S	B	6,500	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.00
R15	0.00	ROLLERS, STATIC, TOWED, PNEUMATIC	55	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.92	0.70
R20	0.00	ROLLERS, STATIC, TOWED, STEEL DRUM	55	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.92	0.80
R30	0.00	ROLLERS, STATIC, SELF-PROPELLED	1																			
R30	0.01	PNEUMATIC	55	A	B	8,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.83	0.54	0.92	0.70
R30	0.02	SMOOTH DRUM	55	A	B	10,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80

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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
R30	0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	55	A	B	12,000	0.20	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80
R40	0.00	ROLLERS, VIBRATORY, TOWED	55	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.80
R45	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM	55	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.10
R50	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM	55	A	B	8,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.83	0.54	0.92	1.00
R55	0.00	ROOFING EQUIPMENT	95	A	B	6,000	0.15	60	.600	.054	.029	0	.000	.000	.000	.477	.102	.102	0.97	0.87	1.08	0.80
S10	0.00	SCRAPERS, ELEVATING	1																			
S10	0.01	0 THRU 200 HP	60	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.000	.170	0.84	0.55	0.93	0.90
S10	0.01	0 THRU 200 HP	60	S	B	8,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.000	.170	0.23	0.13	0.25	1.00
S10	0.02	OVER 200 HP	60	A	B	13,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.000	.136	0.84	0.55	0.93	0.95
S10	0.02	OVER 200 HP	60	S	B	11,500	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.000	.136	0.23	0.13	0.25	1.00
S15	0.00	SCRAPERS, CONVENTIONAL	60	A	B	15,000	0.20	60	.600	.054	.029	0	.000	.000	.000	.000	.000	.136	0.84	0.55	0.93	0.80
S15	0.00	SCRAPERS, CONVENTIONAL	60	S	B	12,500	0.20	78	.780	.070	.037	0	.000	.000	.000	.000	.000	.136	0.23	0.13	0.25	0.85
S20	0.00	SCRAPERS, TANDEM POWERED	60	A	B	15,000	0.20	62	.620	.056	.030	62	.620	.056	.030	.000	.000	.110	0.84	0.55	0.93	0.85
S20	0.00	SCRAPERS, TANDEM POWERED	60	S	B	13,500	0.20	81	.810	.073	.039	81	.810	.073	.039	.000	.000	.110	0.23	0.13	0.25	0.90
S25	0.00	SCRAPERS, TRACTOR DRAWN	60	A	B	12,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.84	0.55	0.93	0.70
S25	0.00	SCRAPERS, TRACTOR DRAWN	60	S	B	10,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.23	0.13	0.25	0.75
S30	0.00	SCREENING & CRUSHING PLANTS	1																			
S30	0.10	CONVEYORS	95	A	B	10,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.70
S30	0.10	CONVEYORS	95	S	B	8,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	0.85
S30	0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	95	A	B	25,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	1.00
S30	0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	95	S	B	15,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	1.25
S30	0.21	CRUSHERS - CONE	95	A	B	25,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	1.20
S30	0.21	CRUSHERS - CONE	95	S	B	15,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	1.60
S30	0.22	CRUSHERS - JAW	95	A	B	25,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.65
S30	0.22	CRUSHERS - JAW	95	S	B	15,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	0.85

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## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
S30	0.30	SCREENING PLANT	95	A	B	10,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.80
S30	0.30	SCREENING PLANT	95	S	B	8,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	1.00
S35	0.00	SNOW REMOVAL EQUIPMENT	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.000	.119	0.00	0.00	0.00	0.80
S40	0.00	SOIL & ROAD STABILIZERS	60	A	B	10,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.000	.119	0.84	0.55	0.96	0.85
S40	0.00	SOIL & ROAD STABILIZERS	60	S	B	8,000	0.20	91	.910	.082	.044	0	.000	.000	.000	.000	.000	.119	0.23	0.13	0.25	0.95
S45	0.00	SPLITTERS, ROCK & CONCRETE	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
T10	0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	70	A	B	10,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.96	0.80
T10	0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	70	S	B	8,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.86	0.90
T15	0.00	TRACTORS, CRAWLER (DOZER) (includes blade)	1																			
T15	0.01	0 THRU 225 HP	70	A	B	10,000	0.30	70	.700	.063	.034	0	.000	.000	.000	.000	.000	.153	0.00	0.00	0.00	1.10
T15	0.01	0 THRU 225 HP	70	S	B	8,000	0.30	91	.910	.082	.044	0	.000	.000	.000	.000	.000	.153	0.00	0.00	0.00	1.25
T15	0.02	226 HP THRU 425 HP	70	A	B	12,500	0.25	70	.700	.063	.034	0	.000	.000	.000	.000	.000	.119	0.00	0.00	0.00	1.20
T15	0.02	226 HP THRU 425 HP	70	S	B	10,500	0.25	91	.910	.082	.044	0	.000	.000	.000	.000	.000	.119	0.00	0.00	0.00	1.25
T15	0.03	OVER 425 HP	70	A	B	15,000	0.20	60	.600	.054	.029	0	.000	.000	.000	.000	.000	.066	0.00	0.00	0.00	1.20
T15	0.03	OVER 425 HP	70	S	B	12,500	0.20	78	.780	.070	.037	0	.000	.000	.000	.000	.000	.066	0.00	0.00	0.00	1.35
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	75	A	B	14,000	0.15	60	.600	.054	.029	0	.000	.000	.000	.000	.102	.119	0.96	0.63	0.00	0.60
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	75	S	B	13,000	0.15	78	.780	.070	.037	0	.000	.000	.000	.000	.102	.119	0.25	0.15	0.00	0.65
T25	0.00	TRACTORS, AGRICULTURAL	1																			
T25	0.10	CRAWLER	75	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.00	0.00	0.00	0.85
T25	0.20	WHEEL	75	A	B	8,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.96	0.73	0.00	0.70
T30	0.00	TRENCHERS, CHAIN TYPE CUTTER	80	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.119	.119	1.08	0.82	0.00	0.90
T30	0.00	TRENCHERS, CHAIN TYPE CUTTER	80	S	B	6,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.119	.119	0.32	0.22	0.00	1.00
T35	0.00	TRENCHERS, WHEEL TYPE CUTTER	80	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.119	.119	1.08	0.82	0.00	0.90
T35	0.00	TRENCHERS, WHEEL TYPE CUTTER	80	S	B	6,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.119	.119	0.32	0.22	0.00	1.00
T40	0.00	TRUCK OPTIONS	1																			
T40	0.10	CRANES / HOISTS, PERSONNEL & MATERIAL HANDLING	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.80

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CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
T40	0.20	DUMP BODY, REAR	95	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
T40	0.20	DUMP BODY, REAR	95	S	B	6,500	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
T40	0.30	FLATBEDS, WITH SIDES	95	A	B	8,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.60
T40	0.41	HOIST, ELECTRIC DRIVE	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.70
T40	0.50	TRANSIT MIXERS	95	A	B	8,000	0.15	65	.650	.059	.031	35	.350	.032	.017	.477	.136	.136	0.77	0.69	0.86	0.70
T40	0.60	WATER TANKS	95	A	B	8,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.60
T40	0.70	ALL OTHER OPTIONS	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	1.08	0.86	1.20	0.70
T45	0.00	TRUCK TRAILERS	1																			
T45	0.10	BOTTOM DUMP	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.70
T45	0.10	BOTTOM DUMP	95	S	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.18	0.00	0.20	0.80
T45	0.20	END DUMP	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.65
T45	0.20	END DUMP	95	S	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.18	0.00	0.20	0.75
T45	0.30	PUP TRAILER	95	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.60
T45	0.41	LOWBOY, RIGID NECK, DROP DECK	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.50
T45	0.50	FLATBED TRAILER	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.50
T45	0.60	MISCELLANEOUS / UTILITY	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.50
T45	0.70	WATER TANKER TRAILER	95	A	B	10,000	0.25	65	.000	.059	.031	0	.000	.000	.000	.000	.119	.102	0.66	0.92	0.73	0.60
T45	0.80	DECONTAMINATION FACILITY	95	A	B	8,000	0.25	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.70
T45	0.90	TANK TRAILERS	95	A	B	10,000	0.25	65	.000	.059	.031	0	.000	.000	.000	.000	.119	.102	0.66	0.00	0.73	0.70
T50	0.00	TRUCKS, HIGHWAY (Add attachments as required)	1																			
T50	0.01	0 THRU 10,000 GVW	85	A	S	8,000	0.20	15	.150	.014	.007	0	.000	.000	.000	.000	.119	.102	0.61	0.56	0.67	0.70
T50	0.01	0 THRU 10,000 GVW	85	S	S	6,500	0.20	20	.200	.018	.010	0	.000	.000	.000	.000	.119	.102	0.20	0.16	0.22	0.75
T50	0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	85	A	S	10,000	0.20	35	.350	.032	.017	0	.000	.000	.000	.000	.127	.110	0.72	0.66	0.79	0.65
T50	0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	85	S	S	8,000	0.20	46	.460	.041	.022	0	.000	.000	.000	.000	.127	.110	0.20	0.16	0.22	0.70
T50	0.03	OVER 30,000 GVW (Chassis only - Add options)	85	A	S	12,000	0.20	50	.500	.045	.024	0	.000	.000	.000	.000	.136	.119	0.77	0.71	0.86	0.65
T50	0.03	OVER 30,000 GVW (Chassis only - Add options)	85	S	S	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	0.21	0.18	0.24	0.75
T55	0.00	TRUCKS, OFF-HIGHWAY	1																			

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									E	G	D		E	G	D	E	G	D	FT	DT	TT	
T55	0.10	RIGID FRAME	90	A	B	20,000	0.15	35	.350	.032	.017	0	.000	.000	.000	.000	.000	.144	0.84	0.73	0.93	0.90
T55	0.10	RIGID FRAME	90	S	B	18,000	0.15	45	.450	.041	.022	0	.000	.000	.000	.000	.000	.144	0.23	0.18	0.25	0.95
T55	0.20	ARTICULATED FRAME	90	A	B	13,000	0.15	50	.500	.045	.024	0	.000	.000	.000	.000	.000	.080	0.84	0.73	0.93	0.80
T55	0.20	ARTICULATED FRAME	90	S	B	12,250	0.15	60	.600	.054	.029	0	.000	.000	.000	.000	.000	.080	0.23	0.18	0.25	0.85
T56	0.00	TRUCKS, OFF-HIGHWAY/PRIME MOVER TRACTORS & WAGONS	1																			
T56	0.10	PRIME MOVER TRACTORS	90	A	B	20,000	0.15	40	.400	.036	.019	0	.000	.000	.000	.000	.102	.144	0.84	0.64	0.93	0.90
T56	0.10	PRIME MOVER TRACTORS	90	S	B	18,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.23	0.16	0.25	0.95
T56	0.20	WAGONS, BOTTOM DUMP	90	A	B	15,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.84	0.64	0.93	0.65
T56	0.20	WAGONS, BOTTOM DUMP	90	S	B	10,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.23	0.16	0.25	0.75
T56	0.30	WAGONS, REAR DUMP	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.84	0.65	0.93	0.60
T57	0.00	TRUCKS, VACUUM	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.23	0.17	0.25	0.80
T60	0.00	TRUCKS, WATER, OFF-HIGHWAY	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.90	0.69	1.00	0.70
T60	0.00	TRUCKS, WATER, OFF-HIGHWAY	90	S	B	10,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.25	0.17	0.28	0.80
T65	0.00	TUNNEL/MINING EQUIPMENT	1																			
T65	0.10	DRIFTING & TUNNELING DRILLS	25	A	B	14,000	0.15	80	.800	.072	.038	13	.130	.012	.006	.530	.136	.119	0.67	0.57	0.00	0.90
T65	0.20	TUNNEL BORING MACHINES	95	A	B	18,000	0.15	70	.700	.063	.034	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.70
T65	0.20	TUNNEL BORING MACHINES	95	S	B	16,000	0.15	91	.910	.082	.044	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.80
T65	0.30	PRODUCTION DRILLING RIGS	25	A	B	12,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.90
T65	0.40	ROADHEADERS & CONTINUOUS MINERS	95	A	B	16,000	0.15	70	.700	.063	.034	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.90
T65	0.40	ROADHEADERS & CONTINUOUS MINERS	95	S	B	14,000	0.15	91	.910	.082	.044	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	1.00
T65	0.50	ROCK BOLTING EQUIPMENT	95	A	B	10,000	0.20	80	.800	.072	.038	10	.100	.009	.005	.530	.136	.119	0.00	0.00	0.00	0.80
T65	0.61	LOADING & HAULING EQUIPMENT, DIESEL OR GAS	95	A	B	12,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.136	.127	0.00	0.00	0.00	0.75
T65	0.62	LOADING & HAULING EQUIPMENT, ELECTRIC	95	A	B	14,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	0.70
T65	0.63	LOADING & HAULING EQUIPMENT, AIR-POWERED	95	A	B	10,000	0.25	70	.700	.063	.034	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.65
T65	0.70	LOCOMOTIVES	95	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.75
T65	0.90	OTHER TUNNELING EQUIPMENT	95	A	B	10,000	0.20	70	.700	.063	.034	13	.130	.012	.006	.477	.136	.127	0.00	0.00	0.00	0.80
W10	0.00	WAGONS, BOTTOM DUMP	90	A	B	12,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.88	0.67	0.98	0.65

EK=Economic Key (Appendix E)  
 C=Operating Conditions (A=average, S=severe)  
 DC=Discount Code (B=basic 7.5%, S=special 15%)  
 RCF=Repair Cost Factor

LIFE=Economic Life  
 SLV=Salvage Value  
 HPF=Horsepower Factor

E=Electric Powered  
 G=Gas Powered  
 D=Diesel Powered

FT=Front Tire  
 DT=Drive Tire  
 TT=Trailing Tire

## APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS			HPF	CARRIER FUEL FACTORS			FOG FACTORS			TIRE WEAR FACTORS			RCF
									E	G	D		E	G	D	E	G	D	FT	DT	TT	
W10	0.00	WAGONS, BOTTOM DUMP	90	S	B	10,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.25	0.17	0.28	0.75
W15	0.00	WAGONS, REAR DUMP	90	A	B	12,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.88	0.77	0.98	0.60
W15	0.00	WAGONS, REAR DUMP	90	S	B	10,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.25	0.19	0.28	0.70
W25	0.00	WATER & CO2 BLASTERS	1																			
W25	0.10	LOW PRESSURE, (< 5,000 PSI)	95	A	B	4,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.424	.102	.119	0.96	0.73	1.07	1.10
W25	0.20	HIGH PRESSURE, (>= 5,000 PSI)	95	A	B	4,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.424	.102	.119	0.96	0.73	1.07	1.20
W25	0.30	STEAM CLEANERS	95	A	B	4,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.424	.102	.119	0.00	0.00	0.73	1.10
W25	0.40	CO2 BLASTERS	95	A	B	6,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.127	.148	0.00	0.00	0.73	1.00
W25	0.50	WET ABRASIVE BLASTING SYSTEM (TORBO)	95	A	B	10,000	0.35	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.73	0.40
W30	0.00	WATER TANKS	1																			
W30	0.10	PORTABLE WITH WHEELS	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.00	0.00	0.73	0.60
W30	0.20	SKID MOUNTED	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.00	0.00	0.00	0.50
W35	0.00	WELDERS	1																			
W35	0.10	ENGINE DRIVEN	95	A	B	8,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.00	0.00	1.07	0.75
W35	0.20	ELECTRIC DRIVEN	95	A	B	6,000	0.20	30	.300	.027	.014	0	.000	.000	.000	.424	.000	.000	0.00	0.00	0.00	0.50

EK=Economic Key (Appendix E)  
 C=Operating Conditions (A=average, S=severe)  
 DC=Discount Code (B=basic 7.5%, S=special 15%)  
 RCF=Repair Cost Factor

LIFE=Economic Life  
 SLV=Salvage Value  
 HPF=Horsepower Factor

E=Electric Powered  
 G=Gas Powered  
 D=Diesel Powered

FT=Front Tire  
 DT=Drive Tire  
 TT=Trailing Tire

## **APPENDIX E ECONOMIC INDEXES FOR CONSTRUCTION EQUIPMENT**

## APPENDIX E

### ECONOMIC INDEXES FOR CONSTRUCTION EQUIPMENT

KEY (EK)		Note: Table 2-1 Equipment Rates are based on equipment purchased new in the year 2004 {--Projected-----}																		
		2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
5	Air Equipment	2438	2366	2296	2235	2157	2085	2075	2069	2079	2047	2078	2074	2070	2063	2053	2012	2022	2008	1963
10	Asphalt & Concrete Paving Equipment	4510	4377	4247	4116	3950	3758	3763	3769	3766	3717	3638	3589	3490	3390	3323	3248	3189	3092	3106
15	Buckets	9190	8919	8655	8505	8057	7626	7443	7254	6804	6900	6982	6930	6888	6774	6672	6638	6663	6380	5901
20	Cranes, Draglines & Clamshells - Crawler & Truck Mtd	7072	6864	6661	6545	6201	5869	5728	5582	5236	5310	5289	5225	5116	5013	4880	4783	4736	4540	4298
25	Drills	5688	5520	5357	5117	4762	4444	4192	4116	3819	3736	3683	3626	3574	3518	3394	3320	3268	3196	3163
30	Generators	5657	5490	5328	5119	4888	4641	4566	4548	4548	4529	4520	4517	4484	4511	4457	4343	4294	4234	4181
35	Graders, Motor	7402	7183	6971	6827	6578	6318	6117	6049	5979	5952	5853	5682	5544	5466	5186	5088	4946	4655	4509
40	Loaders, Track	7465	7245	7031	6905	6653	6347	6177	6081	6058	6032	5960	5792	5686	5606	5434	5257	5068	4816	4677
45	Loaders, Wheel	6890	6687	6489	6372	6140	5857	5701	5612	5591	5567	5511	5409	5303	5251	5101	4988	4894	4758	4640
50	Pile Driving Equipment	6550	6357	6169	6032	5787	5450	5270	5195	5127	5112	5062	4993	4892	4809	4700	4598	4539	4427	4305
55	Rollers	6697	6500	6308	6136	5872	5646	5406	5285	5225	5130	5204	5092	5001	4950	4851	4719	4484	4460	4668
60	Scrapers & Soil Stabilizers	7402	7183	6971	6827	6578	6318	6117	6049	5979	5952	5853	5682	5544	5466	5186	5088	4946	4655	4509
65	Shovels, Backhoes & Hydraulic Excavators	7072	6864	6661	6545	6201	5869	5728	5582	5236	5310	5289	5225	5116	5013	4880	4783	4736	4540	4298
70	Tractors, Crawlers & Attachments	7465	7245	7031	6905	6653	6347	6177	6081	6058	6032	5960	5792	5686	5606	5434	5257	5068	4816	4677
75	Tractor, Wheel	6405	6216	6032	5867	5616	5400	5170	5055	4997	4906	4833	4695	4624	4540	4527	4484	4342	4270	4186
80	Trenchers	8267	8023	7786	7573	7248	6970	6466	6524	6450	6332	6223	6042	5833	5749	5670	5509	5207	5015	4948
85	Trucks, Highway	5255	5100	4949	4816	4638	4450	4356	4306	4216	4212	4307	4216	4241	4318	4293	4190	4025	3838	3669
90	Trucks & Wagons - Off-Highway	7927	7693	7466	7225	6896	6424	6095	6026	5931	5828	5715	5651	5581	5440	5265	4979	4837	4797	4739
95	All Other Equipment	6550	6357	6169	6032	5787	5450	5270	5195	5127	5112	5062	4993	4892	4809	4700	4598	4539	4427	4305
100	All Tires & Tubes	3247	3151	3058	2929	2759	2614	2487	2430	2401	2373	2371	2400	2431	2475	2559	2517	2525	2524	2506
105	Marine Equipment	7667	7441	7221	6913	6661	6436	6101	5846	5771	5645	5556	5513	5429	5245	5036	4951	4881	4679	4438

EK = Economic Key

## APPENDIX E

### ECONOMIC INDEXES FOR CONSTRUCTION EQUIPMENT

KEY		Note: Table 2-1 Equipment Rates are based on equipment purchased new in the year 2004																	
(EK)	EQUIPMENT DIVISIONS	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973
5	Air Equipment	1956	1888	1801	1730	1720	1733	1683	1695	1668	1563	1630	1521	1354	1295	1186	1165	1028	935
10	Asphalt & Concrete Paving Equipment	2967	2867	2793	2730	2687	2687	2611	2583	2620	2461	2296	2111	1941	1815	1686	1610	1451	1304
15	Buckets	5640	5314	4872	4767	4713	4640	4527	4471	4541	4313	3879	3280	2963	2738	2520	2175	1838	1430
20	Cranes, Draglines & Clamshells - Crawler & Truck Mtd	4152	3967	3688	3595	3485	3395	3339	3282	3213	3009	2782	2512	2301	2138	2010	1843	1522	1305
25	Drills	3069	2969	2807	2792	2786	2832	2803	2836	2810	2602	2265	1993	1858	1699	1638	1559	1373	1249
30	Generators	4116	3998	3773	3575	3514	3510	3400	3314	3236	3160	2817	2390	2301	2128	2053	1839	1456	1316
35	Graders, Motor	4359	4219	4010	3914	3759	3738	3645	3643	3561	3276	2992	2687	2492	2259	2109	1956	1604	1361
40	Loaders, Track	4555	4404	4163	3918	3770	3767	3791	3792	3655	3349	3061	2750	2482	2247	2053	1916	1573	1329
45	Loaders, Wheel	4532	4409	4235	4099	3991	3973	3944	3873	3788	3441	2938	2606	2375	2156	2002	1907	1584	1362
50	Pile Driving Equipment	4182	4029	3845	3745	3668	3626	3570	3519	3439	3208	2894	2562	2329	2135	1989	1852	1523	1307
55	Rollers	4630	4507	4412	4217	4151	4090	3926	3744	3431	3199	2913	2653	2396	2139	1983	1872	1556	1328
60	Scrapers & Soil Stabilizers	4359	4219	4010	3914	3759	3738	3645	3643	3561	3276	2992	2687	2492	2259	2109	1956	1604	1361
65	Shovels, Backhoes & Hydraulic Excavators	4152	3967	3688	3595	3485	3395	3339	3282	3213	3009	2782	2512	2301	2138	2010	1843	1522	1305
70	Tractors, Crawlers & Attachments	4555	4404	4163	3918	3770	3767	3791	3792	3655	3349	3061	2750	2482	2247	2053	1916	1573	1329
75	Tractor, Wheel	4123	4018	3936	3862	3820	3818	3656	3557	3530	3256	2927	2578	2319	2125	1956	1843	1498	1288
80	Trenchers	4886	4753	4679	4600	4586	4488	4431	4360	4097	3618	3153	2772	2580	2300	1894	1633	1527	1384
85	Trucks, Highway	3546	3495	3363	3299	3282	3139	3055	2934	2824	2638	2324	2108	1934	1775	1646	1524	1369	1230
90	Trucks & Wagons - Off-Highway	4617	4405	4094	3915	3840	3822	3786	3744	3662	3363	2964	2588	2364	2196	2081	1965	1568	1315
95	All Other Equipment	4182	4029	3845	3745	3668	3626	3570	3519	3439	3208	2894	2562	2329	2135	1989	1852	1523	1307
100	All Tires & Tubes	2470	2480	2399	2322	2340	2374	2421	2453	2552	2506	2369	2055	1792	1699	1615	1485	1334	1114
105	Marine Equipment	4271	4091	3920	3886	3863	3749	3633	3497	3391	3239	2922	2587	2352	2156	2008	1870	1538	1320

EK = Economic Key

## **APPENDIX F TIRE DESCRIPTION AND TIRE COST**

**APPENDIX F  
TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
<b><u>LT TRUCK/RECREATIONAL VEHICLE, RADIAL</u></b>						
<b>WORKHORSE EXTRA GRIP RADIAL</b>			<i>(Life = 5000 hrs )</i>			
ABAA1		LT235/75R15	9.25 x 15.00	6	TL	\$140
ABAA3		LT265/75R16	10.40 x 16.00	10	TL	\$197
ABAA2		31-10.50R15LT	10.50 x 15.00	6	TL	\$164
<b>SERVICE TRAILER - MARATHON RADIAL</b>			<i>(Life = 5000 hrs )</i>			
ABBF1		ST175/80R13	7.00 x 13.00	4	TL	\$84
ABBF3		ST185/80R13	7.20 x 13.00	6	TL	\$93
ABBF5		ST205/75R14	8.00 x 14.00	6	TL	\$108
ABBF8		ST205/75R15	8.00 x 15.00	6	TL	\$117
ABBF6		ST215/75R14	8.50 x 14.00	6	TL	\$113
ABBF9		ST225/75R15	8.80 x 15.00	6	TL	\$131
ABBF10		ST225/75R15	8.80 x 15.00	8	TL	\$140
<b><u>LT TRUCK/RECREATIONAL VEHICLE, BIAS</u></b>						
<b>WORKHORSE RIB</b>			<i>(Life = 5000 hrs )</i>			
ACBA5		800-16.5LT	8.00 x 16.50	8	TL	\$187
ACBA2		700-15LT	8.30 x 15.00	8	TL	\$143
ACBA7		875-16.5LT	8.80 x 16.50	10	TL	\$173
ACBA4		750-16LT	8.90 x 16.00	10	TL	\$168
ACBA9		950-16.5LT	9.60 x 16.50	10	TL	\$187
<b>TRACTION HI-MILER</b>			<i>(Life = 5000 hrs )</i>			
ACBC1		6.70-15LT	7.50 x 15.00	6	TL	\$120
ACBC3		8-14.5LT	8.00 x 14.50	12	TL	\$204
ACBC4		9-14.5LT	9.50 x 14.50	12	TL	\$221
<b>CUSTOM HI-MILER</b>			<i>(Life = 5000 hrs )</i>			
ACBD1		12-16.5LT	12.10 x 16.50	12	TL	\$424
<b><u>OVER-THE-ROAD TRUCK, COMMERCIAL, RADIAL</u></b>						
<b>COMMERCIAL RADIAL LT TRUCK</b>			<i>(Life = 5000 hrs )</i>			
ADCA2		LT225/75R16	7.50 x 16.00	10	TL	\$255
ADCA17		8R19.5	8.00 x 19.50	10	TL	\$361
ADCA18		8R195	8.00 x 19.50	12	TL	\$288
ADCA4		LT215/85R16	8.50 x 16.00	10	TL	\$163
ADCA3		LT215/85R16	8.50 x 16.00	8	TL	\$168
ADCA1		750R16LT	8.70 x 16.00	8	TL	\$163
ADCA6		LT225/75R16	8.80 x 16.00	10	TL	\$159
ADCA19		225/70R195	8.85 x 19.50	12	TL	\$327
ADCA8		LT235/85R16	9.25 x 16.00	10	TL	\$155

(1) TT = includes tube, TL = no tube, NO = no tube

## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
ADCA15		950R16.5LT	9.50 x 16.50	8	TL	\$181
ADCA21		245/70R195	9.65 x 19.50	14	TL	\$389
ADCA11		LT245/75R16	9.80 x 16.00	10	TL	\$168
<b>COMMERCIAL RADIAL TRUCK TL</b>			<i>(Life = 5000 hrs)</i>			
ADCB2		9R175	9.00 x 17.50	16	TL	\$327
ADCB5		9R22.5	9.00 x 22.50	12	TL	\$342
ADCB3		10R175	10.00 x 17.50	16	TL	\$328
ADCB7		10R22.5	10.00 x 22.50	14	TL	\$461
ADCB4		11R17.5	11.00 x 17.50	16	TL	\$449
ADCB8		11R22.5	11.00 x 22.50	16	TL	\$595
ADCB13		11R24.5	11.00 x 24.50	16	TL	\$642
ADCB10		12R22.5	12.00 x 22.50	16	TL	\$697
ADCB14		12R24.5	12.00 x 24.50	16	TL	\$716
<b>LOW PROFILE RADIAL TRUCK TL</b>			<i>(Life = 5000 hrs)</i>			
ADCC1		215/75R175	8.40 x 17.50	16	TL	\$311
ADCC5		245/75R22.5	9.60 x 22.50	14	TL	\$353
ADCC3		255/70R22.5	10.00 x 22.50	16	TL	\$408
ADCC2		265/70R19.5	10.40 x 19.50	14	TL	\$378
ADCC6		265/75R22.5	10.40 x 22.50	14	TL	\$430
ADCC4		275/70R22.5	10.80 x 22.50	16	TL	\$474
ADCC12		285/75R24.5	11.20 x 24.50	14	TL	\$591
ADCC8		295/75R22.5	11.60 x 22.50	16	TL	\$635
ADCC10		315/80R22.5	12.40 x 22.50	18	TL	\$686
<b>SUPER SINGLE COMMERCIAL RADIAL TRUCK</b>			<i>(Life = 5000 hrs)</i>			
ADCD1		385/65R22.5	15.10 x 22.50	18	TL	\$790
ADCD2		425/65R22.5	16.70 x 22.50	20	TL	\$888
ADCD3		445/65R22.5	17.50 x 22.50	20	TL	\$1,002
<b>COMMERCIAL RADIAL TRUCK TT</b>			<i>(Life = 5000 hrs)</i>			
ADCE1		825R15	8.25 x 15.00	14	TT	\$343
ADCE5		9.00R28	8.25 x 20.00	12	TT	\$405
ADCE6		900R20	9.00 x 20.00	12	TT	\$425
ADCE3		1000R15	10.00 x 15.00	14	TT	\$449
ADCE7		1000R20	10.00 x 20.00	14	TT	\$481
ADCE13		10R22.5	10.00 x 22.50	12	TT	\$441
ADCE12		365/80R20	10.40 x 20.00	18	TT	\$718
ADCE9		1100R20	11.00 x 20.00	16	TT	\$559
ADCE10		1100R20	11.00 x 20.00	16	TT	\$646
ADCE14		1100R22	11.00 x 22.00	16	TT	\$671
ADCE15		1100R24	11.00 x 24.00	16	TT	\$663
ADCE11		1200R20	12.00 x 20.00	18	TT	\$682
ADCE17		1200R24	12.00 x 24.00	18	TT	\$727

(1) TT = includes tube, TL = no tube, NO = no tube



**APPENDIX F  
TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
ADCE16		1400R20	14.00 x 20.00	20	TT	\$135
<b><u>FARM, FRONT</u></b>						
<b>DYNA RIB F-2-M</b>			<i>(Life = 5000 hrs)</i>			
AFED2	F-2M	1000-16	10.00 x 16.00	8	TL	\$223
AFED1	F-2M	11L-15	11.00 x 15.00	6	TL	\$270
AFED4	F-2M	1100-16	11.00 x 16.00	8	TL	\$293
AFED8	F-2M	1100-24	11.00 x 24.00	12	TL	\$814
AFED6	F-2M	14L-161	14.00 x 16.10	10	TL	\$526
AFED7	F-2M	165L-161	16.50 x 16.10	8	TL	\$754
<b>SINGLE RIB FRONT TRACTOR F-1</b>			<i>(Life = 5000 hrs)</i>			
AFEE1	F-1	600-16	6.00 x 16.00	4	TT	\$133
AFEE2	F-2	750-16	7.50 x 16.00	6	TL	\$195
<b>FARM HIGHWAY SERVICE</b>			<i>(Life = 5000 hrs)</i>			
AFEF2	I-1	95L-15FI	9.50 x 15.00	8	TL	\$162
AFEF5	I-1	11L-15FI	11.00 x 15.00	12	TL	\$245
AFEF7	I-1	125L-15FI	12.50 x 15.00	12	TL	\$282
<b>FARM UTILITY</b>			<i>(Life = 5000 hrs)</i>			
AFEG7	I-1	750-14	7.50 x 14.00	4	TL	\$123
AFEG14	I-1	760-15	7.60 x 15.00	8	TL	\$124
AFEG8	I-1	85L-14	8.50 x 14.00	6	TL	\$124
AFEG1	I-1	95L-14	9.50 x 14.00	8	TT	\$120
AFEG17	I-1	95L-15	9.50 x 15.00	12	TL	\$183
AFEG18	I-1	1000-15	10.00 x 15.00	8	TL	\$188
AFEG11	I-1	11L-14	11.00 x 14.00	8	TL	\$127
AFEG22	I-1	11L-15	11.00 x 15.00	10	TL	\$169
AFEG20	I-1	11L-15	11.00 x 15.00	8	TL	\$136
AFEG34	I-1	11L-16	11.00 x 16.00	10	TL	\$183
AFEG25	I-1	125L-15	12.50 x 15.00	12	TL	\$254
AFEG30	I-1	125L-16	12.50 x 16.00	12	TL	\$257
AFEG29	I-1	125L-16	12.50 x 16.00	8	TL	\$228
AFEG28	I-1	14L-161	14.00 x 16.10	12	TT	\$435
AFEG31	I-1	165L-161	16.50 x 16.10	10	TL	\$482
AFEG32	I-1	19L-161	19.00 x 16.10	10	TL	\$627
AFEG27	I-1	215L-161	21.50 x 16.10	14	TL	\$779
<b>FOUR RIB FRONT TRACTOR F-2-M</b>			<i>(Life = 5000 hrs)</i>			
AFEH1	F-2M	750-16	7.50 x 16.00	6	TT	\$155
AFEH3	F-2M	1000-16	10.00 x 16.00	8	TT	\$214
AFEH4	F-2M	1100-16	11.00 x 16.00	8	TT	\$240

(1) TT = includes tube, TL = no tube, NO = no tube

## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
<b>IMPLEMENT RIB</b>			<i>(Life = 5000 hrs )</i>			
AFEK11	I-1	400-18	4.00 x 18.00	4	TT	\$101
AFEK4	I-1	500-15	5.00 x 15.00	4	TT	\$92
AFEK16	I-1	590-15	5.90 x 15.00	4	TL	\$113
AFEK6	I-1	600-16	6.00 x 16.00	6	TT	\$110
AFEK7	I-1	650-16	6.50 x 16.00	6	TT	\$123
AFEK5	I-1	670-15	6.70 x 15.00	6	TL	\$139
AFEK9	I-1	750-16	7.50 x 16.00	10	TT	\$161
AFEK10	I-1	900-16	9.00 x 16.00	10	TL	\$212
AFEK13	I-1	900-24	9.00 x 24.00	8	TL	\$441
AFEK14	I-1	1125-28	11.25 x 28.00	12	TT	\$891
<b>LABORER F-3</b>			<i>(Life = 5000 hrs )</i>			
AFEL6	F-3	145/75-161	5.70 x 16.10	10	TL	\$630
AFEL2	F-3	11L-15	11.00 x 15.00	10	TL	\$182
AFEL4	F-3	11L-16	11.00 x 16.00	10	TL	\$210
AFEL5	F-3	11L-16	11.00 x 16.00	12	TL	\$265
<b>MULTI-RIB F-3</b>			<i>(Life = 5000 hrs )</i>			
AFEM1	F-3	900-10	9.00 x 10.00	10	TT	\$195
AFEM2	F-3	1100-16	11.00 x 16.00	12	TL	\$457
<b>SMOOTH</b>			<i>(Life = 5000 hrs )</i>			
AFEN1	I-1	169-30	16.90 x 30.00	6	TL	\$2,064
<b>SMOOTH IMP</b>			<i>(Life = 5000 hrs )</i>			
AFEO1		400-8	4.00 x 8.00	4	TL	\$67
AFEO3		600-16	6.00 x 16.00	10	TL	\$207
AFEO2		11L-15	11.00 x 15.00	10	TL	\$200
<b>SOFTRAC II</b>			<i>(Life = 5000 hrs )</i>			
AFEP1	I-2	165L-161	16.50 x 16.10	6	TL	\$545
AFEP3	I-2	215L-161	21.50 x 16.10	10	TL	\$1,076
<b>SUPER RIB F-2</b>			<i>(Life = 5000 hrs )</i>			
AFER1	F-2	400-12	4.00 x 12.00	4	TT	\$193
<b>COMPACT UTILITY R-1</b>			<i>(Life = 5000 hrs )</i>			
AFES2	R-1	5-12	5.00 x 12.00	4	TT	\$67
AFES1	R-1	7-16	7.00 x 16.00	4	TT	\$145
AFES3	R-1	8-16	8.00 x 16.00	4	TT	\$215
<b>SURE GRIP IMPLEMENT</b>			<i>(Life = 5000 hrs )</i>			
AFET1	I-3	105/80-18	4.10 x 18.00	10	TL	\$491
AFET2	I-3	125/80-18	4.90 x 18.00	10	TL	\$582

(1) TT = includes tube, TL = no tube, NO = no tube

**APPENDIX F  
TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (I)	COST PER EACH
<b>SURE GRIP LUG</b>			<i>(Life = 5000 hrs )</i>			
AFEU2	I-3	105/80-18	10.50 x 18.00	10	TL	\$486
AFEU1	I-3	124-16	12.40 x 16.00	4	TL	\$464
AFEU3	I-3	125/80-18	12.50 x 18.00	10	TL	\$511
<b>SURE GRIP TRACTION</b>			<i>(Life = 5000 hrs )</i>			
AFEV1	I-3	670-15	6.70 x 15.00	4	TT	\$118
AFEV5	I-3	750-16	7.50 x 16.00	4	TL	\$183
AFEV2	I-3	750-18	7.50 x 18.00	4	TT	\$180
AFEV3	I-3	750-20	7.50 x 20.00	4	TT	\$258
AFEV4	I-3	760-15	7.60 x 15.00	6	TL	\$157
<b>TRACTION IMPLEMENT</b>			<i>(Life = 5000 hrs )</i>			
AFEW1	I-3	500-15	5.00 x 15.00	4	TL	\$114
AFEW2	I-3	590-15	5.90 x 15.00	4	TL	\$122
<b>TRIPLE RIB HD</b>			<i>(Life = 5000 hrs )</i>			
AFEX8	F-2	550-16	5.50 x 16.00	6	TT	\$118
AFEX10	F-2	600-16	6.00 x 16.00	6	TT	\$121
AFEX11	F-2	650-16	6.50 x 16.00	6	TT	\$126
AFEX4	F-2	75L-15	7.50 x 15.00	6	TT	\$130
AFEX13	F-2	750-16	7.50 x 16.00	8	TT	\$158
AFEX14	F-2	750-18	7.50 x 18.00	6	TT	\$174
AFEX5	F-2	95L-15	9.50 x 15.00	6	TT	\$188
AFEX16	F-2	1000-16	10.00 x 16.00	8	TL	\$218
AFEX6	F-2	11L-15	11.00 x 15.00	8	TT	\$214
AFEX17	F-2	1100-16	11.00 x 16.00	8	TL	\$284
<b>TRIPLE RIB R/S F-2</b>			<i>(Life = 5000 hrs )</i>			
AFEY2	F-2	400-15	4.00 x 15.00	4	TT	\$95
AFEY1	F-2	500-15	5.00 x 15.00	4	TT	\$78
<b><u>FARM, REAR</u></b>						
<b>ALL TRACTION R-3</b>			<i>(Life = 5000 hrs )</i>			
AGFA1	R-3	750-16	7.50 x 16.00	4	TT	\$183
<b>ALL WEATHER R-3</b>			<i>(Life = 5000 hrs )</i>			
AGFB2	R-3	95-24	9.50 x 24.00	4	TT	\$449
AGFB7	R-3	136-161	13.60 x 16.10	8	TL	\$761
AGFB5	R-3	136-28	13.60 x 28.00	6	TT	\$880
AGFB3	R-3	149-24	14.90 x 24.00	6	TL	\$602
AGFB4	R-3	169-24	16.90 x 24.00	6	TL	\$745
AGFB8	R-3	184-161	18.40 x 16.10	8	TL	\$908
AGFB10	R-3	184-26	18.40 x 26.00	12	TL	\$1,219

(1) TT = includes tube, TL = no tube, NO = no tube

## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AGFB11	R-3	231-26	23.10 x 26.00	10	TL	\$1,726
AGFB12	R-3	231-26	23.10 x 26.00	12	TL	\$1,925
AGFB14	R-3	245-32	24.50 x 32.00	12	TL	\$2,706
AGFB13	R-3	28L-26	28.00 x 26.00	16	TT	\$2,568
AGFB15	R-3	305L-32	30.50 x 32.00	12	TL	\$2,950
AGFB16	R-3	305L-32 VA	30.50 x 32.00	24	TL	\$5,501
<b>DT 800 RADIAL R-1W</b>			<i>(Life = 5000 hrs )</i>			
AGFE1	R-1W	320/90R42	12.60 x 42.00	UK	TL	\$1,251
AGFE3	R-1W	320/90R50	12.60 x 50.00	UK	TL	\$1,867
AGFE2	R-1W	380/90R46	14.90 x 46.00	UK	TL	\$1,434
<b>DT 812 RADIAL R-1W</b>			<i>(Life = 5000 hrs )</i>			
AGFF1	R-1W	380/70R24	14.90 x 24.00	UK	TL	\$1,001
AGFF2	R-1W	420/70R28	16.50 x 28.00	UK	TL	\$1,183
AGFF3	R-1W	480/70R30	18.90 x 30.00	UK	TL	\$1,575
<b>DT 820 RADIAL R-1W</b>			<i>(Life = 5000 hrs )</i>			
AGFG2	R-1W	600/65R28	23.60 x 28.00	UK	TL	\$2,090
AGFG1	R-1W	620/75R26	24.40 x 26.00	UK	TL	\$3,324
AGFG5	R-1W	620/70R42	24.40 x 42.00	UK	TL	\$2,665
AGFG3	R-1W	650/75R34	25.60 x 34.00	UK	TL	\$3,307
AGFG4	R-1W	710/70R38	27.90 x 38.00	UK	TL	\$2,772
<b>DYNA TORQUE RADIAL R-1</b>			<i>(Life = 5000 hrs )</i>			
AGFH5	R-1	320/85R34	12.60 x 34.00	UK	TL	\$1,143
AGFH7	R-1	149R30	14.90 x 30.00	X3	TL	\$1,199
AGFH9	R-1	149R34	14.90 x 34.00	X3	TL	\$1,363
AGFH15	R-1	149R46	14.90 x 46.00	X3	TL	\$1,569
AGFH6	R-1	385/85R34	15.10 x 34.00	UK	TL	\$1,275
AGFH16	R-1	420/80R46	16.50 x 46.00	UK	TL	\$2,182
AGFH8	R-1	169R30	16.90 x 30.00	X3	TL	\$1,294
AGFH2	R-1	184R26	18.40 x 26.00	X2	TL	\$1,353
AGFH10	R-1	184R38	18.40 x 38.00	X1	TL	\$1,258
AGFH13	R-1	184R42	18.40 x 42.00	X2	TL	\$1,567
AGFH17	R-1	184R46	18.40 x 46.00	X3	TL	\$1,888
AGFH12	R-1	208R38	20.80 x 38.00	X1	TL	\$1,651
AGFH14	R-1	208R42	20.80 x 42.00	X2	TL	\$1,748
<b>DYNA TORQUE II R-1</b>			<i>(Life = 5000 hrs )</i>			
AGFJ29	R-1	112-16	11.20 x 16.00	4	TL	\$277
AGFJ6	R-1	136-24	13.60 x 24.00	8	TT	\$651
AGFJ41	R-1	136-28	13.60 x 28.00	10	TL	\$753
AGFJ11	R-1	136-28	13.60 x 28.00	10	TT	\$753
AGFJ7	R-1	149-24	14.90 x 24.00	6	TL	\$636

(1) TT = includes tube, TL = no tube, NO = no tube

**APPENDIX F  
 TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AGFJ31	R-1	149-24	14.90 x 24.00	8	TL	\$709
AGFJ42	R-1	149-28	14.90 x 28.00	10	TL	\$889
AGFJ8	R-1	169-24	16.90 x 24.00	6	TT	\$745
AGFJ39	R-1	169-26	16.90 x 26.00	10	TL	\$1,545
AGFJ43	R-1	169-28	16.90 x 28.00	10	TL	\$1,228
AGFJ37	R-1	169-34	16.90 x 34.00	6	TL	\$900
AGFJ23	R-1	169-38	16.90 x 38.00	14	TT	\$1,441
AGFJ40	R-1	184-26	18.40 x 26.00	12	TL	\$1,258
AGFJ18	R-1	184-34	18.40 x 34.00	8	TT	\$1,023
AGFJ24	R-1	184-38	18.40 x 38.00	8	TT	\$1,158
AGFJ19	R-1	208-34	20.80 x 34.00	14	TT	\$1,596
AGFJ25	R-1	208-38	20.80 x 38.00	8	TT	\$1,434
AGFJ27	R-1	208-42	20.80 x 42.00	10	TL	\$2,166
AGFJ45	R-1	231-26	23.10 x 26.00	12	TL	\$1,779
AGFJ20	R-1	231-34	23.10 x 34.00	8	TT	\$1,988
AGFJ35	R-1	245-32	24.50 x 32.00	12	TL	\$1,921
AGFJ34	R-1	28L-26	28.00 x 26.00	12	TL	\$2,255
AGFJ36	R-1	305L-32	30.50 x 32.00	14	TL	\$3,229
<b>INDUSTRIAL SURE GRIP R-4</b>			<i>(Life = 5000 hrs)</i>			
AGFK1	R-4	169-30	16.90 x 30.00	10	TT	\$1,393
AGFK3	R-4	184-28	18.40 x 28.00	12	TL	\$1,200
<b>IT510 RADIAL R4</b>			<i>(Life = 5000 hrs)</i>			
AGFL3	R-4	195LR24	19.50 x 24.00	UK	TL	\$1,362
<b>IT525 RADIAL R4</b>			<i>(Life = 5000 hrs)</i>			
AGFM1	R-4	149-24	14.90 x 24.00	8	TL	\$1,362
AGFM4	R-4	169-24	16.90 x 24.00	10	TL	\$823
AGFM12	R-4	169-28	16.90 x 28.00	10	TL	\$809
AGFM6	R-4	175L-24	17.50 x 24.00	10	TL	\$786
AGFM5	R-4	184-24	18.40 x 24.00	12	TL	\$1,366
AGFM7	R-4	195L-24	19.50 x 24.00	10	TL	\$955
AGFM8	R-4	195L-24	19.50 x 24.00	12	TL	\$1,099
AGFM9	R-4	21L-24	21.00 x 24.00	12	TL	\$1,327
AGFM11	R-4	21L-24	21.00 x 24.00	16	TL	\$1,605
AGFM14	R-4	21L-28	21.00 x 28.00	14	TL	\$1,742
<b>POWER TORQUE R-1</b>			<i>(Life = 5000 hrs)</i>			
AGFN1	R-1	6-12	6.00 x 12.00	4	TL	\$97
<b>SPECIAL SURE GRIP R-2-0</b>			<i>(Life = 5000 hrs)</i>			
AGFO2	R-2	149-24	14.90 x 24.00	6	TL	\$1,033
AGFO11	R-2	184-26	18.40 x 26.00	10	TL	\$1,344
AGFO8	R-2	184-38	18.40 x 38.00	8	TL	\$1,252

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## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AGFO12	R-2	VA500/95D32	19.70 x 32.00	20	TL	\$3,044
AGFO10	R-2	208-38	20.80 x 38.00	8	TL	\$1,860
AGFO3	R-2	231-26	23.10 x 26.00	10	TL	\$1,860
AGFO4	R-2	28L-26	28.00 x 26.00	12	TL	\$2,587
AGFO6	R-2	305L-32	30.50 x 32.00	14	TL	\$3,282
<b>SPECIAL SURE GRIP RADIAL R-2-0</b>			<i>(Life = 5000 hrs )</i>			
AGFP8	R-2	320/90R46	12.60 x 46.00	X3	TL	\$1,503
AGFP9	R-2	340/85R46	13.40 x 46.00	UK	TL	\$1,624
AGFP1	R-2	169R28	16.90 x 28.00	X2	TL	\$1,551
AGFP2	R-2	169R30	16.90 x 30.00	X3	TL	\$1,697
AGFP3	R-2	184R38	18.40 x 38.00	X1	TL	\$1,475
AGFP5	R-2	184R42	18.40 x 42.00	X2	TL	\$2,012
AGFP7	R-2	184R46	18.40 x 46.00	X3	TL	\$2,236
AGFP4	R-2	208R38	20.80 x 38.00	X2	TL	\$1,971
AGFP6	R-2	208R42	20.80 x 42.00	X2	TL	\$2,470
<b>SUPER TRACTION RADIAL R-1W</b>			<i>(Life = 5000 hrs )</i>			
AGFQ3	R-1W	260/80R20	10.20 x 20.00	8	TL	\$557
AGFQ2	R-1W	112R20	11.20 x 20.00	UK	TL	\$593
AGFQ6	R-1W	136R28	13.60 x 28.00	UK	TL	\$1,027
AGFQ15	R-1W	136R38	13.60 x 38.00	UK	TL	\$1,280
AGFQ20	R-1W	149R24	14.90 x 24.00	X2	TL	\$1,032
AGFQ7	R-1W	149R28	14.90 x 28.00	UK	TL	\$1,130
AGFQ9	R-1W	149R30	14.90 x 30.00	UK	TL	\$750
AGFQ4	R-1W	169R24	16.90 x 24.00	UK	TL	\$1,249
AGFQ5	R-1W	169R26	16.90 x 26.00	X2	TL	\$1,468
AGFQ8	R-1W	169R28	16.90 x 28.00	UK	TL	\$1,339
AGFQ10	R-1W	169R30	16.90 x 30.00	UK	TL	\$1,423
AGFQ21	R-1W	169R34	16.90 x 34.00	X2	TL	\$1,217
AGFQ22	R-1W	169R38	16.90 x 38.00	X2	TT	\$1,351
AGFQ11	R-1W	184R26	18.40 x 26.00	UK	TL	\$1,395
AGFQ12	R-1W	184R30	18.40 x 30.00	UK	TL	\$1,536
AGFQ14	R-1W	184R34	18.40 x 34.00	UK	TL	\$1,281
AGFQ16	R-1W	184R38	18.40 x 38.00	UK	TL	\$1,394
AGFQ18	R-1W	184R42	18.40 x 42.00	UK	TL	\$1,914
AGFQ17	R-1W	208R38	20.80 x 38.00	UK	TL	\$2,025
AGFQ19	R-1W	208R42	20.80 x 42.00	UK	TL	\$2,149
AGFQ13	R-1W	800/65R32	31.50 x 32.00	UK	TL	\$3,241
<b>DURATORQUE R-1</b>			<i>(Life = 5000 hrs )</i>			
AGFU1	R-1	149-28	14.90 x 28.00	6	TT	\$647
AGFU2	R-1	169-30	16.90 x 30.00	6	TT	\$846
AGFU3	R-1	184-30	18.40 x 30.00	6	TT	\$1,012

(1) TT = includes tube, TL = no tube, NO = no tube

**APPENDIX F  
TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (I)	COST PER EACH
AGFU5	R-1	184-38	18.40 x 38.00	8	TT	\$908
<b><u>FARM, TERRA - 20" UP</u></b>						
<b>SFT105</b>			<i>(Life = 5000 hrs)</i>			
AHGA2	HF-1	54-3100-26	31.00 x 26.00	10	TL	\$4,166
<b>SOF TRAC</b>			<i>(Life = 5000 hrs)</i>			
AHGB3	HF-1	38-1400-20	14.00 x 20.00	4	TL	\$669
AHGB2	HF-1	41-1400-20	14.00 x 20.00	4	TL	\$1,058
AHGB1	HF-1	44-1800-20	18.00 x 20.00	4	TL	\$1,272
<b>SUPER TERRA GRIP</b>			<i>(Life = 5000 hrs)</i>			
AHGC1	HF-2	38-1400-20	14.00 x 20.00	8	TL	\$1,031
AHGC2	HF-2	42-2500-20	25.00 x 20.00	8	TL	\$2,692
AHGC7	HF-2	54-3100-26	31.00 x 26.00	10	TL	\$5,139
AHGC12	HF-2	67-3400-25	34.00 x 25.00	10	TL	\$5,688
AHGC11	HF-2	66-4300-25	43.00 x 25.00	20	TL	\$8,788
<b>SUPER TERRA GRIP XT</b>			<i>(Life = 5000 hrs)</i>			
AHGD1	HF-3	42-2500-20	25.00 x 20.00	12	TL	\$3,114
AHGD5	HF-3	48-3100-20	31.00 x 20.00	12	TL	\$3,746
AHGD6	HF-3	66-4300-25	43.00 x 25.00	10	TL	\$5,976
AHGD7	HF-3	VA73-4400-32	44.00 x 32.00	12	TL	\$9,578
<b>TUNDRA GRIP</b>			<i>(Life = 5000 hrs)</i>			
AHGF2	HF-1	66-4400-25	44.00 x 25.00	16	TL	\$7,361
AHGF1	HF-1	66-4400-25	44.00 x 25.00	20	TL	\$7,723
<b><u>FARM, SPECIALTY</u></b>						
<b>SFT105</b>			<i>(Life = 5000 hrs)</i>			
AJHA1	HF-1	33-1250-15	12.50 x 15.00	4	TL	\$511
<b>SOFTRAC</b>			<i>(Life = 5000 hrs)</i>			
AJHB2		18-650-8	6.50 x 8.00	4	TL	\$52
AJHB3		18-850-10	8.50 x 10.00	6	TL	\$65
AJHB1	HF-1	25-850-14	8.50 x 14.00	6	TL	\$195
AJHB5	HF-1	27-850-15	8.50 x 15.00	4	TL	\$200
AJHB4	HF-1	25-1050-15	10.50 x 15.00	4	TL	\$222
AJHB6	HF-1	27-1050-15	10.50 x 15.00	4	TL	\$238
AJHB7	HF-1	29-1250-15	12.50 x 15.00	4	TL	\$306
AJHB10	HF-1	31-1250-15	12.50 x 15.00	4	TL	\$317
AJHB11	HF-1	33-1250-15	12.50 x 15.00	4	TL	\$391
AJHB8	HF-1	31-1350-15	13.50 x 15.00	4	TL	\$381
AJHB9	HF-1	31-1550-15	15.50 x 15.00	4	TL	\$414

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## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
<b>SUPER TERRA GRIP</b>			<i>(Life = 5000 hrs )</i>			
AJHC3	HF-2	29-1250-15	12.50 x 15.00	6	TL	\$351
AJHC6	HF-2	31-1550-15	15.50 x 15.00	8	TL	\$464
AJHC7	HF-2	38-2000-16.1	20.00 x 16.00	8	TL	\$1,330
<b>SURE GRIP LUG</b>			<i>(Life = 5000 hrs )</i>			
AJHD9	HF-2	27-850-15	8.50 x 15.00	6	TL	\$222
AJHD1		10-165	10.00 x 16.50	6	TL	\$212
AJHD10	HF-2	27-1050-15	10.50 x 15.00	6	TL	\$263
AJHD4		12-165	12.00 x 16.50	10	TL	\$325
AJHD3		12-165	12.00 x 16.50	8	TL	\$281
AJHD5		14-175	14.00 x 17.50	10	TL	\$417
AJHD7		15-195	15.00 x 19.50	12	TL	\$528
AJHD6		15-195	15.00 x 19.50	6	TL	\$413
<b>IT 323</b>			<i>(Life = 5000 hrs )</i>			
AJHE1		10-165	10.00 x 16.50	8	TL	\$267
AJHE3		12-165	12.00 x 16.50	10	TL	\$374
AJHE4		31-1550-15	15.50 x 15.00	8	TL	\$671
<b>POWER RIB</b>			<i>(Life = 5000 hrs )</i>			
AJHJ1		18-850-8	8.50 x 8.00	4	TL	\$59
AJHJ2		20-1000-10	10.00 x 10.00	4	TL	\$137
<b>RALLY</b>			<i>(Life = 5000 hrs )</i>			
AJHK1		480-8	4.80 x 8.00	4	TL	\$102
AJHK2		18-950-8	9.50 x 8.00	4	TL	\$153
<b>TERRA RIB</b>			<i>(Life = 5000 hrs )</i>			
AJHM2	HF-1	25-750-15	7.50 x 15.00	6	TL	\$179
AJHM4	HF-1	27-950-15	9.50 x 15.00	10	TL	\$295
AJHM6	HF-1	31-1350-15	13.50 x 15.00	8	TL	\$383
<b>ATV</b>			<i>(Life = 5000 hrs )</i>			
AJHN1		AT21-7-10	7.00 x 10.00	X1	TL	\$69
AJHN3		AT23-8-11	8.00 x 11.00	X2	TL	\$92
AJHN5		AT24-9-11	9.00 x 11.00	X1	TL	\$107
<b>TRACKER ATT</b>			<i>(Life = 5000 hrs )</i>			
AJHT1		AT24-8-11	8.00 x 11.00	X2	TL	\$113
AJHT2		AT24-10-11	10.00 x 11.00	X2	TL	\$108
<b><u>INDUSTRIAL, MINE SERVICE</u></b>						
<b>HARD ROCK LUG MINE &amp; INDUSTRIAL</b>			<i>(Life = 5000 hrs )</i>			
AKJC1		10.00-20	10.00 x 20.00	18	TT	\$820

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**APPENDIX F  
TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
<b>XTRA TRACTION LUG</b>			<i>(Life = 5000 hrs )</i>			
AKJD2		8.25-15	8.25 x 15.00	16	TT	\$217
AKJD3		36-11x15(10.00L15)	10.00 x 15.00	16	TT	\$435
AKJD7		24x12x12	12.00 x 12.00	24	TL	\$778
AKJD6		35-15x15(14.50L-15)	14.50 x 15.00	32	TL	\$1,010
<b>XTRA TRACTION GRIP</b>			<i>(Life = 5000 hrs )</i>			
AKJE1		32x12-15	12.00 x 15.00	20	TT	\$731
<b><u>OFF-THE-ROAD, MED &amp; HEAVY COMMERCIAL, RADIAL</u></b>						
<b>G-2 GRADER SERVICE - RL2F, SG2B</b>			<i>(Life = 3200 hrs )</i>			
AMLA1	G2	14.00R24	14.00 x 24.00	X1	TL	\$1,203
<b>E-2 HAULAGE SERVICE - RL2F/GP2B RL2+</b>			<i>(Life = 2800 hrs )</i>			
AMLB1	E/L/G3	17.5R25	17.50 x 25.00	X1	TL	\$1,220
AMLB8	L5	18.00R25	18.00 x 25.00	X2	TL	\$4,181
AMLB2	E/L/G3	20.5R25	20.50 x 25.00	X1	TL	\$1,724
AMLB9	E/L/G3	20.5R25	20.50 x 25.00	X2	TL	\$1,724
AMLB5	E/L/G3+T	20.5R25	20.50 x 25.00	X2	TL	\$2,814
AMLB15	E4	21.00R35	21.00 x 35.00	X2	TL	\$5,878
AMLB3	E/L/G3	23.5R25	23.50 x 25.00	X1	TL	\$2,351
AMLB10	E/L/G3	23.5R25	23.50 x 25.00	X2	TL	\$2,513
AMLB21	E/L/G3+T	26.5R25	26.50 x 25.00	X2	TL	\$4,218
AMLB22	E/L3	29.5R25	29.50 x 25.00	X2	TL	\$5,112
AMLB17	E3	33.25R35	33.25 x 35.00	X2	TL	\$8,087
AMLB23	E3+	40.5/75R39	40.50 x 39.00	X2	TL	\$12,140
<b>E-3 HAULAGE SERVICE - ROCK DESIGN RL3, RL3J,</b>			<i>(Life = 2800 hrs )</i>			
AMLC3	E3+	18.00R33	18.00 x 33.00	X2	TL	\$3,693
AMLC5	E3+	24.00R35	24.00 x 35.00	X2	TL	\$6,345
AMLC6	E3	29.5R29	29.50 x 29.00	X2	TL	\$5,811
AMLC7	E3	33.25R35	33.25 x 25.00	X2	TL	\$8,087
AMLC8	E3	37.25R35	37.35 x 35.00	X2	TL	\$9,828
AMLC9	E3	37.5R39	37.50 x 39.00	X2	TL	\$10,859
<b>E-4 RL4J/RL4 &amp; RL4H/RL4 E4</b>			<i>(Life = 5000 hrs )</i>			
AMLD1	E4	12.00R24	12.00 x 24.00	X3	TT	\$1,439
AMLD2	E4	14.00R24	14.00 x 24.00	X3	TL	\$1,617
AMLD3	E4	14.00R25	14.00 x 25.00	X3	TL	\$1,704
AMLD4	E4	18.00R25	18.00 x 25.00	X2	TL	\$3,383
AMLD5	E4	18.00R33	18.00 x 33.00	X2	TL	\$4,451
AMLD14	E4	21.00R35	21.00 x 35.00	X2	TL	\$5,878
AMLD15	E4	24.00R35	24.00 x 25.00	X2	TL	\$7,013
AMLD7	E4	27.00R49	27.00 x 49.00	X2	TL	\$9,123

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## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (I)	COST PER EACH
AMLD8	E4	30.00R51	30.00 x 51.00	X2	TL	\$11,960
AMLD9	E4	33.00R51	33.00 x 51.00	X2	TL	\$14,772
AMLD10	E4	36.00R51	36.00 x 51.00	X2	TL	\$16,918
AMLD11	E4	37.00R57	37.00 x 57.00	X2	TL	\$30,397
AMLD12	E4	40.00R57	40.00 x 57.00	X2	TL	\$30,966
<b>MOBILE CRANE</b>			<i>(Life = 5000 hrs )</i>			
AMLF1	E/L/G3	445/80R25 (17.5R25)	17.50 x 25.00	UK	TL	\$1,854
AMLF3	E/L/G3	525/80R25(20.5R25)	20.60 x 25.00	UK	TL	\$1,724
<b>L-5 DOZER &amp; LOADER SERVICE RL5K</b>			<i>(Life = 8000 hrs )</i>			
AMLG1	L5	20.5R25	20.50 x 25.00	X1	TL	\$3,602
AMLG2	L5	23.5R25	23.50 x 25.00	X1	TL	\$4,443
<b>SPECIAL SERVICE - AT2A</b>			<i>(Life = 5000 hrs )</i>			
AMLH1	E/L/G3	14.00R20	14.00 x 20.00	18	TL	\$986
AMLH3	E/L/G3	16.00R20	16.00 x 20.00	22	TL	\$1,485
AMLH4	E/L/G3	16.00R21	16.00 x 21.00	22	TL	\$1,561
AMLH2	E/L/G3	17.5R25	17.50 x 25.00	X1	TL	\$1,220
AMLH6	E/L/G3	22/65R25	22.00 x 25.00	X1	TL	\$2,220
<b><u>OFF-THE-ROAD, MED &amp; HEAVY COMMERCIAL, BIAS</u></b>						
<b>INDUSTRIAL SURE GRIP MPT</b>			<i>(Life = 5000 hrs )</i>			
ANMA1		10.5-20	10.50 x 20.00	10	TL	\$397
ANMA2		12.5-20	12.50 x 20.00	10	TL	\$508
<b>E-1 HRR 1A</b>			<i>(Life = 2500 hrs )</i>			
ANMB1	E3	14.00-25	14.00 x 25.00	20	TL	\$1,191
ANMB2	E1	16.00-25	16.00 x 25.00	32	TL	\$1,968
<b>E-2 TRACTION EARTHMOVER SURE GRIP</b>			<i>(Life = 2800 hrs )</i>			
ANMC3	E7	18.00-25	18.00 x 25.00	16	TL	\$1,561
<b>E-3 ROCK SERVICE HARD ROCK LUG/HRL WC</b>			<i>(Life = 2800 hrs )</i>			
ANME1	E3	12.00-20	12.00 x 20.00	20	TT	\$830
ANME2	E3	12.00-24	12.00 x 24.00	16	TT	\$793
ANME3	E3	14.00-24	14.00 x 24.00	28	TT	\$1,491
ANME4	E3	14.00-25	14.00 x 25.00	20	TL	\$1,191
ANME6	E3	16.00-25	16.00 x 25.00	24	TL	\$1,730
<b>E-3 ROCK SERVICE SUPER HARD ROCK LUG</b>			<i>(Life = 2800 hrs )</i>			
ANMF1	L5	26.5-25	26.50 x 25.00	24	TL	\$4,335
ANMF3	L4	29.5-25	29.50 x 25.00	22	TL	\$4,706
ANMF4	L5	29.5-25	29.50 x 25.00	28	TL	\$5,845
ANMF5	L4	29.5-29	29.50 x 29.00	28	TL	\$5,069

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**APPENDIX F  
TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (I)	COST PER EACH
ANMF6	E-3	29.5-29	29.50 x 29.00	34	TL	\$4,738
<b>E-3 ROCK SERVICE SHRL8</b>			<i>(Life = 2800 hrs )</i>			
ANMG4	E3	29.5-35	29.50 x 35.00	34	TL	\$5,053
ANMG1	E-3	33.25-29	33.25 x 29.00	26	TL	\$5,542
ANMG6	E-3	33.25-35	33.25 x 35.00	38	TL	\$7,176
ANMG7	E-3	37.25-35	37.25 x 35.00	36	TL	\$7,471
ANMG9	E3	37.5-39	37.50 x 39.00	44	TL	\$8,346
<b>E-3 ROCK SERVICE ELV3A, ELV4B, ELV4/5A</b>			<i>(Life = 2800 hrs )</i>			
ANMH4	IND 4	18.00-25	18.00 x 25.00	40	TL	\$4,485
ANMH9	IND 3	21.00-25	21.00 x 25.00	32	TL	\$3,785
<b>E-3 ROCK SERVICE HRL 3F</b>			<i>(Life = 2800 hrs )</i>			
ANMJ2	E3	33.25-35	33.25 x 35.00	32	TL	\$5,837
ANMJ5	E3	37.25-35	37.25 x 35.00	36	TL	\$7,467
ANMJ6	E3	37.5-39	37.50 x 39.00	44	TL	\$8,346
<b>E-3 ROCK SERVICE WRL 3A</b>			<i>(Life = 2800 hrs )</i>			
ANML1	E3	14.00-20	14.00 x 20.00	24	TT	\$1,180
ANML2	E3	14.00-24	14.00 x 24.00	24	TT	\$1,252
<b>E-4 ROCK SERVICE HRL 4B</b>			<i>(Life = 5000 hrs )</i>			
ANMN1	E4	16.00-25	16.00 x 25.00	28	TL	\$2,021
ANMN3	E4	18.00-33	18.00 x 33.00	32	TL	\$3,280
ANMN4	E4	21.00-35	21.00 x 35.00	36	TL	\$4,651
ANMN5	E4	24.00-35	24.00 x 35.00	36	TL	\$5,875
ANMN9	E4	36.00-51	36.00 x 51.00	58	TL	\$16,919
<b>E-7 FLOTATION TYPE PAVER TIRE</b>			<i>(Life = 3000 hrs )</i>			
ANMR1	E7	1600-24	16.00 x 24.00	12	TL	\$1,202
<b>G-1 RBG 1A</b>			<i>(Life = 3200 hrs )</i>			
ANMS1	G1	1400-24	14.00 x 24.00	12	TL	\$1,112
<b>G-2 SGG2A</b>			<i>(Life = 3200 hrs )</i>			
ANMT1	G2	13.00-20	13.00 x 20.00	10	TT	\$437
ANMT10	G2	13.00-24 SG	13.00 x 24.00	12	TL	\$361
ANMT6	G2	14.00-24	14.00 x 24.00	12	TL	\$396
ANMT8	G2	16.00-24	16.00 x 24.00	12	TL	\$1,125
<b>G-2 GRADER SMOOTH</b>			<i>(Life = 3200 hrs )</i>			
ANMU1	G1	13.00-24	13.00 x 24.00	10	TL	\$463
<b>G-2 SGLDL 2A L2</b>			<i>(Life = 3200 hrs )</i>			
ANMV2	L2/G2	15.5-25	15.50 x 25.00	12	TL	\$553
ANMV3	L2/G2	17.5-25	17.50 x 25.00	12	TL	\$577

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## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
ANMV4	L2/G2	17.5-25	17.50 x 25.00	16	TL	\$748
ANMV5	L2/G2	17.5-25	17.50 x 25.00	20	TL	\$964
<b>G-2 SGLEL 2A ES/L2/G2</b>			<i>(Life = 3200 hrs)</i>			
ANMW1	E/L/G2	20.5-25	20.50 x 25.00	12	TL	\$1,091
ANMW2	E/L/G2	20.5-25	20.50 x 25.00	16	TL	\$1,178
ANMW4	E/L/G2	23.5-25	23.50 x 25.00	12	TL	\$1,661
ANMW5	E/L/G2	23.5-25	23.50 x 25.00	16	TL	\$1,742
<b>G-3 RKG 3A</b>			<i>(Life = 3200 hrs)</i>			
ANMX1	G3	14.00-24	14.00 x 24.00	16	TL	\$898
<b>L-2 DOZER/LOADER SERVICE TRACTION SG LUG DL</b>			<i>(Life = 3200 hrs)</i>			
ANNA2	L3	26.5-25	26.50 x 25.00	20	TL	\$2,874
<b>L-3 DOZER/LOADER SERVICE ROCK SERVICE E3/L3</b>			<i>(Life = 3200 hrs)</i>			
ANNB1	E/L 3	20.5-25	20.50 x 25.00	12	TL	\$1,374
ANNB2	E/L 3	20.5-25	20.50 x 25.00	16	TL	\$1,456
ANNB5	E/L 3	23.5-25	23.50 x 25.00	16	TL	\$1,988
ANNB6	E/L 3	23.5-25	23.50 x 25.00	20	TL	\$2,270
<b>L-3 DOZER/LOADER SERVICE ROCK SHRL DL</b>			<i>(Life = 3200 hrs)</i>			
ANNC1	L3	26.5-25	26.50 x 25.00	20	TL	\$2,874
ANNC2	L4	29.5-25	29.50 x 25.00	22	TL	\$4,706
ANNC3	L4	29.5-25	29.50 x 25.00	28	TL	\$5,069
<b>L-3 DOZER/LOADER SERVICE ROCK HRL DL 3A &amp; 3F</b>			<i>(Life = 3200 hrs)</i>			
ANND2	L/G3	17.5-25	17.50 x 25.00	12	TL	\$677
ANND4	L/G3	17.5-25	17.50 x 25.00	20	TL	\$1,107
<b>L-4 DOZER/LOADER SERVICE ROCK DEEP TREAD S</b>			<i>(Life = 5000 hrs)</i>			
ANNE2	L3	26.5-25	26.50 x 25.00	20	TL	\$2,874
ANNE3	L4	29.5-25	29.50 x 25.00	22	TL	\$4,706
ANNE4	L4	29.5-25	29.50 x 25.00	28	TL	\$5,069
ANNE5	E3	29.5-29	29.50 x 29.00	34	TL	\$4,738
<b>L-4 DOZER/LOADER SERVICE ROCK DEEP TREAD N</b>			<i>(Life = 5000 hrs)</i>			
ANNG1	L5	35/65-33	35.00 x 33.00	24	TL	\$7,746
<b>L-5 DOZER/LOADER SERVICE ROCK SUPER XTRA T</b>			<i>(Life = 8000 hrs)</i>			
ANNL2	L5	35/65-33	35.00 x 33.00	30	TL	\$8,056
ANNL4	L5	41.25/70-39	41.25 x 39.00	42	TL	\$12,889
ANNL7	L5	45/65-45	45.00 x 45.00	58	TL	\$18,677
<b>L-5 DOZER/LOADER SERVICE SMOOTH SMO SL5B</b>			<i>(Life = 8000 hrs)</i>			
ANNN3	IND 3	18.00-25	18.00 x 25.00	32	TL	\$2,725

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**APPENDIX F  
TIRE DESCRIPTION AND TIRE COST**

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
<b>L-5 DOZER/LOADER SERVICE SMOOTH SUPER XTR</b>			<i>(Life = 8000 hrs )</i>			
ANNO1	L5S	21.00-25	21.00 x 25.00	32	TL	\$5,542
ANNO3	L5S	26.5-25	26.50 x 25.00	32	TL	\$5,293
ANNO4	L5S	29.5-25	29.50 x 25.00	28	TL	\$6,597
<b>L-5 DOZER/LOADER SERVICE SMOOTH NSM DL5B</b>			<i>(Life = 8000 hrs )</i>			
ANNP1	L5	35/65-33	35.00 x 33.00	24	TL	\$7,746
<b><u>INDUSTRIAL, SOLID</u></b>						
<b>SOLID, HIGH PERFORMANCE, OIL RESISTANT/STATI</b>			<i>(Life = 5000 hrs )</i>			
EPPO5		10-3-61/4 Grip	3.00 x 10.00		NO	\$256
EPPO4		10-31/2-6	3.50 x 10.00		NO	\$310
EPPO18		12-31/2-8	3.50 x 12.00		NO	\$313
EPPO23		13-31/2-8	3.50 x 13.00		NO	\$264
EPPO32		15-31/2-111/4	3.50 x 15.00		NO	\$411
EPPO1		81/2-4-4	4.00 x 8.50		NO	\$351
EPPO10		10-4-61/2	4.00 x 10.00		NO	\$268
EPPO6		10-4-61/4	4.00 x 10.00		NO	\$313
EPPO19		12-4-8	4.00 x 12.00		NO	\$310
EPPO47		161/4-4-111/4 Lug	4.00 x 16.25		NO	\$122
EPPO30		14-41/2-8	4.50 x 14.00		NO	\$466
EPPO40		16-41/2-101/2 Lug	4.50 x 16.00		NO	\$528
EPPO2		9-5- 5 Grip	5.00 x 9.00		NO	\$262
EPPO12		10-5-61/2	5.00 x 10.00		NO	\$279
EPPO7		10-5-61/4	5.00 x 10.00		NO	\$283
EPPO13		101/2-5-5	5.00 x 10.50		NO	\$455
EPPO31		14-5-10	5.00 x 14.00		NO	\$427
EPPO33		15-5-111/4	5.00 x 15.00		NO	\$394
EPPO38		151/2-5-10	5.00 x 15.50		NO	\$326
EPPO41		16-5-101/2	5.00 x 16.00		NO	\$593
EPPO48		161/4-5-111/4	5.00 x 16.25		NO	\$426
EPPO53		17-5-121/8	5.00 x 17.00		NO	\$386
EPPO63		18-5-14	5.00 x 18.00		NO	\$465
EPPO58		18-5-121/8	5.00 x 18.00		NO	\$516
EPPO68		20-5-16	5.00 x 20.00		NO	\$579
EPPO73		21-5-15	5.00 x 21.00		NO	\$538
EPPO79		22-5-16	5.00 x 22.00		NO	\$643
EPPO8		10-6-61/4	6.00 x 10.00		NO	\$343
EPPO14		101/2-6-5 Lug	6.00 x 10.50		NO	\$306
EPPO34		15-6-111/4 Grip	6.00 x 15.00		NO	\$508
EPPO42		16-6-101/2	6.00 x 16.00		NO	\$679
EPPO49		161/4-6-111/4	6.00 x 16.25		NO	\$573

(1) TT = includes tube, TL = no tube, NO = no tube

## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
EPPO59		18-6-121/8	6.00 x 18.00		NO	\$582
EPPO69		20-6-16	6.00 x 20.00		NO	\$615
EPPO74		21-6-15	6.00 x 21.00		NO	\$752
EPPO80		22-6-16	6.00 x 22.00		NO	\$758
EPPO22		12-61/2-8	6.50 x 12.00		NO	\$407
EPPO9		10-7-61/4	7.00 x 10.00		NO	\$397
EPPO35		15-7-111/4	7.00 x 15.00		NO	\$610
EPPO43		16-7-101/2	7.00 x 16.00		NO	\$274
EPPO50		161/4-7-111/4	7.00 x 16.25		NO	\$714
EPPO60		18-7-121/8	7.00 x 18.00		NO	\$606
EPPO70		20-7-16	7.00 x 20.00		NO	\$744
EPPO75		21-7-15	7.00 x 21.00		NO	\$773
EPPO81		22-7-16	7.00 x 22.00		NO	\$911
EPPO94		26-7-20	7.00 x 26.00		NO	\$785
EPPO36		15-8-111/4	8.00 x 15.00		NO	\$809
EPPO61		18-8-121/8	8.00 x 18.00		NO	\$712
EPPO66		18-8-14	8.00 x 18.00		NO	\$742
EPPO71		20-8-16	8.00 x 20.00		NO	\$795
EPPO76		21-8-15	8.00 x 21.00		NO	\$941
EPPO82		22-8-16	8.00 x 22.00		NO	\$982
EPPO37		15-9-111/4	9.00 x 15.00		NO	\$478
EPPO67		18-9-14	9.00 x 18.00		NO	\$783
EPPO62		18-9-121/8	9.00 x 18.00		NO	\$842
EPPO72		20-9-16	9.00 x 20.00		NO	\$1,079
EPPO77		21-9-15	9.00 x 21.00		NO	\$1,281
EPPO83		22-9-16	9.00 x 22.00		NO	\$1,116
EPPO116		22-9-16	9.00 x 22.00		NO	\$1,271
EPPO92		22-10-173/4	10.00 x 22.00		NO	\$1,350
EPPO84		22-10-16	10.00 x 22.00		NO	\$1,510
EPPO95		28-10-22	10.00 x 28.00		NO	\$1,814
EPPO99		36-10-30	10.00 x 36.00		NO	\$2,688
EPPO78		21-12-15	12.00 x 21.00		NO	\$917
EPPO86		22-12-16	12.00 x 22.00		NO	\$1,533
EPPO96		28-12-22	12.00 x 28.00		NO	\$1,343
EPPO93		22-14-173/4	14.00 x 22.00		NO	\$1,415
EPPO87		22-14-16	14.00 x 22.00		NO	\$1,773
EPPO88		22-16-16	16.00 x 22.00		NO	\$1,348
EPPO98		28-16-22	16.00 x 28.00		NO	\$3,234

### CONVEYOR/LOADER BELTING

CONVEYOR BELTING (GOODYEAR WINGFOOT)			(Life = 5000 hrs)			
AZZA1	Conveyor Belting	24.00 x 50.00	2	NO	\$544	
AZZA2	Conveyor Belting	24.00 x 60.00	2	NO	\$653	

(1) TT = includes tube, TL = no tube, NO = no tube

## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AZZA3		Conveyor Belting	24.00 x 70.00	2	NO	\$762
AZZA4		Conveyor Belting	24.00 x 80.00	2	NO	\$871
AZZA5		Conveyor Belting	24.00 x 90.00	2	NO	\$980
AZZA6		Conveyor Belting	24.00 x 100.00	2	NO	\$1,088
AZZA7		Conveyor Belting	24.00 x 110.00	2	NO	\$1,197
AZZA8		Conveyor Belting	24.00 x 120.00	2	NO	\$1,306
AZZA9		Conveyor Belting	24.00 x 130.00	2	NO	\$1,415
AZZA10		Conveyor Belting	24.00 x 140.00	2	NO	\$1,524
AZZA11		Conveyor Belting	24.00 x 150.00	2	NO	\$1,633
AZZA12		Conveyor Belting	30.00 x 50.00	2	NO	\$680
AZZA13		Conveyor Belting	30.00 x 60.00	2	NO	\$816
AZZA14		Conveyor Belting	30.00 x 70.00	2	NO	\$952
AZZA15		Conveyor Belting	30.00 x 80.00	2	NO	\$1,088
AZZA16		Conveyor Belting	30.00 x 90.00	2	NO	\$1,225
AZZA17		Conveyor Belting	30.00 x 100.00	2	NO	\$1,361
AZZA18		Conveyor Belting	30.00 x 110.00	2	NO	\$1,497
AZZA19		Conveyor Belting	30.00 x 120.00	2	NO	\$1,633
AZZA20		Conveyor Belting	30.00 x 130.00	2	NO	\$1,769
AZZA21		Conveyor Belting	30.00 x 140.00	2	NO	\$1,905
AZZA22		Conveyor Belting	30.00 x 150.00	2	NO	\$2,041
AZZA23		Conveyor Belting	36.00 x 50.00	2	NO	\$816
AZZA24		Conveyor Belting	36.00 x 60.00	2	NO	\$980
AZZA25		Conveyor Belting	36.00 x 70.00	2	NO	\$1,143
AZZA26		Conveyor Belting	36.00 x 80.00	2	NO	\$1,306
AZZA27		Conveyor Belting	36.00 x 90.00	2	NO	\$1,469
AZZA28		Conveyor Belting	36.00 x 100.00	2	NO	\$1,633
AZZA29		Conveyor Belting	36.00 x 110.00	2	NO	\$1,796
AZZA30		Conveyor Belting	36.00 x 120.00	2	NO	\$1,959
AZZA31		Conveyor Belting	36.00 x 130.00	2	NO	\$2,123
AZZA32		Conveyor Belting	36.00 x 140.00	2	NO	\$2,285
AZZA33		Conveyor Belting	36.00 x 150.00	2	NO	\$2,449
AZZA34		Conveyor Belting	42.00 x 50.00	2	NO	\$952
AZZA35		Conveyor Belting	42.00 x 60.00	2	NO	\$1,143
AZZA36		Conveyor Belting	42.00 x 70.00	2	NO	\$1,333
AZZA37		Conveyor Belting	42.00 x 80.00	2	NO	\$1,524
AZZA38		Conveyor Belting	42.00 x 90.00	2	NO	\$1,715
AZZA39		Conveyor Belting	42.00 x 100.00	2	NO	\$1,905
AZZA40		Conveyor Belting	42.00 x 110.00	2	NO	\$2,095
AZZA41		Conveyor Belting	42.00 x 120.00	2	NO	\$2,285
AZZA42		Conveyor Belting	42.00 x 130.00	2	NO	\$2,477
AZZA43		Conveyor Belting	42.00 x 140.00	2	NO	\$2,667
AZZA44		Conveyor Belting	42.00 x 150.00	2	NO	\$2,857
AZZA45		Conveyor Belting	48.00 x 50.00	3	NO	\$1,302

(1) TT = includes tube, TL = no tube, NO = no tube

## APPENDIX F TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AZZA46		Conveyor Belting	48.00 x 60.00	3	NO	\$1,562
AZZA47		Conveyor Belting	48.00 x 70.00	3	NO	\$1,823
AZZA48		Conveyor Belting	48.00 x 80.00	3	NO	\$2,083
AZZA49		Conveyor Belting	48.00 x 90.00	3	NO	\$2,343
AZZA50		Conveyor Belting	48.00 x 100.00	3	NO	\$2,604
AZZA51		Conveyor Belting	48.00 x 110.00	3	NO	\$2,864
AZZA52		Conveyor Belting	48.00 x 120.00	3	NO	\$3,125
AZZA53		Conveyor Belting	48.00 x 130.00	3	NO	\$3,385
AZZA54		Conveyor Belting	48.00 x 140.00	3	NO	\$3,645
AZZA55		Conveyor Belting	48.00 x 150.00	3	NO	\$3,906
AZZA56		Conveyor Belting	60.00 x 50.00	4	NO	\$2,574
AZZA57		Conveyor Belting	60.00 x 60.00	4	NO	\$3,089
AZZA58		Conveyor Belting	60.00 x 70.00	4	NO	\$3,605
AZZA59		Conveyor Belting	60.00 x 80.00	4	NO	\$4,120
AZZA60		Conveyor Belting	60.00 x 90.00	4	NO	\$4,636
AZZA61		Conveyor Belting	60.00 x 100.00	4	NO	\$5,151
AZZA62		Conveyor Belting	60.00 x 110.00	4	NO	\$5,665
AZZA63		Conveyor Belting	60.00 x 120.00	4	NO	\$6,180
AZZA64		Conveyor Belting	60.00 x 130.00	4	NO	\$6,694
AZZA65		Conveyor Belting	60.00 x 140.00	4	NO	\$7,210
AZZA66		Conveyor Belting	60.00 x 150.00	4	NO	\$7,725

(1) TT = includes tube, TL = no tube, NO = no tube



## **APPENDIX G TIRE LIFE AND TIRE WEAR FACTORS**

**APPENDIX G  
 TIRE LIFE AND TIRE WEAR FACTORS**

**SECTION I. TIRE WEAR FACTORS**

The tire wear factors used in this pamphlet are listed in appendix D. The “useful life” of a new tire is the product of Condition Factors (CF) from I through V, the Wheel Position Factor (WPF), the Grade Factor (GF) (for Drive Tires only) and the Miscellaneous Condition (MC). These factors provide a percentage reduction to the maximum tire life. See chapter 2 for tire cost methodology.

Condition Factors, Wheel Position Factors, Grade Factor, and Miscellaneous Condition are derived from the Caterpillar Performance Handbook.

The factors shown below are examples specifically for a rear dump wagon.

<u>Condition Factors (CF):</u>	<u>Average</u>	<u>Severe</u>
I. Maintenance	0.981	0.763
II. Speed	0.872	0.763
III. Curves	0.981	0.872
IV. Surface Condition	0.981	0.763
V. Loads	1.090	0.709
 <b>CF Product of the factors (I x II x III x IV x V)</b>	 <b>0.897</b>	 <b>0.275</b>
 <b>VI. <u>Wheel Position Factors (WPF):</u></b>		
WPF-FT Front Tire (FT)	0.981	0.981
WPF-DTR Drive Tire (DT) - Rear Dump	0.818	0.709
WPF-TT Trailing Tire (TT)	1.090	1.090
 <b>VII. Grade Factor (GF) (Drive Tires Only)</b>	 0.981	 0.763
 <b>VIII. Miscellaneous Condition (MC)</b>	 1.090	 0.981

**APPENDIX G  
 TIRE LIFE AND TIRE WEAR FACTORS (Continued)**

**SECTION I. TIRE WEAR FACTORS (Continued)**

**Example: Final Tire Wear Factors for Wagon, Rear Dump  
 (See Appendix D, Category W15)**

	<u>Average</u>	<u>Severe</u>
Front Tire - Average = (CF = 0.897)(WPF-FT = 0.981)(MC = 1.090)	0.96	
Front Tire - Severe = (CF = 0.275)(WPF-FT = 0.981)(MC = 0.927)		0.60
Drive Tire - Average = (CF = 0.897)(WPF-DTR = 0.763)(GF = 0.981)(MC = 1.090)	0.78	
Drive Tire - Severe = (CF = 0.275)(WPF-DTR = 0.732)(GF = 0.763)(MC = 0.927)		0.15
Trailing Tire - Average = (CF = 0.897)(WPF-TT = 1.090)(MC = 1.090)	1.07	
Trailing Tire - Severe = (CF = 0.275)(WPF-TT = 1.090)(MC = 0.927)		0.29

**SECTION II. MAXIMUM TIRE LIFE**

Maximum tire life is used in the formula to determine tire wear cost and is located in Appendix F by type of tire.

## **APPENDIX H MANUFACTURER LIST**

## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

---

A1	- ALLIED-GATOR, INC.
A2	- ASV INC.
A3	- AMERICAN PILEDRIVING EQUIPMENT, INC.
A4	- ATLAS COPCO WAGNER INC.
AA	- AMERICAN AUGERS, INC.
AB	- ALLMAND BROTHERS INC.
AC	- ACE ENTERPRISES
AD	- ACKER DRILL COMPANY INC.
AE	- AEROIL PRODUCTS COMPANY, INC.
AF	- AIRPLACO EQUIPMENT CO., INC.
AG	- ARROW-MASTER, INC.
AH	- AUTO CRANE CO.
AI	- AMIDA INDUSTRIES, INC.
AJ	- ALLEN ENGINEERING CORP.
AK	- TYLER EQUIPMENT CO.
AL	- ALLENTOWN EQUIPMENT
AM	- AMERICAN CRANE CORPORATION
AN	- ATLANTIC
AO	- ALKOTA CLEANING SYSTEMS, INC.
AP	- PECCO AND WOLFF TOWER CRANES
AQ	- AQUATICS UNLIMITED
AR	- AMERICAN ROAD MACHINERY, INC.
AS	- ATLAS COPCO COSTRUCTION TOOLS INC.
AT	- ANDERSON MAVOR INC.
AU	- ALLIED CONSTRUCTION PRODUCTS
AV	- ALIVA LTD.
AW	- AIRMAN (HOKUETSU INDUSTRIES CO. LTD.)
AX	- AMERICAN COMPACTION EQUIPMENT, INC.
AY	- KOMLINE-SANDERSON ENGINEERING CO.
AZ	- ALLIS-CHALMERS CORP.
BA	- BADGER EQUIPMENT CO.
BB	- BASCO

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## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

---

BC	- BOCK ENGINEERED PRODUCTS, INC.
BD	- BRODERSON MANUFACTURING CORPORATION
BE	- INGERSOLL RAND MATERIAL HANDLING
BF	- BENFORD
BG	- BARBER-GREENE COMPANY
BI	- BOR-IT MANUFACTURING COMPANY INC.
BJ	- BURKEEN MANUFACTURING CO.
BK	- BLAW KNOX CONSTRUCTION EQUIPMENT CORP.
BL	- US FILTER/BLASTRAC
BM	- BROCE MANUFACTURING COMPANY
BN	- BANDIT INDUSTRIES, INC.
BO	- COMPACTION AMERICA
BQ	- BELL EQUIPMENT NORTH AMERICA INC .
BR	- BROOKVILLE MINING EQUIPMENT CORP.
BS	- BALDERSON, INC.
BT	- BREAKER TECHNOLOGY INC.
BU	- BUSH HOG
BW	- BOWIE INDUSTRIES, INC.
BX	- BIL-JAX, INC.
C1	- COYOTE LOADER SALES, INC.
C2	- CARELIFT EQUIPMENT
C3	- TIME CONDOR CORPORATION
C4	- CATERPILLAR LIFT TRUCKS,
CA	- CATERPILLAR INC. ( MACHINE DIVISION)
CB	- CONSOLIDATED BALING MACHINE COMPANY, INC
CC	- CEMEN TECH
CD	- CDS GROUP
CE	- ATHEY PRODUCTS CORPORATION
CF	- CGR COMPACTING
CG	- CHEMGROUT, INC.
CH	- CHAMPION ROAD MACHINERY - SUPERPAC CO.
CI	- CHIPMORE MANUFACTURING CO., INC.

## APPENDIX H MANUFACTURER LIST

---

<b>CODE</b>	<b>MANUFACTURER</b>
CJ	- COLD JET
CK	- CHICAGO PNEUMATIC TOOL CO.
CL	- CON-E-CO
CM	- CLEMCO INDUSTRIES CORPORATION
CN	- CEMEN TECH, INC.
CO	- BOMAG AMERICAS
CP	- CRISAFULLI PUMP
CQ	- CUSHION CUT, INC.
CR	- CAMLEVER
CS	- CASE CORPORATION
CT	- CLEVELAND TRENCHER
CU	- CUSCO INDUSTRIES
CV	- CONMACO, INC.
CW	- CMI CORPORATION - BID-WELL DIVISION
CX	- CMC (CONSTRUCTION MACHINERY COMPANY)
CY	- CENTRIC
CZ	- CLYDE IRON WORKS
DA	- ELCO INTERNATIONAL INC.
DD	- DELTA DREDGE & PUMP CORP.
DE	- DEMOLITION TECHNOLOGIES
DF	- DURA FLOAT
DG	- DAINONG HEAVY INDUSTRIES, INC.
DH	- DAEWOO HEAVY INDUSTRIES LTD.
DI	- DICKSON INDUSTRIES INC.
DJ	- CATERPILLAR/DJB
DL	- PILECO, INC.
DO	- DOSCO CORPORATION
DR	- DRESSER MINING EQUIPMENT
DS	- DREDGING SUPPLY COMPANY (DSC)
DT	- DRILTECH, INC.
DW	- DITCH WITCH(The Charles Machine Works)
DY	- DYNAPAC DIVISION - SVEDALA INDUSTRIES

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## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

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EA	- EAGER BEAVER
EC	- ELGIN SWEEPER COMPANY
ED	- EQUIPMENT DEVELOPMENT CO., INC. (EDCO)
EI	- EIMCO JARVIS CLARK
EJ	- CEDARAPIDS INC., A TEREX COMPANY
EL	- ELLICOTT MACHINE CORPORATION
EM	- EXCEL MACHINERY LTD.
EP	- ENVIRO-PAK
ES	- ESCO CORPORATION
ET	- E. D. ETNYRE & CO.
EU	- EUCLID INDUSTRIES, INC.
EX	- EXCEL INDUSTRIES, INC.
EZ	- E-Z DRILL, INC.
FC	- FERMEC NORTH AMERICA LTD., A TEREX CO.
FE	- FELKER
FG	- FINN CORPORATION
FH	- FRUEHAUF TRAILER CORPORAITON
FI	- FIATALLIS
FK	- FRANKLIN TREEFARMER
FL	- FLETCHER MINING EQUIPMENT
FN	- NEW HOLLAND NORTH AMERICA, INC.
FO	- FORD MOTOR COMPANY
FR	- FERGUSON MANUFACTURING & EQUIPMENT
FS	- FIVE STAR MANUFACTURING CO/ELGIN SWEEPER
FU	- FURUKAWA CO.,LTD.
GA	- GRADALL COMPANY
GB	- GAR-BRO MANUFACTURING COMPANY
GC	- GEHL COMPANY
GD	- GARDNER-DENVER INDUSTRIAL MACHINES
GE	- GENSCO AMERICA CO. LTD.
GF	- GRIFFIN DEWATERING CORP.
GH	- GEITH INC.



## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

---

GI	- GALION DIVISION
GJ	- GENIE INDUSTRIES
GL	- GARLOCK EQUIPMENT CO.
GM	- GMC AND CHEVROLET
GN	- GALION DUMP BODIES, INC.
GO	- GOMACO CORPORATION
GR	- GORMAN-RUPP COMPANY
GT	- GILCREST EQUIPMENT COMPANY
GV	- GROVE CRANES
GW	- GROVE MANLIFT
HA	- HAZCO SERVICES, INC.
HB	- HAWCO MANUFACTURING COMPANY, LLC
HC	- HAMM COMPACTORS, INC.
HD	- HYDRAULIC POWER SYSTEMS, INC.
HE	- HENDRIX MANUFACTURING COMPANY, INC.
HF	- HYDRA-MAC INTERNATIONAL, INC.
HH	- ESG MANUFACTURING H&H PUMP & DREDGE
HI	- HITACHI CONSTRUCTION MACHINERY
HM	- H&M VIBRO, INC.
HN	- HINO DIESEL TRUCKS (U.S.A.) INC.
HO	- HOMELITE, INC. (DEERE & COMPANY)
HP	- COMPACTION AMERICA
HQ	- HYPAC COMPACTION EQUIPMENT
HR	- HYDROCAL INC.
HU	- HYUNDAI CONSTRUCTION EQUIPMENT
HW	- HEWITT-ROBINS
HY	- HYSTER CO.
HZ	- HOFFCO-COMET
IA	- INGERSOLL RAND ROTARY-REC COMPRESSOR DIV
IB	- INGERSOLL RAND ROTARY DRILL DIV
IC	- INTERNATIONAL CONSTRUCTION EQUIPMENT, INC
ID	- KOMATSU DRESSER

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## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

---

IE	- IDEAL MANUFACTURING, INC.
IF	- INGERSOLL RAND PORTABLE COMPRESSOR DIV
IG	- INGRAM MANUFACTURING CO.
IH	- NAVISTAR INTERNATIONAL TRANSPORTATION
IM	- INNOVATIVE MATERIAL SYSTEMS, INC. (IMS)
IN	- INGERSOLL RAND CO.
IP	- INGERSOLL RAND ROAD MACHINERY DIV
IR	- INGERSOLL RAND ROCK DRILL DIV
IS	- INSLEY DIVISION
IT	- NAVISTAR INTERNATIONAL CORPORATION
JC	- JCB INC.
JD	- DEERE & COMPANY
JE	- JCL EQUIPMENT CO.
JL	- JLG INDUSTRIES, INC.
JM	- JEFFREY MINING MACHINERY DIVISION
JO	- C. S. JOHNSON COMPANY
JR	- JRB COMPANY INC.
JS	- JOHNSTON SWEEPER COMPANY
JU	- ATI-Bell
KA	- KAWASAKI LOADERS, INC.
KB	- KOLBERG - PIONEER, INC
KC	- KOBELCO AMERICA INC.
KD	- K-D MANITOU, INC.
KE	- KENWORTH TRUCK COMPANY
KF	- KNAPHEIDE MANUFACTURING CO.
KH	- KOHLER COMPANY
KI	- KLEIN PRODUCTS, INC.
KK	- KEENE ENGINEERING INC.
KL	- KOLMAN / ATHEY DIV.
KM	- Komatsu America International Company
KN	- KENT DEMOLITION TOOLS
KO	- KOEHRING CRANES, INC.

## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

---

KP	- KOCH-WATER
KR	- KORI CORPORATION
KU	- KUBOTA TRACTOR CORPORATION
KW	- KERSHAW MFG., CO.
KZ	- KEIZER TECHNOLOGIES AMERICAS, INC
LA	- LAYTON MANUFACTURING COMPANY
LB	- LINK-BELT CONSTRUCTION EQUIPMENT CO.
LC	- LINCOLN ELECTRIC COMPANY
LD	- LEE-BOY
LE	- LELY PACIFIC, INC.
LG	- LITTLE GIANT CRANE & SHOVEL INC.
LH	- MORROW EQUIPMENT COMPANY, LLC
LI	- LINK-BELT CONSTRUCTION EQUIPMENT COMPANY
LK	- LIFTKING INDUSTRIES, INC.
LL	- OMNIQUIP, LULL
LN	- LONDON MACHINERY INC.
LO	- LORAIN CRANES DIVISION
LS	- LAKE SHORE MINING EQUIPMENT INC.
LU	- LABOUNTY MANUFACTURING,
LY	- BOART LONGYEAR COMPANY
LZ	- LIEBHERR CONSTRUCTION EQUIPMENT CO
M1	- MANITEX - MANITOWOC BOOM TRUCKS GROUP
M2	- MAULDIN - CALDER BROTHERS CORP.
M3	- MAYCO PUMP - MULTIQUIP INC.
M4	- MITCHELL INDUSTRIAL TIRE COMPANY (MITCO)
MA	- MANITOWOC ENGINEERING CO.
MB	- M-B COMPANIES, INC.
MC	- VME NORTH AMERICA
MD	- MDI/YUTANI
ME	- MELROE COMPANY/BOBCAT
MF	- MF INDUSTRIAL
MG	- McMASTER-CARR

## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

---

MH - MITSUBISHI FUSO TRUCK OF AMERICA

---

MI - MITSUBISHI CONSTRUCTION EQUIP.

---

MJ - MILLER SPREADER CO.

---

MK - MKT MANUFACTURING, INC.

---

ML - ITT MARLOW PUMPS

---

MM - MACO-MUEDON

---

MN - MAC CORPORATION

---

MO - MORGEN MANUFACTURING CO.

---

MP - MIDLAND MACHINERY CO

---

MQ - MORBARK, INC.

---

MR - FOREMOST MOBILE DRILLING COMPANY, INC.

---

MS - MUSTANG UNITS COMPANY

---

MT - MACK TRUCKS, INC.

---

MU - MULTIQIP, INC.

---

MV - MAYVILLE ENGINEERING CO., INC.

---

MW - M-B-W, INC.

---

MX - MAXON INDUSTRIES

---

MY - MIDLAND MANUFACTURING INC.

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MZ - MARINE INLAND FABRICATORS

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NA - NAGANO - LELY CORP.

---

NB - NASCO EQUIPMENT CO. INC.

---

NC - NATIONAL CRANE CORPORATION

---

NE - NEAL MANUFACTURING COMPANY, INC

---

NI - NIFTYLIFT INC. - USA

---

NL - NLB CORPORATION

---

NO - NORTHWEST ENGINEERING COMPANY

---

NP - NPK CONSTRUCTION EQUIPMENT

---

OE - OLIN ENGINEERING, INC.

---

OK - O & K ORENSTEIN & KOPPEL INC.

---

OL - OLYMPYK CHAIN SAWS

---

ON - ONAN CORPORATION

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PA - PALFINGER INC.

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## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

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PB	-	PETTIBONE MICHIGAN LLC
PC	-	GETMAN BROTHERS MFG. COMPANY
PE	-	PETERBILT MOTORS COMPANY
PH	-	P & H
PI	-	PIQUA ENGINEERING
PL	-	PRO-LINE / ANVIL ATTACHMENTS
PN	-	PEMBERTON, INC.
PO	-	PROGRESSIVE DEVELOPMENT INC.
PP	-	PACIFIC RUBBER
PR	-	USFILTER PERRIN PRODUCTS
PS	-	POWER CURBERS, INC.
PT	-	PATENT CONSTRUCTION SYSTEMS
PU	-	PUTZMEISTER INC.
PW	-	POWERSCREEN INTERNATIONAL DISTRIBUTN LTD
PZ	-	PACIFIC RUBBER
RA	-	METSO MINERALS
RC	-	ROSS COMPANY
RD	-	REEDRILL, INC.
RE	-	NORSTAR PRODUCTS INTERNATIONAL, INC.
RI	-	REYNOLDS INTERNATIONAL, L.P.
RK	-	RAPID MIX
RM	-	ROME PLOW CO.
RN	-	ALLIED SYSTEMS COMPANY (RANGER)
RO	-	ROBBINS COMPANY
RQ	-	REED MANUFACTURING
RR	-	RAMMER - GR COSTRUTTORI - SANDVIK
RS	-	ROSCO, A LeeBoy COMPANY
RT	-	ROADTEC
RX	-	RAMMAX MACHINERY CO.
S1	-	STANLEY HYDRAULIC TOOLS
S2	-	SCHRAMM, INC
S3	-	CHAMPION ROAD MACHINERY - SUPERPAC CO.

## APPENDIX H MANUFACTURER LIST

CODE	MANUFACTURER
S4	- SUPERIOR INDUSTRIES, AN ASTEC COMPANY
S5	- SOMAT WASTE REDUCTION TECHNOLOGY
S6	- SUPERIOR TIRE & RUBBER CORP.
SA	- SAUERMAN
SB	- SCAT TRAK - OMNIQUIP - TEXTRON INC.
SC	- SCHWING AMERICA INC.
SD	- SIOUX STEAM CLEANER CORPORATION
SE	- SEALMASTER, INC.
SF	- SECO CORPORATION
SG	- STONE CONSTRUCTION EQUIPMENT, INC.
SH	- SHRED-TECH LIMITED
SI	- SAKAI AMERICA, INC.
SJ	- SKYJACK, INC.
SK	- LTV ENERGY PRODUCTS (SKAGIT)
SL	- SHUTTLELIFT, INC.
SM	- SEAARK MARINE
SN	- STEPHENS MANUFACTURING CO., INC.
SO	- SOUTHWEST CONSTRUCTION EQUIPMENT CO.
SP	- SPRAGUE AND HENWOOD
SQ	- SCHAEFF INC.
SR	- SULLAIR CORPORATION
SS	- SAMSUNG CONSTRUCTION EQUIPMENT AMERICA
ST	- STOW MANUFACTURING, INC.
SU	- SULLIVAN INDUSTRIES, INC.
SV	- SOMERO ENTERPRISES, INC.
SW	- SNORKEL
SX	- SELICK EQUIPMENT LIMITED
SY	- SKY TRAK - OMNIQUIP - TEXTRON INC.
SZ	- STRATO-LIFT INTERNATIONAL CORP.
TA	- TAMPO MANUFACTURING CO., INC.
TB	- TERRAMITE CONSTRUCTION EQUIPMENT
TC	- TCM

## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

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TD	- TADANO AMERICA CORPORATION
TE	- TEREX CORPORATION
TF	- THOMAS EQUIPMENT LTD.
TG	- TIMBCO HYDRAULICS, INC.
TH	- TEEMARK CORPORATION
TI	- TIMBERJACK, A JOHN DEERE COMPANY
TJ	- TRAMAC
TK	- TAKEUCHI MFG. (U.S.), LTD
TL	- BREAKER TECHNOLOGY, INC. (AN ASTEC CO.)
TM	- TESMEC USA, INC.
TO	- TORO
TR	- TEREX MINING
TS	- TELSMITH INC.
TT	- TRAIL KING INDUSTRIES, INC.
TU	- TITAN INTERNATIONAL, INC.
TV	- TRAVERSE LIFT CO.
UE	- UNDERGROUND EQUIPMENT & SUPPLY
UL	- UNIVERSAL ENGINEERING - SVEDALA - METSO
UN	- UNIT RIG
UP	- UPRIGHT INC.
VA	- VOEST-ALPINE
VB	- VIBROMAX AMERICA INC.
VE	- VERMEER MANUFACTURING CO.
VI	- VINCE HAGAN COMPANY
VO	- VOLVO CONSTRUCTION EQUIPMENT GROUP
VP	- VOGELE AMERICA - PRO-PAV DIV.
VS	- VALLEY SLURRY SEAL / MACROPAVER DIVISION
VT	- VALMET - PARTEK FOREST LLC
VU	- VULCAN FOUNDATION EQUIPMENT, INC
WA	- HAULPAK DIVISION
WB	- WEBER MASCHINENTECHNIK GMBH
WC	- WACKER CORPORATION

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## APPENDIX H MANUFACTURER LIST

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**CODE MANUFACTURER**

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WD - WALDON, INC.

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WE - WEATHERFORD U.S. INC.

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WF - WATSON INC.

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WG - ATLAS COPCO WAGNER

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WH - WIGGINS LIFT CO., INC.

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WI - WILLMAR EQUIPMENT COMPANY

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WL - WALKER MANUFACTURING CO., INC.

---

WN - WAIN-ROY, INC.

---

WO - WACO SCAFFOLDING & EQUIPMENT

---

WR - WARNER FRUEHAUF TRAILER CO., INC.

---

WS - WHITEMAN CONSPRAY, INC.

---

WT - WIRTGEN AMERICAN, INC.

---

XX - NO SPECIFIC MANUFACTURER

---

YA - YANMAR DIESEL AMERICA CORP.

---

YB - ADVANCED ENVIRONMENTAL SOLUTIONS

---

ZZ - GENERIC EQUIPMENT

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## **APPENDIX I FEDERAL COST-OF-MONEY RATE**

**APPENDIX I**  
**FEDERAL COST-OF-MONEY RATE**  
*(Renegotiation or Prompt Payment Rate)*

<b>EFFECTIVE MONTHS</b>	<b>EFFECTIVE DATE</b>	<b>RATE</b>
JULY - DECEMBER	7/1/1992	7.000%
JANUARY - JUNE	1/1/1993	6.500%
JULY - DECEMBER	7/1/1993	5.625%
JANUARY - JUNE	1/1/1994	5.500%
JULY - DECEMBER	7/1/1994	7.000%
JANUARY - JUNE	1/1/1995	8.125%
JULY - DECEMBER	7/1/1995	6.375%
JANUARY - JUNE	1/1/1996	5.875%
JULY - DECEMBER	7/1/1996	7.000%
JANUARY - JUNE	1/1/1997	6.375%
JULY - DECEMBER	7/1/1997	6.750%
JANUARY - JUNE	1/1/1998	6.250%
JULY - DECEMBER	7/1/1998	6.000%
JANUARY - JUNE	1/1/1999	5.000%
JULY - DECEMBER	7/1/1999	6.500%
JANUARY - JUNE	1/1/2000	6.750%
JULY - DECEMBER	7/1/2000	7.250%
JANUARY - JUNE	1/1/2001	6.375%
JULY - DECEMBER	7/1/2001	5.875%
JANUARY - JUNE	1/1/2002	5.500%
JULY - DECEMBER	7/1/2002	5.250%
JANUARY - JUNE	1/1/2003	4.250%
JULY - DECEMBER	7/1/2003	3.125%
JANUARY - JUNE	1/1/2004	4.000%
JULY - DECEMBER	7/1/2004	4.000%
JANUARY - JUNE	1/1/2005	4.000%
JULY - DECEMBER	7/1/2005	4.500%
JANUARY - JUNE	1/1/2006	5.125%
JULY - DECEMBER	7/1/2006	5.750%
JANUARY - JUNE	1/1/2007	5.250%

## **APPENDIX J EQUIPMENT ACCESSORIES**

**APPENDIX J  
 EQUIPMENT ACCESSORIES**

The following accessories are listed by category (CAT), subcategory (SUB), and description (including features required for safety). The accessories have been included with the major equipment listed in this pamphlet when they are not included with the basic cost and are offered by the manufacturer.

<b>CAT SUB</b>	<b>DESCRIPTION</b>
<b>C85.10</b>	<b>CRANES, DRAGLINE AND CLAMSHELL, CRAWLER MOUNTED</b> Power load lowering Independent swing and travel Third drum Torque converter [machines 1 1/2 cubic yard (cy) or larger] Approximately one-half maximum boom length Counterweight (standard) Fire extinguisher 5-B:C Swing and reverse signal (backup) alarm Boom angle indicator and a load-indicating device Drum rotation indicators Anti-two block (upper limit) devices Manufacturers' mandatory accessories
<b>C85.20</b>	<b>CRANES, LIFTING, CRAWLER MOUNTED</b> Power load lowering Independent swing and travel Third drum Torque converter (machines 25 tons or larger) One-half maximum boom length (machines less than 60 tons) Maximum boom length at 360 degree rating (machines larger than 60 tons) Counterweight (standard) Fire extinguisher 5-B:C Swing and reverse signal (backup) alarm Boom angle indicator and a load-indicating device Drum rotation indicators Anti-two block (upper limit) devices Manufacturers' mandatory accessories Hook block on machines larger than 100 tons
<b>C90.01</b>	<b>TRUCK CRANES - LESS THAN 25 TONS</b> Power load lowering Third drum Mechanical outriggers with screw jacks Maximum boom length at 360 degrees rating
<b>C90.01</b>	<b>TRUCK CRANES - LESS THAN 25 TONS (Continued)</b>

**APPENDIX J  
 EQUIPMENT ACCESSORIES**

<b>CAT SUB</b>	<b>DESCRIPTION</b>
	Counterweight (standard) Fire extinguisher 5-B:C Swing and reverse signal (backup) alarm Boom angle indicator and a load-indicating device Drum rotation indicators Anti-two block (upper limit) devices Manufacturers mandatory accessories
<b>C90.02</b>	<b>TRUCK CRANE - 25 TONS AND LARGER</b>
<b>C90.03</b>	Power load lowering
<b>C90.04</b>	Third drum Hydraulic outriggers with screw jacks Torque converter when available (upper only) Maximum boom length at 360 degrees rating Counterweight (standard) Fire extinguisher 5-B:C Reverse signal (backup) alarm Boom angle indicator and a load-indicating device Drum rotation indicators Anti-two block (upper limit) devices Hook block on machines larger than 100 tons
<b>G15</b>	<b>GRADER</b> Rollover protective structures (ROPS) with enclosed cab Ripper/scarifier, rear mounted Front wheel lean Power circle Hydraulic shift and tilt moldboard End bits Standard work lights Fire extinguisher 5-B:C Reverse signal (backup) alarm
<b>H25</b>	<b>EXCAVATORS, HYDRAULIC</b>
<b>H30</b>	Backhoe bucket (standard) Backhoe stick (medium length) Backhoe boom (one piece) Backhoe bucket linkage (with cylinder) Guards Counterweight Standard work lights Reverse signal (backup) alarm

**APPENDIX J  
 EQUIPMENT ACCESSORIES**

<b>CAT SUB</b>	<b>DESCRIPTION</b>
	ROPS Fire extinguisher 5-B:C
<b>H35</b>	<b>HYDRAULIC SHOVELS - CRAWLER MOUNTED</b> Torque converter (machines 1 1/2 cy or larger) Counterweight Reverse signal (backup) alarm ROPS Fire extinguisher 5-B:C
<b>L30</b>	<b>LOADERS, BELT (CONVEYOR BELTS)</b> Power unit Head pulley clutch and backstop Belt cleaner and belt installing equipment King pin attachments
<b>L35</b> <b>L40</b>	<b>LOADERS, 1 1/2 cy AND LARGER</b> Blower fan Guard, power train Automatic bucket positioner Standard counterweight <u>Machines less than 7 cy:</u> General purpose or excavating bucket with bolt on cutting edge and no teeth <u>Machines 7 cy or larger:</u> Rock bucket with bolt on cutting edge and teeth Standard work lights Reverse signal (backup) alarm ROPS Fire extinguisher 5-B:C
<b>S10</b> <b>S15</b> <b>S20</b>	<b>SCRAPERS</b> Control single lever Blower fan Standard work light Guards, power train Reverse signal (backup) alarm ROPS Fire extinguisher 5-B:C Supplemental steering
<b>T15</b>	<b>TRACTOR, CRAWLER</b> Hydraulic controls for ripper and blade

**APPENDIX J  
EQUIPMENT ACCESSORIES**

<b>CAT SUB</b>	<b>DESCRIPTION</b>
	Guards Blower fan Standard work lights Hook, front pull Track grousers (severe service for units over 200 hp) Counterweights where required Reverse signal (backup) alarm ROPS Universal blade
<b>T20</b>	<b>TRACTOR, WHEEL</b> Hydraulic controls for ripper and blade Guards Blower fan Standard work lights Blade Fire extinguisher 5-B:C Counterweights when required
<b>T25</b>	<b>TRACTOR, AGRICULTURAL</b> Independent power take off (PTO) Standard work lights Fire extinguisher 5-B:C Counterweights when required 3-point hitch ROPS Hydraulic system with controls
<b>T55</b>	<b>TRUCKS, OFF-HIGHWAY</b> No spin differential Tachograph Engine and transmission guards Body liners

## **APPENDIX K ACRONYMS**



## APPENDIX K

### ACRONYMS

AVF	average value factor
bhp	brake horsepower
CAT	category
CENWW	U.S. Army Corps of Engineers, Walla Walla District
CMR	cost of money rate
cwt	hundredweight
D	diesel
DC	discount code
DEPR	depreciation
DT	drive tire
E	electricity
EAF	economic adjustment factor
EK	economic key
EP	Engineer Pamphlet
ER	Engineer Regulation
FAR	Federal Acquisition Regulation
EFAR	Engineer Federal Acquisition Regulation
FCCM	facilities capital cost of money
FOG	filters, oil, and grease
FT	front tire
G	gas
G&A	general and administrative
gal	gallon
GCW	gross combined weight
GVW	gross vehicle weight
hp	horsepower
HPF	horsepower factor
hr	hour
ID No.	identification number
IGE	Independent Government Estimate
kW	kilowatt
LAF	labor adjustment factor
lbs	pounds
LIFE	Chapter 1 economic life (probably should take this out)
N	number of years
PDF	portable document format
PTO	power take off
RCF	repair cost factor
RF	repair factor
ROPS	Rollover protective structures
RPR	repairs
SLV	salvage value

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SUB	subcategory
TCI	tire cost index
TEV	total equipment value
TT	trailing tire
WHPY	working hours per year
wk	week
WLS	water, lube, and supplies
yr	year

**APPENDIX L GROUND ENGAGING COMPONENT COSTS INCLUDED  
IN REPAIRS (RCF)**

## APPENDIX L

### Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY								Blade cutting edges, wear plates, hard facing, and end plates		Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
SUB	DESCRIPTION	EK	C	DC	LIFE	SLV							
B15 0.00	BROOMS, STREET SWEEPERS & FLUSHERS	95	A	B	8,000	0.10		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.80
B25 0.00	BUCKETS, CLAMSHELL	15	A	B	8,000	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
B25 0.00	BUCKETS, CLAMSHELL	15	S	B	6,500	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
B35 0.00	BUCKETS, DRAGLINE	1						<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B35 0.10	LIGHT WEIGHT	15	A	B	8,000	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
B35 0.10	LIGHT WEIGHT	15	S	B	6,500	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
B35 0.20	MEDIUM WEIGHT	15	A	B	9,000	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
B35 0.20	MEDIUM WEIGHT	15	S	B	7,000	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
B35 0.30	HEAVY WEIGHT	15	A	B	10,000	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
B35 0.30	HEAVY WEIGHT	15	S	B	8,000	0.10		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
G15 0.00	GRADERS, MOTOR	35	A	B	14,500	0.25		<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.75
G15 0.00	GRADERS, MOTOR	35	S	B	13,500	0.25		<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.85
H25 0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED	1						<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
H25 0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	A	B	8,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
H25 0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	S	B	7,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
H25 0.11	OVER 12,500 LBS THRU 40,000 LBS	65	A	B	8,500	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
H25 0.11	OVER 12,500 LBS THRU 40,000 LBS	65	S	B	7,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.85
H25 0.12	OVER 40,000 LBS THRU 100,000 LBS	65	A	B	12,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
H25 0.12	OVER 40,000 LBS THRU 100,000 LBS	65	S	B	10,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.95
H25 0.13	OVER 100,000 LBS THRU 160,000 LBS	65	A	B	16,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.00
H25 0.13	OVER 100,000 LBS THRU 160,000 LBS	65	S	B	13,500	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.10
H25 0.14	OVER 160,000 LBS	65	A	B	19,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.10
H25 0.14	OVER 160,000 LBS	65	S	B	15,000	0.25		<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.25
H30 0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED	1						<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

EK=Economic Key (Appendix E)  
LIFE=Economic Life

C=Operating Conditions (A=average, S=severe)  
SLV=Salvage Value

DC=Discount Code (B=basic 7.5%, S=special 15%)  
RCF=Repair Cost Factor

Ground Engaging Component (GEC) is defined as those wear items on the machine that come in direct contact with in situ ground to perform the machines primary function. For machines with blades, GEC can include: cutting edges, wear plates, hard facing, and end plates. For machines with buckets, GEC can include: bucket teeth, cutting edges, side cutters, and wear plates. For machines with rippers, GEC can include: tips and shank protectors. Equipment Specific Wear items include those items of wear that are specific to that equipment. Not included in the Repairs and must be added as needed are: drill/bits, drill/steel, roadheader/rock breaking bits, air tools/breaker points/jackhammer points, concrete coring drill bits, and other wear items that are not shown here.

## APPENDIX L

### Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY								Blade cutting edges, wear plates, hard facing, and end plates	Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
SUB	DESCRIPTION	EK	C	DC	LIFE	SLV						
H30 0.01	0 THRU 1.0 CY	65	A	B	8,000	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.50
H30 0.01	0 THRU 1.0 CY	65	S	B	6,500	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.55
H30 0.02	OVER 1.0 CY	65	A	B	10,000	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.60
H30 0.02	OVER 1.0 CY	65	S	B	8,000	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.65
H35 0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED	1						<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
H35 0.11	DIESEL, 0 CY THRU 5.0 CY	65	A	B	14,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.00
H35 0.11	DIESEL, 0 CY THRU 5.0 CY	65	S	B	12,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.10
H35 0.12	DIESEL, OVER 5.0 CY	65	A	B	16,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.20
H35 0.12	DIESEL, OVER 5.0 CY	65	S	B	14,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.30
H35 0.21	ELECTRIC, OVER 2.5 CY	65	A	B	18,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
H35 0.21	ELECTRIC, OVER 2.5 CY	65	S	B	16,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.90
L35 0.00	LOADERS, FRONT END, CRAWLER TYPE	40	A	B	10,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.10
L35 0.00	LOADERS, FRONT END, CRAWLER TYPE	40	S	B	8,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.25
L40 0.00	LOADERS, FRONT END, WHEEL TYPE	1						<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
L40 0.11	ARTICULATED, 0 THRU 225 HP	45	A	B	9,250	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
L40 0.11	ARTICULATED, 0 THRU 225 HP	45	S	B	8,750	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
L40 0.12	ARTICULATED, OVER 225 HP	45	A	B	13,500	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.70
L40 0.12	ARTICULATED, OVER 225 HP	45	S	B	12,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.75
L40 0.20	SKID STEER	45	A	B	8,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
L40 0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	A	B	10,000	0.25		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.85
L40 0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	S	B	9,250	0.25		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.90
L40 0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	A	B	12,000	0.15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.85
L40 0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	S	B	10,000	0.15		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.90
L45 0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	A	B	8,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.35

EK=Economic Key (Appendix E)  
 LIFE=Economic Life

C=Operating Conditions (A=average, S=severe)  
 SLV=Salvage Value

DC=Discount Code (B=basic 7.5%, S=special 15%)  
 RCF=Repair Cost Factor

Ground Engaging Component (GEC) is defined as those wear items on the machine that come in direct contact with in situ ground to perform the machines primary function. For machines with blades, GEC can include: cutting edges, wear plates, hard facing, and end plates. For machines with buckets, GEC can include: bucket teeth, cutting edges, side cutters, and wear plates. For machines with rippers, GEC can include: tips and shank protectors. Equipment Specific Wear items include those items of wear that are specific to that equipment. Not included in the Repairs and must be added as needed are: drill/bits, drill/steel, roadheader/rock breaking bits, air tools/breaker points/jackhammer points, concrete coring drill bits, and other wear items that are not shown here.

## APPENDIX L

### Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY								Blade cutting edges, wear plates, hard facing, and end plates	Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
SUB	DESCRIPTION	EK	C	DC	LIFE	SLV						
L45 0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	S	B	6,000	0.20		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.40
L50 0.00	LOADERS / BACKHOE, WHEEL TYPE	45	A	B	10,000	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.80
L50 0.00	LOADERS / BACKHOE, WHEEL TYPE	45	S	B	6,000	0.25		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.85
L60 0.00	LOG SKIDDERS	75	A	B	10,000	0.15		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.70
L60 0.00	LOG SKIDDERS	75	S	B	8,000	0.15		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.80
P35 0.00	PIPELAYERS	70	A	B	14,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.95
P35 0.00	PIPELAYERS	70	S	B	11,500	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1.10
R30 0.00	ROLLERS, STATIC, SELF-PROPELLED	1						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
R30 0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	55	A	B	12,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.80
S10 0.00	SCRAPERS, ELEVATING	1						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
S10 0.01	0 THRU 200 HP	60	A	B	10,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.90
S10 0.01	0 THRU 200 HP	60	S	B	8,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1.00
S10 0.02	OVER 200 HP	60	A	B	13,000	0.25		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.95
S10 0.02	OVER 200 HP	60	S	B	11,500	0.25		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1.00
S15 0.00	SCRAPERS, CONVENTIONAL	60	A	B	15,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.80
S15 0.00	SCRAPERS, CONVENTIONAL	60	S	B	12,500	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.85
S20 0.00	SCRAPERS, TANDEM POWERED	60	A	B	15,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.85
S20 0.00	SCRAPERS, TANDEM POWERED	60	S	B	13,500	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.90
S25 0.00	SCRAPERS, TRACTOR DRAWN	60	A	B	12,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.70
S25 0.00	SCRAPERS, TRACTOR DRAWN	60	S	B	10,000	0.20		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.75
T15 0.00	TRACTORS, CRAWLER (DOZER) (includes blade)	1						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
T15 0.01	0 THRU 225 HP	70	A	B	10,000	0.30		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.10
T15 0.01	0 THRU 225 HP	70	S	B	8,000	0.30		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.25
T15 0.02	226 HP THRU 425 HP	70	A	B	12,500	0.25		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.20

EK=Economic Key (Appendix E)  
LIFE=Economic Life

C=Operating Conditions (A=average, S=severe)  
SLV=Salvage Value

DC=Discount Code (B=basic 7.5%, S=special 15%)  
RCF=Repair Cost Factor

Ground Engaging Component (GEC) is defined as those wear items on the machine that come in direct contact with in situ ground to perform the machines primary function. For machines with blades, GEC can include: cutting edges, wear plates, hard facing, and end plates. For machines with buckets, GEC can include: bucket teeth, cutting edges, side cutters, and wear plates. For machines with rippers, GEC can include: tips and shank protectors. Equipment Specific Wear items include those items of wear that are specific to that equipment. Not included in the Repairs and must be added as needed are: drill/bits, drill/steel, roadheader/rock breaking bits, air tools/breaker points/jackhammer points, concrete coring drill bits, and other wear items that are not shown here.

## APPENDIX L

### Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY								Blade cutting edges, wear plates, hard facing, and end plates	Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
SUB	DESCRIPTION	EK	C	DC	LIFE	SLV						
T15 0.02	226 HP THRU 425 HP	70	S	B	10,500	0.25		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.25
T15 0.03	OVER 425 HP	70	A	B	15,000	0.20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.20
T15 0.03	OVER 425 HP	70	S	B	12,500	0.20		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.35
T20 0.00	TRACTORS, WHEEL TYPE (DOZER)	75	A	B	14,000	0.15		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.60
T20 0.00	TRACTORS, WHEEL TYPE (DOZER)	75	S	B	13,000	0.15		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.65

EK=Economic Key (Appendix E)  
 LIFE=Economic Life

C=Operating Conditions (A=average, S=severe)  
 SLV=Salvage Value

DC=Discount Code (B=basic 7.5%, S=special 15%)  
 RCF=Repair Cost Factor

Ground Engaging Component (GEC) is defined as those wear items on the machine that come in direct contact with in situ ground to perform the machines primary function. For machines with blades, GEC can include: cutting edges, wear plates, hard facing, and end plates. For machines with buckets, GEC can include: bucket teeth, cutting edges, side cutters, and wear plates. For machines with rippers, GEC can include: tips and shank protectors. Equipment Specific Wear items include those items of wear that are specific to that equipment. Not included in the Repairs and must be added as needed are: drill/bits, drill/steel, roadheader/rock breaking bits, air tools/breaker points/jackhammer points, concrete coring drill bits, and other wear items that are not shown here.

**APPENDIX M GUIDE FOR ESTIMATING DRILL STEEL AND  
DRILL BIT COSTS**



# Guide for Estimating Drill Steel and Drill Bit Costs

Prepared for the  
US Army Corps of Engineers, Walla Walla District  
By Western Mine Engineering, Inc in cooperation  
with Aventurine Engineering, Inc. 2003

October 2003

**Ingersoll-Rand LM100A - percussion**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	1.75		2.00		2.50	
Granite	1,506	- 2,037	1,449	- 1,960	1,359	- 1,838
Basalt	674	- 912	649	- 878	608	- 823
Gabbro	1,002	- 1,356	964	- 1,305	904	- 1,223
Shale	1,427	- 1,931	1,373	- 1,858	1,287	- 1,742
Sandstone	524	- 709	504	- 682	473	- 639
Siltstone	3,779	- 5,112	3,636	- 4,919	3,409	- 4,612
Conglomer	292	- 395	281	- 380	263	- 356
Breccia	2,181	- 2,951	2,099	- 2,839	1,968	- 2,662
Limestone	1,835	- 2,483	1,766	- 2,389	1,656	- 2,240
Schist	3,414	- 4,619	3,285	- 4,444	3,080	- 4,167
Slate	1,710	- 2,313	1,645	- 2,226	1,542	- 2,087
Gneiss	735	- 995	707	- 957	663	- 897

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	1.75		2.00		2.50	
Granite	2,720	- 3,680	2,617	- 3,541	2,454	- 3,320
Basalt	1,417	- 1,918	1,364	- 1,845	1,279	- 1,730
Gabbro	1,600	- 2,164	1,539	- 2,083	1,443	- 1,953
Shale	2,855	- 3,863	2,747	- 3,717	2,576	- 3,485
Sandstone	2,978	- 4,029	2,865	- 3,877	2,687	- 3,635
Siltstone	2,964	- 4,011	2,852	- 3,859	2,674	- 3,618
Conglomer	3,425	- 4,633	3,295	- 4,458	3,090	- 4,180
Breccia	4,739	- 6,412	4,560	- 6,170	4,276	- 5,785
Limestone	3,931	- 5,318	3,782	- 5,117	3,546	- 4,798
Schist	4,828	- 6,532	4,646	- 6,285	4,356	- 5,893
Slate	3,133	- 4,239	3,015	- 4,079	2,827	- 3,824
Gneiss	2,849	- 3,855	2,742	- 3,709	2,571	- 3,478

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	1.75		2.00		2.50	
Granite	98	- 132	83	- 113	64	- 86
Basalt	57	- 77	48	- 65	37	- 50
Gabbro	63	- 85	53	- 72	41	- 55
Shale	102	- 138	87	- 117	66	- 90
Sandstone	105	- 142	90	- 121	69	- 93
Siltstone	105	- 142	89	- 121	68	- 92
Conglomer	118	- 160	101	- 136	77	- 104
Breccia	155	- 210	132	- 179	101	- 137
Limestone	133	- 180	113	- 153	86	- 117
Schist	158	- 213	134	- 181	103	- 139
Slate	110	- 149	94	- 127	72	- 97
Gneiss	102	- 137	86	- 117	66	- 89

3,000 lbs.      1.75 inch      2.00 inch      2.50 inch  
1,247 psi      955 psi      611 psi

**Ingersoll-Rand LM100A - percussion**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	1.75		2.00		2.50	
Granite	\$0.04	- \$0.03	\$0.05	- \$0.03	\$0.07	- \$0.05
Basalt	\$0.09	- \$0.07	\$0.10	- \$0.08	\$0.15	- \$0.11
Gabbro	\$0.06	- \$0.04	\$0.07	- \$0.05	\$0.10	- \$0.08
Shale	\$0.04	- \$0.03	\$0.05	- \$0.04	\$0.07	- \$0.05
Sandstone	\$0.11	- \$0.08	\$0.13	- \$0.10	\$0.20	- \$0.15
Siltstone	\$0.02	- \$0.01	\$0.02	- \$0.01	\$0.03	- \$0.02
Conglomer	\$0.21	- \$0.15	\$0.24	- \$0.17	\$0.36	- \$0.26
Breccia	\$0.03	- \$0.02	\$0.03	- \$0.02	\$0.05	- \$0.04
Limestone	\$0.03	- \$0.02	\$0.04	- \$0.03	\$0.06	- \$0.04
Schist	\$0.02	- \$0.01	\$0.02	- \$0.01	\$0.03	- \$0.02
Slate	\$0.04	- \$0.03	\$0.04	- \$0.03	\$0.06	- \$0.05
Gneiss	\$0.08	- \$0.06	\$0.09	- \$0.07	\$0.14	- \$0.10

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	1.75		2.00		2.50	
Granite	\$0.056	- \$0.042	\$0.058	- \$0.043	\$0.062	- \$0.046
Basalt	\$0.108	- \$0.080	\$0.112	- \$0.083	\$0.120	- \$0.088
Gabbro	\$0.096	- \$0.071	\$0.099	- \$0.073	\$0.106	- \$0.078
Shale	\$0.054	- \$0.040	\$0.056	- \$0.041	\$0.059	- \$0.044
Sandstone	\$0.051	- \$0.038	\$0.053	- \$0.039	\$0.057	- \$0.042
Siltstone	\$0.052	- \$0.038	\$0.054	- \$0.040	\$0.057	- \$0.042
Conglomer	\$0.045	- \$0.033	\$0.046	- \$0.034	\$0.050	- \$0.037
Breccia	\$0.032	- \$0.024	\$0.034	- \$0.025	\$0.036	- \$0.026
Limestone	\$0.039	- \$0.029	\$0.040	- \$0.030	\$0.043	- \$0.032
Schist	\$0.032	- \$0.023	\$0.033	- \$0.024	\$0.035	- \$0.026
Slate	\$0.049	- \$0.036	\$0.051	- \$0.038	\$0.054	- \$0.040
Gneiss	\$0.054	- \$0.040	\$0.056	- \$0.041	\$0.060	- \$0.044

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

3,000 lbs.      1.75 inch      2.00 inch      2.50  
1,247 psi      955 psi      611 psi

**Ingersoll-Rand ECM350 - percussion**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	2.50		3.00		4.00	
Granite	1,203	- 1,628	1,115	- 1,509	1,050	- 1,421
Basalt	539	- 729	499	- 676	470	- 636
Gabbro	801	- 1,083	742	- 1,004	699	- 946
Shale	1,140	- 1,542	1,057	- 1,430	995	- 1,347
Sandstone	418	- 566	388	- 525	365	- 494
Siltstone	3,019	- 4,084	2,798	- 3,786	2,636	- 3,566
Conglomer	233	- 315	216	- 292	204	- 275
Breccia	1,742	- 2,357	1,615	- 2,186	1,521	- 2,058
Limestone	1,466	- 1,983	1,359	- 1,839	1,280	- 1,732
Schist	2,727	- 3,690	2,528	- 3,421	2,381	- 3,222
Slate	1,366	- 1,848	1,266	- 1,713	1,193	- 1,613
Gneiss	587	- 795	544	- 737	513	- 694

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	2.50		3.00		4.00	
Granite	2,173	- 2,940	2,014	- 2,725	1,897	- 2,567
Basalt	1,132	- 1,532	1,050	- 1,420	989	- 1,338
Gabbro	1,278	- 1,729	1,185	- 1,603	1,116	- 1,510
Shale	2,281	- 3,086	2,115	- 2,861	1,992	- 2,695
Sandstone	2,379	- 3,218	2,205	- 2,984	2,077	- 2,810
Siltstone	2,368	- 3,204	2,195	- 2,970	2,068	- 2,798
Conglomer	2,736	- 3,701	2,536	- 3,431	2,389	- 3,232
Breccia	3,786	- 5,122	3,510	- 4,749	3,306	- 4,473
Limestone	3,140	- 4,249	2,911	- 3,939	2,742	- 3,710
Schist	3,857	- 5,218	3,576	- 4,838	3,368	- 4,556
Slate	2,503	- 3,386	2,320	- 3,139	2,185	- 2,957
Gneiss	2,276	- 3,080	2,110	- 2,855	1,987	- 2,689

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	2.50		3.00		4.00	
Granite	87	- 117	63	- 85	49	- 67
Basalt	50	- 68	37	- 50	29	- 39
Gabbro	56	- 75	41	- 55	32	- 43
Shale	90	- 122	66	- 89	51	- 69
Sandstone	93	- 126	68	- 92	53	- 72
Siltstone	93	- 126	68	- 92	53	- 71
Conglomer	105	- 142	76	- 103	60	- 81
Breccia	137	- 186	100	- 136	78	- 106
Limestone	118	- 159	86	- 116	67	- 90
Schist	140	- 189	102	- 138	79	- 107
Slate	97	- 132	71	- 96	55	- 75
Gneiss	90	- 122	66	- 89	51	- 69

6,000 lbs.      2.50 inch      3.25 inch      4.00 inch  
1,222 psi      723 psi      477 psi

**Ingersoll-Rand ECM350 - percussion**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	2.50		3.00		4.00	
Granite	\$0.08	- \$0.06	\$0.11	- \$0.08	\$0.20	- \$0.15
Basalt	\$0.17	- \$0.13	\$0.25	- \$0.19	\$0.46	- \$0.34
Gabbro	\$0.12	- \$0.09	\$0.17	- \$0.13	\$0.31	- \$0.23
Shale	\$0.08	- \$0.06	\$0.12	- \$0.09	\$0.21	- \$0.16
Sandstone	\$0.22	- \$0.17	\$0.32	- \$0.24	\$0.59	- \$0.43
Siltstone	\$0.03	- \$0.02	\$0.05	- \$0.03	\$0.08	- \$0.06
Conglomer	\$0.40	- \$0.30	\$0.58	- \$0.43	\$1.05	- \$0.78
Breccia	\$0.05	- \$0.04	\$0.08	- \$0.06	\$0.14	- \$0.10
Limestone	\$0.06	- \$0.05	\$0.09	- \$0.07	\$0.17	- \$0.12
Schist	\$0.03	- \$0.03	\$0.05	- \$0.04	\$0.09	- \$0.07
Slate	\$0.07	- \$0.05	\$0.10	- \$0.07	\$0.18	- \$0.13
Gneiss	\$0.16	- \$0.12	\$0.23	- \$0.17	\$0.42	- \$0.31

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	2.50		3.00		4.00	
Granite	\$0.092	- \$0.068	\$0.099	- \$0.073	\$0.105	- \$0.078
Basalt	\$0.176	- \$0.130	\$0.190	- \$0.140	\$0.201	- \$0.149
Gabbro	\$0.156	- \$0.115	\$0.168	- \$0.124	\$0.178	- \$0.132
Shale	\$0.087	- \$0.064	\$0.094	- \$0.070	\$0.100	- \$0.074
Sandstone	\$0.084	- \$0.062	\$0.090	- \$0.067	\$0.096	- \$0.071
Siltstone	\$0.084	- \$0.062	\$0.091	- \$0.067	\$0.096	- \$0.071
Conglomer	\$0.073	- \$0.054	\$0.078	- \$0.058	\$0.083	- \$0.062
Breccia	\$0.053	- \$0.039	\$0.057	- \$0.042	\$0.060	- \$0.044
Limestone	\$0.063	- \$0.047	\$0.068	- \$0.051	\$0.073	- \$0.054
Schist	\$0.052	- \$0.038	\$0.056	- \$0.041	\$0.059	- \$0.044
Slate	\$0.080	- \$0.059	\$0.086	- \$0.063	\$0.091	- \$0.067
Gneiss	\$0.087	- \$0.065	\$0.094	- \$0.070	\$0.100	- \$0.074

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

6,000 lbs.      2.50 inch      3.00 inch      4.00  
1,222 psi      849 psi      477

**Ingersoll-Rand ECM590 - percussion**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	2.50		3.50		4.50	
Granite	1,168	- 1,580	1,060	- 1,434	986	- 1,334
Basalt	523	- 708	475	- 642	441	- 597
Gabbro	778	- 1,052	706	- 955	656	- 888
Shale	1,107	- 1,498	1,005	- 1,359	934	- 1,264
Sandstone	406	- 550	369	- 499	343	- 464
Siltstone	2,931	- 3,966	2,660	- 3,599	2,474	- 3,347
Conglomer	226	- 306	205	- 278	191	- 259
Breccia	1,692	- 2,289	1,535	- 2,077	1,428	- 1,932
Limestone	1,424	- 1,926	1,292	- 1,748	1,201	- 1,626
Schist	2,648	- 3,583	2,403	- 3,251	2,235	- 3,024
Slate	1,326	- 1,794	1,203	- 1,628	1,119	- 1,514
Gneiss	570	- 771	517	- 700	481	- 651

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	2.50		3.50		4.50	
Granite	2,110	- 2,855	1,915	- 2,590	1,781	- 2,409
Basalt	1,100	- 1,488	998	- 1,350	928	- 1,255
Gabbro	1,241	- 1,679	1,126	- 1,524	1,047	- 1,417
Shale	2,215	- 2,997	2,010	- 2,719	1,869	- 2,529
Sandstone	2,310	- 3,125	2,096	- 2,836	1,950	- 2,638
Siltstone	2,300	- 3,111	2,087	- 2,823	1,941	- 2,626
Conglomer	2,657	- 3,594	2,411	- 3,262	2,242	- 3,033
Breccia	3,676	- 4,974	3,336	- 4,514	3,103	- 4,198
Limestone	3,049	- 4,125	2,767	- 3,744	2,573	- 3,482
Schist	3,745	- 5,067	3,399	- 4,598	3,161	- 4,277
Slate	2,430	- 3,288	2,205	- 2,984	2,051	- 2,775
Gneiss	2,210	- 2,990	2,006	- 2,714	1,865	- 2,524

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	2.50		3.50		4.50	
Granite	99	- 134	66	- 89	49	- 66
Basalt	57	- 78	38	- 52	28	- 38
Gabbro	63	- 86	42	- 57	31	- 42
Shale	103	- 139	69	- 93	51	- 69
Sandstone	107	- 144	71	- 96	52	- 71
Siltstone	106	- 144	71	- 96	52	- 71
Conglomer	120	- 162	80	- 108	59	- 80
Breccia	157	- 212	105	- 142	77	- 105
Limestone	134	- 182	90	- 121	66	- 90
Schist	159	- 216	106	- 144	79	- 106
Slate	111	- 150	74	- 100	55	- 74
Gneiss	103	- 139	68	- 93	51	- 68

5,500 lbs.      2.50 inch      3.50 inch      4.50 inch  
1,120 psi      572 psi      346 psi

**Ingersoll-Rand ECM590 - percussion**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	2.50		3.50		4.50	
Granite	\$0.08	- \$0.06	\$0.14	- \$0.11	\$0.26	- \$0.19
Basalt	\$0.18	- \$0.13	\$0.32	- \$0.24	\$0.58	- \$0.43
Gabbro	\$0.12	- \$0.09	\$0.22	- \$0.16	\$0.39	- \$0.29
Shale	\$0.08	- \$0.06	\$0.15	- \$0.11	\$0.28	- \$0.20
Sandstone	\$0.23	- \$0.17	\$0.41	- \$0.31	\$0.75	- \$0.56
Siltstone	\$0.03	- \$0.02	\$0.06	- \$0.04	\$0.10	- \$0.08
Conglomer	\$0.42	- \$0.31	\$0.74	- \$0.55	\$1.35	- \$1.00
Breccia	\$0.06	- \$0.04	\$0.10	- \$0.07	\$0.18	- \$0.13
Limestone	\$0.07	- \$0.05	\$0.12	- \$0.09	\$0.21	- \$0.16
Schist	\$0.04	- \$0.03	\$0.06	- \$0.05	\$0.12	- \$0.09
Slate	\$0.07	- \$0.05	\$0.13	- \$0.09	\$0.23	- \$0.17
Gneiss	\$0.16	- \$0.12	\$0.30	- \$0.22	\$0.54	- \$0.40

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	2.50		3.50		4.50	
Granite	\$0.094	- \$0.070	\$0.104	- \$0.077	\$0.112	- \$0.083
Basalt	\$0.181	- \$0.134	\$0.199	- \$0.147	\$0.214	- \$0.159
Gabbro	\$0.160	- \$0.119	\$0.177	- \$0.131	\$0.190	- \$0.140
Shale	\$0.090	- \$0.066	\$0.099	- \$0.073	\$0.106	- \$0.079
Sandstone	\$0.086	- \$0.064	\$0.095	- \$0.070	\$0.102	- \$0.075
Siltstone	\$0.087	- \$0.064	\$0.095	- \$0.070	\$0.103	- \$0.076
Conglomer	\$0.075	- \$0.055	\$0.083	- \$0.061	\$0.089	- \$0.066
Breccia	\$0.054	- \$0.040	\$0.060	- \$0.044	\$0.064	- \$0.047
Limestone	\$0.065	- \$0.048	\$0.072	- \$0.053	\$0.077	- \$0.057
Schist	\$0.053	- \$0.039	\$0.059	- \$0.043	\$0.063	- \$0.047
Slate	\$0.082	- \$0.061	\$0.090	- \$0.067	\$0.097	- \$0.072
Gneiss	\$0.090	- \$0.067	\$0.099	- \$0.073	\$0.107	- \$0.079

(Based pm 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

5,500 lbs.      2.50 inch      3.50 inch      4.50  
1,120 psi      572 psi      346 psi

**Ingersoll-Rand ECM720 - percussion**

Bit Life (feet/bit)	Hole Diameter (inches)					
	4.00		4.50		5.00	
Granite	2,305	- 3,118	2,228	- 3,014	2,161	- 2,924
Basalt	1,032	- 1,396	997	- 1,349	967	- 1,309
Gabbro	1,534	- 2,075	1,483	- 2,006	1,438	- 1,946
Shale	2,184	- 2,955	2,111	- 2,856	2,048	- 2,771
Sandstone	802	- 1,085	775	- 1,048	752	- 1,017
Siltstone	5,783	- 7,824	5,589	- 7,562	5,422	- 7,336
Conglomer	447	- 604	432	- 584	419	- 567
Breccia	3,338	- 4,516	3,227	- 4,365	3,130	- 4,235
Limestone	2,809	- 3,800	2,715	- 3,673	2,633	- 3,563
Schist	5,225	- 7,069	5,050	- 6,833	4,899	- 6,628
Slate	2,617	- 3,540	2,529	- 3,422	2,453	- 3,319
Gneiss	1,125	- 1,522	1,087	- 1,471	1,055	- 1,427

Steel Life (feet/rod)	Hole Diameter (inches)					
	4.00		4.50		5.00	
Granite	4,163	- 5,632	4,024	- 5,444	3,903	- 5,281
Basalt	2,169	- 2,935	2,097	- 2,837	2,034	- 2,752
Gabbro	2,448	- 3,313	2,367	- 3,202	2,296	- 3,106
Shale	4,370	- 5,912	4,224	- 5,715	4,097	- 5,544
Sandstone	4,557	- 6,166	4,405	- 5,960	4,273	- 5,781
Siltstone	4,537	- 6,138	4,385	- 5,933	4,254	- 5,755
Conglomer	5,241	- 7,091	5,066	- 6,854	4,914	- 6,649
Breccia	7,253	- 9,813	7,011	- 9,485	6,801	- 9,201
Limestone	6,016	- 8,139	5,815	- 7,867	5,641	- 7,631
Schist	7,389	- 9,997	7,142	- 9,663	6,928	- 9,374
Slate	4,795	- 6,487	4,635	- 6,270	4,496	- 6,083
Gneiss	4,361	- 5,900	4,215	- 5,702	4,089	- 5,532

Penetration Rate (feet/hour)	Hole Diameter (inches)					
	4.00		4.50		5.00	
Granite	100	- 135	87	- 117	76	- 103
Basalt	58	- 78	50	- 68	44	- 60
Gabbro	64	- 87	56	- 75	49	- 66
Shale	104	- 141	90	- 122	79	- 107
Sandstone	108	- 146	93	- 126	82	- 111
Siltstone	107	- 145	93	- 126	82	- 111
Conglomer	121	- 163	105	- 142	92	- 125
Breccia	158	- 214	137	- 186	121	- 164
Limestone	136	- 183	118	- 159	104	- 140
Schist	161	- 218	140	- 189	123	- 166
Slate	112	- 152	97	- 132	86	- 116
Gneiss	104	- 140	90	- 122	79	- 107

20,000 lbs.      4 inch      5 inch      5 inch  
1,592 psi      1,258 psi      1,019 psi

**Ingersoll-Rand ECM720 - percussion**

Bit Cost (\$/foot)	Hole Diameter (inches)					
	4.00		4.50		5.00	
Granite	\$0.09	- \$0.07	\$0.12	- \$0.09	\$0.14	- \$0.11
Basalt	\$0.21	- \$0.15	\$0.26	- \$0.19	\$0.32	- \$0.24
Gabbro	\$0.14	- \$0.10	\$0.17	- \$0.13	\$0.21	- \$0.16
Shale	\$0.10	- \$0.07	\$0.12	- \$0.09	\$0.15	- \$0.11
Sandstone	\$0.27	- \$0.20	\$0.33	- \$0.25	\$0.41	- \$0.30
Siltstone	\$0.04	- \$0.03	\$0.05	- \$0.03	\$0.06	- \$0.04
Conglomer	\$0.48	- \$0.35	\$0.60	- \$0.44	\$0.74	- \$0.55
Breccia	\$0.06	- \$0.05	\$0.08	- \$0.06	\$0.10	- \$0.07
Limestone	\$0.08	- \$0.06	\$0.10	- \$0.07	\$0.12	- \$0.09
Schist	\$0.04	- \$0.03	\$0.05	- \$0.04	\$0.06	- \$0.05
Slate	\$0.08	- \$0.06	\$0.10	- \$0.08	\$0.13	- \$0.09
Gneiss	\$0.19	- \$0.14	\$0.24	- \$0.18	\$0.29	- \$0.22

Steel Cost (\$/foot per rod)	Hole Diameter (inches)					
	4.00		4.50		5.00	
Granite	\$0.067	- \$0.050	\$0.070	- \$0.051	\$0.072	- \$0.053
Basalt	\$0.129	- \$0.095	\$0.134	- \$0.099	\$0.138	- \$0.102
Gabbro	\$0.114	- \$0.085	\$0.118	- \$0.087	\$0.122	- \$0.090
Shale	\$0.064	- \$0.047	\$0.066	- \$0.049	\$0.068	- \$0.051
Sandstone	\$0.061	- \$0.045	\$0.064	- \$0.047	\$0.066	- \$0.048
Siltstone	\$0.062	- \$0.046	\$0.064	- \$0.047	\$0.066	- \$0.049
Conglomer	\$0.053	- \$0.039	\$0.055	- \$0.041	\$0.057	- \$0.042
Breccia	\$0.039	- \$0.029	\$0.040	- \$0.030	\$0.041	- \$0.030
Limestone	\$0.047	- \$0.034	\$0.048	- \$0.036	\$0.050	- \$0.037
Schist	\$0.038	- \$0.028	\$0.039	- \$0.029	\$0.040	- \$0.030
Slate	\$0.058	- \$0.043	\$0.060	- \$0.045	\$0.062	- \$0.046
Gneiss	\$0.064	- \$0.047	\$0.066	- \$0.049	\$0.068	- \$0.051

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

20,000 lbs.      4 inch      4.5 inch      5  
1,592 psi      1,258 psi      1,019

**Ingersoll-Rand DM25SP - DTH**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	3.50		5.00		6.50	
Granite	2,498	- 3,380	2,254	- 3,049	2,089	- 2,827
Basalt	1,118	- 1,513	1,009	- 1,365	935	- 1,266
Gabbro	1,663	- 2,250	1,500	- 2,030	1,391	- 1,882
Shale	2,367	- 3,203	2,136	- 2,890	1,980	- 2,679
Sandstone	869	- 1,176	784	- 1,061	727	- 983
Siltstone	6,268	- 8,481	5,655	- 7,651	5,243	- 7,093
Conglome	484	- 655	437	- 591	405	- 548
Breccia	3,618	- 4,896	3,265	- 4,417	3,026	- 4,095
Limestone	3,044	- 4,119	2,747	- 3,716	2,546	- 3,445
Schist	5,664	- 7,663	5,110	- 6,913	4,737	- 6,409
Slate	2,836	- 3,837	2,559	- 3,462	2,372	- 3,209
Gneiss	1,219	- 1,650	1,100	- 1,489	1,020	- 1,380

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	3.50		5.00		6.50	
Granite	28,996	- 39,229	26,159	- 35,392	24,252	- 32,811
Basalt	16,978	- 22,970	15,317	- 20,723	14,200	- 19,212
Gabbro	18,752	- 25,371	16,918	- 22,889	15,684	- 21,220
Shale	30,177	- 40,827	27,225	- 36,834	25,240	- 34,148
Sandstone	31,235	- 42,259	28,180	- 38,125	26,125	- 35,345
Siltstone	31,120	- 42,103	28,076	- 37,985	26,028	- 35,215
Conglome	35,035	- 47,400	31,608	- 42,764	29,303	- 39,645
Breccia	45,750	- 61,896	41,275	- 55,842	38,265	- 51,770
Limestone	39,235	- 53,082	35,397	- 47,890	32,816	- 44,398
Schist	46,452	- 62,847	41,908	- 56,699	38,852	- 52,565
Slate	32,566	- 44,060	29,381	- 39,750	27,238	- 36,852
Gneiss	30,123	- 40,755	27,177	- 36,768	25,195	- 34,087

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	3.50		5.00		6.50	
Granite	129	- 175	84	- 114	61	- 83
Basalt	75	- 102	49	- 66	36	- 48
Gabbro	83	- 113	54	- 73	39	- 53
Shale	135	- 182	88	- 119	64	- 87
Sandstone	140	- 189	91	- 123	66	- 90
Siltstone	139	- 188	90	- 122	66	- 89
Conglome	157	- 212	102	- 138	74	- 101
Breccia	205	- 278	134	- 181	98	- 132
Limestone	176	- 238	114	- 155	83	- 113
Schist	209	- 282	136	- 184	99	- 134
Slate	146	- 197	95	- 128	69	- 93
Gneiss	134	- 182	88	- 118	64	- 86

25,000 lbs.      3.50 inch      5.00 inch      6.50 inch  
2,598 psi      1,273 psi      753 psi

**Ingersoll-Rand DM25SP - DTH**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	3.50		5.00		6.50	
Granite	\$0.16	- \$0.12	\$0.24	- \$0.18	\$0.32	- \$0.24
Basalt	\$0.37	- \$0.27	\$0.55	- \$0.40	\$0.72	- \$0.53
Gabbro	\$0.25	- \$0.18	\$0.37	- \$0.27	\$0.49	- \$0.36
Shale	\$0.17	- \$0.13	\$0.26	- \$0.19	\$0.34	- \$0.25
Sandstone	\$0.47	- \$0.35	\$0.70	- \$0.52	\$0.93	- \$0.69
Siltstone	\$0.07	- \$0.05	\$0.10	- \$0.07	\$0.13	- \$0.10
Conglome	\$0.85	- \$0.63	\$1.26	- \$0.93	\$1.67	- \$1.23
Breccia	\$0.11	- \$0.08	\$0.17	- \$0.12	\$0.22	- \$0.16
Limestone	\$0.13	- \$0.10	\$0.20	- \$0.15	\$0.27	- \$0.20
Schist	\$0.07	- \$0.05	\$0.11	- \$0.08	\$0.14	- \$0.11
Slate	\$0.14	- \$0.11	\$0.21	- \$0.16	\$0.28	- \$0.21
Gneiss	\$0.34	- \$0.25	\$0.50	- \$0.37	\$0.66	- \$0.49

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	3.50		5.00		6.50	
Granite	\$0.009	- \$0.007	\$0.011	- \$0.008	\$0.024	- \$0.018
Basalt	\$0.016	- \$0.012	\$0.018	- \$0.014	\$0.041	- \$0.031
Gabbro	\$0.014	- \$0.011	\$0.017	- \$0.012	\$0.037	- \$0.028
Shale	\$0.009	- \$0.007	\$0.010	- \$0.008	\$0.023	- \$0.017
Sandstone	\$0.009	- \$0.006	\$0.010	- \$0.007	\$0.022	- \$0.017
Siltstone	\$0.009	- \$0.006	\$0.010	- \$0.007	\$0.023	- \$0.017
Conglome	\$0.008	- \$0.006	\$0.009	- \$0.007	\$0.020	- \$0.015
Breccia	\$0.006	- \$0.004	\$0.007	- \$0.005	\$0.015	- \$0.011
Limestone	\$0.007	- \$0.005	\$0.008	- \$0.006	\$0.018	- \$0.013
Schist	\$0.006	- \$0.004	\$0.007	- \$0.005	\$0.015	- \$0.011
Slate	\$0.008	- \$0.006	\$0.010	- \$0.007	\$0.022	- \$0.016
Gneiss	\$0.009	- \$0.007	\$0.010	- \$0.008	\$0.023	- \$0.017

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

25,000 lbs.      3.50 inch      5.00 inch      6.50 inch  
2,598 psi      1,273 psi      753 psi

**Ingersoll-Rand DM30 -DTH**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	5.50		6.00		6.50	
Granite	1,946	- 2,633	1,898	- 2,568	1,855	- 2,509
Basalt	871	- 1,179	850	- 1,150	830	- 1,124
Gabbro	1,296	- 1,753	1,263	- 1,709	1,235	- 1,670
Shale	1,845	- 2,496	1,799	- 2,434	1,758	- 2,378
Sandstone	677	- 916	660	- 893	645	- 873
Siltstone	4,884	- 6,608	4,763	- 6,444	4,654	- 6,297
Conglome	377	- 510	368	- 498	360	- 486
Breccia	2,819	- 3,814	2,749	- 3,720	2,687	- 3,635
Limestone	2,372	- 3,209	2,313	- 3,130	2,260	- 3,058
Schist	4,413	- 5,970	4,303	- 5,822	4,205	- 5,689
Slate	2,210	- 2,990	2,155	- 2,916	2,106	- 2,849
Gneiss	950	- 1,285	927	- 1,254	905	- 1,225

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	5.50		6.00		6.50	
Granite	26,110	- 35,326	25,463	- 34,450	24,881	- 33,663
Basalt	15,288	- 20,684	14,909	- 20,171	14,569	- 19,711
Gabbro	16,886	- 22,846	16,468	- 22,280	16,092	- 21,771
Shale	27,174	- 36,765	26,500	- 35,853	25,895	- 35,034
Sandstone	28,127	- 38,054	27,429	- 37,110	26,803	- 36,263
Siltstone	28,023	- 37,914	27,328	- 36,974	26,704	- 36,129
Conglome	31,549	- 42,684	30,766	- 41,625	30,064	- 40,675
Breccia	41,197	- 55,738	40,176	- 54,355	39,258	- 53,114
Limestone	35,331	- 47,800	34,455	- 46,615	33,668	- 45,551
Schist	41,830	- 56,593	40,792	- 55,190	39,861	- 53,929
Slate	29,326	- 39,676	28,599	- 38,692	27,945	- 37,809
Gneiss	27,126	- 36,700	26,453	- 35,790	25,849	- 34,972

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	5.50		6.00		6.50	
Granite	81	- 110	73	- 99	67	- 90
Basalt	47	- 64	43	- 58	39	- 52
Gabbro	52	- 71	47	- 64	43	- 58
Shale	85	- 115	76	- 103	69	- 94
Sandstone	88	- 119	79	- 107	72	- 97
Siltstone	87	- 118	79	- 107	72	- 97
Conglome	99	- 133	89	- 120	81	- 109
Breccia	129	- 175	116	- 158	106	- 143
Limestone	111	- 150	100	- 135	91	- 122
Schist	131	- 178	118	- 160	107	- 145
Slate	92	- 124	83	- 112	75	- 101
Gneiss	85	- 115	76	- 103	69	- 94

30,000 lbs.      5.50 inch      6.00 inch      6.50 inch  
1,263 psi      1,061 psi      904 psi

**Ingersoll-Rand DM30 -DTH**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	5.50		6.00		6.50	
Granite	\$0.30	- \$0.22	\$0.33	- \$0.25	\$0.36	- \$0.27
Basalt	\$0.66	- \$0.49	\$0.74	- \$0.55	\$0.81	- \$0.60
Gabbro	\$0.44	- \$0.33	\$0.50	- \$0.37	\$0.55	- \$0.40
Shale	\$0.31	- \$0.23	\$0.35	- \$0.26	\$0.38	- \$0.28
Sandstone	\$0.85	- \$0.63	\$0.95	- \$0.71	\$1.05	- \$0.77
Siltstone	\$0.12	- \$0.09	\$0.13	- \$0.10	\$0.15	- \$0.11
Conglome	\$1.52	- \$1.13	\$1.71	- \$1.27	\$1.88	- \$1.39
Breccia	\$0.20	- \$0.15	\$0.23	- \$0.17	\$0.25	- \$0.19
Limestone	\$0.24	- \$0.18	\$0.27	- \$0.20	\$0.30	- \$0.22
Schist	\$0.13	- \$0.10	\$0.15	- \$0.11	\$0.16	- \$0.12
Slate	\$0.26	- \$0.19	\$0.29	- \$0.22	\$0.32	- \$0.24
Gneiss	\$0.61	- \$0.45	\$0.68	- \$0.50	\$0.75	- \$0.55

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	5.50		6.00		6.50	
Granite	\$0.022	- \$0.017	\$0.023	- \$0.017	\$0.024	- \$0.017
Basalt	\$0.038	- \$0.028	\$0.039	- \$0.029	\$0.040	- \$0.030
Gabbro	\$0.035	- \$0.026	\$0.036	- \$0.026	\$0.036	- \$0.027
Shale	\$0.022	- \$0.016	\$0.022	- \$0.016	\$0.023	- \$0.017
Sandstone	\$0.021	- \$0.015	\$0.021	- \$0.016	\$0.022	- \$0.016
Siltstone	\$0.021	- \$0.015	\$0.021	- \$0.016	\$0.022	- \$0.016
Conglome	\$0.019	- \$0.014	\$0.019	- \$0.014	\$0.019	- \$0.014
Breccia	\$0.014	- \$0.011	\$0.015	- \$0.011	\$0.015	- \$0.011
Limestone	\$0.017	- \$0.012	\$0.017	- \$0.013	\$0.017	- \$0.013
Schist	\$0.014	- \$0.010	\$0.014	- \$0.011	\$0.015	- \$0.011
Slate	\$0.020	- \$0.015	\$0.020	- \$0.015	\$0.021	- \$0.015
Gneiss	\$0.022	- \$0.016	\$0.022	- \$0.016	\$0.023	- \$0.017

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

30,000 lbs.      5.50 inch      6.00 inch      6.50 inch  
1,263 psi      1,061 psi      904 psi

**Ingersoll-Rand DM45 -DTH**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	5.00		6.50		8.00	
Granite	2,580	- 3,490	2,392	- 3,236	2,253	- 3,048
Basalt	1,155	- 1,563	1,071	- 1,449	1,009	- 1,364
Gabbro	1,717	- 2,323	1,592	- 2,154	1,499	- 2,029
Shale	2,445	- 3,308	2,267	- 3,067	2,135	- 2,888
Sandstone	897	- 1,214	832	- 1,126	784	- 1,060
Siltstone	6,473	- 8,758	6,001	- 8,120	5,652	- 7,647
Conglomer	500	- 677	464	- 627	437	- 591
Breccia	3,737	- 5,056	3,464	- 4,687	3,263	- 4,414
Limestone	3,144	- 4,254	2,915	- 3,944	2,745	- 3,714
Schist	5,849	- 7,913	5,422	- 7,336	5,107	- 6,910
Slate	2,929	- 3,963	2,715	- 3,674	2,557	- 3,460
Gneiss	1,259	- 1,704	1,168	- 1,580	1,100	- 1,488

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	5.00		6.50		8.00	
Granite	28,482	- 38,534	26,405	- 35,724	24,869	- 33,646
Basalt	16,677	- 22,563	15,461	- 20,917	14,561	- 19,701
Gabbro	18,420	- 24,921	17,077	- 23,104	16,083	- 21,760
Shale	29,642	- 40,104	27,480	- 37,179	25,882	- 35,017
Sandstone	30,681	- 41,510	28,444	- 38,483	26,789	- 36,245
Siltstone	30,568	- 41,357	28,339	- 38,341	26,691	- 36,111
Conglomer	34,414	- 46,560	31,904	- 43,165	30,049	- 40,654
Breccia	44,939	- 60,799	41,662	- 56,366	39,238	- 53,087
Limestone	38,539	- 52,141	35,729	- 48,339	33,651	- 45,527
Schist	45,628	- 61,733	42,301	- 57,231	39,841	- 53,902
Slate	31,989	- 43,279	29,656	- 40,123	27,931	- 37,789
Gneiss	29,589	- 40,032	27,432	- 37,113	25,836	- 34,955

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	5.00		6.50		8.00	
Granite	109	- 148	80	- 108	62	- 84
Basalt	64	- 86	46	- 63	36	- 49
Gabbro	70	- 95	51	- 69	40	- 54
Shale	114	- 154	83	- 112	65	- 88
Sandstone	118	- 160	86	- 116	67	- 91
Siltstone	118	- 159	86	- 116	67	- 90
Conglomer	133	- 179	97	- 131	75	- 102
Breccia	174	- 235	127	- 171	99	- 134
Limestone	149	- 201	108	- 147	84	- 114
Schist	177	- 239	129	- 174	100	- 136
Slate	123	- 167	90	- 121	70	- 95
Gneiss	114	- 154	83	- 112	65	- 87

45,000 lbs.                      5.00 inch                      6.50 inch                      8.00 inch  
 2,292 psi                      1,356 psi                      895 psi

**Ingersoll-Rand DM45 -DTH**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	5.00		6.50		8.00	
Granite	\$0.21	- \$0.16	\$0.28	- \$0.21	\$0.47	- \$0.35
Basalt	\$0.48	- \$0.35	\$0.63	- \$0.47	\$1.04	- \$0.77
Gabbro	\$0.32	- \$0.24	\$0.42	- \$0.31	\$0.70	- \$0.52
Shale	\$0.22	- \$0.17	\$0.30	- \$0.22	\$0.49	- \$0.36
Sandstone	\$0.61	- \$0.45	\$0.81	- \$0.60	\$1.34	- \$0.99
Siltstone	\$0.08	- \$0.06	\$0.11	- \$0.08	\$0.19	- \$0.14
Conglomer	\$1.10	- \$0.81	\$1.46	- \$1.08	\$2.41	- \$1.78
Breccia	\$0.15	- \$0.11	\$0.19	- \$0.14	\$0.32	- \$0.24
Limestone	\$0.17	- \$0.13	\$0.23	- \$0.17	\$0.38	- \$0.28
Schist	\$0.09	- \$0.07	\$0.12	- \$0.09	\$0.21	- \$0.15
Slate	\$0.19	- \$0.14	\$0.25	- \$0.18	\$0.41	- \$0.30
Gneiss	\$0.44	- \$0.32	\$0.58	- \$0.43	\$0.96	- \$0.71

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	5.00		6.50		8.00	
Granite	\$0.021	- \$0.015	\$0.023	- \$0.017	\$0.029	- \$0.021
Basalt	\$0.035	- \$0.026	\$0.039	- \$0.029	\$0.049	- \$0.037
Gabbro	\$0.032	- \$0.024	\$0.036	- \$0.026	\$0.045	- \$0.033
Shale	\$0.020	- \$0.015	\$0.022	- \$0.016	\$0.028	- \$0.021
Sandstone	\$0.019	- \$0.014	\$0.021	- \$0.016	\$0.027	- \$0.020
Siltstone	\$0.019	- \$0.014	\$0.022	- \$0.016	\$0.027	- \$0.020
Conglomer	\$0.017	- \$0.013	\$0.019	- \$0.014	\$0.024	- \$0.018
Breccia	\$0.013	- \$0.010	\$0.015	- \$0.011	\$0.018	- \$0.014
Limestone	\$0.015	- \$0.011	\$0.017	- \$0.013	\$0.021	- \$0.016
Schist	\$0.013	- \$0.009	\$0.014	- \$0.011	\$0.018	- \$0.013
Slate	\$0.018	- \$0.014	\$0.021	- \$0.015	\$0.026	- \$0.019
Gneiss	\$0.020	- \$0.015	\$0.022	- \$0.016	\$0.028	- \$0.021

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

45,000 lbs.                      5.00 inch                      6.50 inch                      8.00  
 2,292 psi                      1,356 psi                      895



**Ingersoll-Rand DM M2 -DTH**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	8.88		10.00		11.875	
Granite	1,779	- 2,407	1,719	- 2,325	1,636	- 2,213
Basalt	796	- 1,078	770	- 1,041	732	- 991
Gabbro	1,184	- 1,602	1,144	- 1,548	1,089	- 1,473
Shale	1,686	- 2,281	1,629	- 2,204	1,550	- 2,097
Sandstone	619	- 837	598	- 809	569	- 770
Siltstone	4,464	- 6,039	4,313	- 5,835	4,104	- 5,553
Conglomer	345	- 467	333	- 451	317	- 429
Breccia	2,577	- 3,486	2,490	- 3,368	2,369	- 3,205
Limestone	2,168	- 2,933	2,095	- 2,834	1,993	- 2,697
Schist	4,033	- 5,457	3,897	- 5,272	3,708	- 5,017
Slate	2,020	- 2,733	1,951	- 2,640	1,857	- 2,512
Gneiss	868	- 1,175	839	- 1,135	798	- 1,080

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	8.88		10.00		11.875	
Granite	25,947	- 35,105	25,069	- 33,917	23,856	- 32,276
Basalt	15,193	- 20,555	14,679	- 19,859	13,968	- 18,898
Gabbro	16,781	- 22,704	16,213	- 21,935	15,428	- 20,874
Shale	27,004	- 36,535	26,090	- 35,298	24,828	- 33,590
Sandstone	27,951	- 37,817	27,005	- 36,536	25,698	- 34,768
Siltstone	27,848	- 37,677	26,905	- 36,401	25,604	- 34,640
Conglomer	31,352	- 42,417	30,290	- 40,981	28,825	- 38,998
Breccia	40,940	- 55,390	39,554	- 53,514	37,640	- 50,925
Limestone	35,110	- 47,502	33,921	- 45,894	32,280	- 43,673
Schist	41,569	- 56,240	40,161	- 54,336	38,218	- 51,707
Slate	29,143	- 39,428	28,156	- 38,093	26,794	- 36,250
Gneiss	26,957	- 36,471	26,044	- 35,236	24,784	- 33,531

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	8.88		10.00		11.875	
Granite	69	- 93	60	- 81	48	- 66
Basalt	40	- 54	35	- 47	28	- 38
Gabbro	44	- 60	38	- 52	31	- 42
Shale	72	- 97	62	- 84	50	- 68
Sandstone	74	- 100	64	- 87	52	- 71
Siltstone	74	- 100	64	- 87	52	- 70
Conglomer	83	- 113	72	- 98	59	- 79
Breccia	109	- 148	95	- 128	77	- 104
Limestone	94	- 127	81	- 110	66	- 89
Schist	111	- 150	96	- 130	78	- 106
Slate	77	- 105	67	- 91	55	- 74
Gneiss	72	- 97	62	- 84	50	- 68

75,000 lbs.                      8.88 inch                      10.00 inch                      11.88 inch  
1,212 psi                      955 psi                      677 psi

**Ingersoll-Rand DM M2 -DTH**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	8.88		10.00		11.875	
Granite	\$0.31	- \$0.23	\$0.39	- \$0.29	\$0.64	- \$0.48
Basalt	\$0.69	- \$0.51	\$0.88	- \$0.65	\$1.44	- \$1.06
Gabbro	\$0.46	- \$0.34	\$0.59	- \$0.44	\$0.97	- \$0.71
Shale	\$0.33	- \$0.24	\$0.41	- \$0.31	\$0.68	- \$0.50
Sandstone	\$0.89	- \$0.66	\$1.13	- \$0.83	\$1.85	- \$1.37
Siltstone	\$0.12	- \$0.09	\$0.16	- \$0.12	\$0.26	- \$0.19
Conglomer	\$1.60	- \$1.18	\$2.03	- \$1.50	\$3.32	- \$2.46
Breccia	\$0.21	- \$0.16	\$0.27	- \$0.20	\$0.44	- \$0.33
Limestone	\$0.25	- \$0.19	\$0.32	- \$0.24	\$0.53	- \$0.39
Schist	\$0.14	- \$0.10	\$0.17	- \$0.13	\$0.28	- \$0.21
Slate	\$0.27	- \$0.20	\$0.35	- \$0.26	\$0.57	- \$0.42
Gneiss	\$0.63	- \$0.47	\$0.80	- \$0.59	\$1.32	- \$0.97

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	8.88		10.00		11.875	
Granite	\$0.024	- \$0.017	\$0.029	- \$0.021	\$0.048	- \$0.035
Basalt	\$0.040	- \$0.030	\$0.049	- \$0.036	\$0.082	- \$0.060
Gabbro	\$0.036	- \$0.027	\$0.044	- \$0.033	\$0.074	- \$0.055
Shale	\$0.023	- \$0.017	\$0.028	- \$0.020	\$0.046	- \$0.034
Sandstone	\$0.022	- \$0.016	\$0.027	- \$0.020	\$0.044	- \$0.033
Siltstone	\$0.022	- \$0.016	\$0.027	- \$0.020	\$0.045	- \$0.033
Conglomer	\$0.019	- \$0.014	\$0.024	- \$0.018	\$0.040	- \$0.029
Breccia	\$0.015	- \$0.011	\$0.018	- \$0.013	\$0.030	- \$0.022
Limestone	\$0.017	- \$0.013	\$0.021	- \$0.016	\$0.035	- \$0.026
Schist	\$0.015	- \$0.011	\$0.018	- \$0.013	\$0.030	- \$0.022
Slate	\$0.021	- \$0.015	\$0.026	- \$0.019	\$0.043	- \$0.031
Gneiss	\$0.023	- \$0.017	\$0.028	- \$0.020	\$0.046	- \$0.034

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

75,000 lbs.                      8.88 inch                      10.00 inch                      11.88  
1,212 psi                      955 psi                      677

**Ingersoll-Rand DM25SP - Rotary**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	3.88		5.00		6.25	
Granite	3,585	- 4,851	3,364	- 4,552	3,182	- 4,305
Basalt	1,878	- 2,541	1,762	- 2,384	1,667	- 2,255
Gabbro	2,118	- 2,865	1,987	- 2,689	1,880	- 2,543
Shale	3,762	- 5,090	3,531	- 4,777	3,339	- 4,518
Sandstone	3,922	- 5,307	3,681	- 4,980	3,481	- 4,710
Siltstone	3,905	- 5,283	3,664	- 4,957	3,466	- 4,689
Conglomer	4,506	- 6,096	4,228	- 5,720	3,999	- 5,411
Breccia	6,220	- 8,415	5,836	- 7,896	5,520	- 7,468
Limestone	5,166	- 6,990	4,848	- 6,559	4,585	- 6,203
Schist	6,335	- 8,571	5,945	- 8,043	5,623	- 7,607
Slate	4,125	- 5,581	3,871	- 5,237	3,661	- 4,953
Gneiss	3,754	- 5,079	3,523	- 4,766	3,332	- 4,508

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	3.88		5.00		6.25	
Granite	44,519	- 60,232	41,775	- 56,519	39,512	- 53,457
Basalt	26,067	- 35,267	24,460	- 33,093	23,135	- 31,301
Gabbro	28,792	- 38,954	27,017	- 36,552	25,553	- 34,572
Shale	46,333	- 62,685	43,477	- 58,821	41,121	- 55,635
Sandstone	47,957	- 64,883	45,001	- 60,884	42,563	- 57,586
Siltstone	47,780	- 64,644	44,835	- 60,659	42,406	- 57,373
Conglomer	53,792	- 72,777	50,476	- 68,291	47,741	- 64,591
Breccia	70,243	- 95,034	65,913	- 89,176	62,342	- 84,345
Limestone	60,240	- 81,501	56,527	- 76,478	53,465	- 72,334
Schist	71,321	- 96,493	66,925	- 90,545	63,299	- 85,640
Slate	50,001	- 67,649	46,919	- 63,479	44,377	- 60,040
Gneiss	46,250	- 62,574	43,400	- 58,717	41,048	- 55,536

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	3.88		5.00		6.25	
Granite	57	- 77	34	- 46	22	- 29
Basalt	33	- 45	20	- 27	13	- 17
Gabbro	37	- 50	22	- 30	14	- 19
Shale	60	- 81	36	- 48	23	- 31
Sandstone	62	- 83	37	- 50	23	- 32
Siltstone	61	- 83	37	- 50	23	- 32
Conglomer	69	- 94	41	- 56	26	- 36
Breccia	91	- 123	54	- 73	34	- 47
Limestone	78	- 105	46	- 63	29	- 40
Schist	92	- 125	55	- 74	35	- 47
Slate	64	- 87	38	- 52	24	- 33
Gneiss	59	- 80	35	- 48	23	- 31

25,000 lbs.

3.88 inch  
2,120 psi

5.00 inch  
1,273 psi

6.25 inch  
815 psi

**Ingersoll-Rand DM25SP - Rotary**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	3.88		5.00		6.25	
Granite	\$0.28	- \$0.20	\$0.42	- \$0.31	\$0.60	- \$0.44
Basalt	\$0.53	- \$0.39	\$0.80	- \$0.59	\$1.14	- \$0.85
Gabbro	\$0.47	- \$0.35	\$0.71	- \$0.52	\$1.01	- \$0.75
Shale	\$0.26	- \$0.20	\$0.40	- \$0.29	\$0.57	- \$0.42
Sandstone	\$0.25	- \$0.19	\$0.38	- \$0.28	\$0.55	- \$0.40
Siltstone	\$0.25	- \$0.19	\$0.38	- \$0.28	\$0.55	- \$0.41
Conglomer	\$0.22	- \$0.16	\$0.33	- \$0.25	\$0.48	- \$0.35
Breccia	\$0.16	- \$0.12	\$0.24	- \$0.18	\$0.35	- \$0.26
Limestone	\$0.19	- \$0.14	\$0.29	- \$0.21	\$0.42	- \$0.31
Schist	\$0.16	- \$0.12	\$0.24	- \$0.17	\$0.34	- \$0.25
Slate	\$0.24	- \$0.18	\$0.36	- \$0.27	\$0.52	- \$0.38
Gneiss	\$0.26	- \$0.20	\$0.40	- \$0.30	\$0.57	- \$0.42

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	3.88		5.00		6.25	
Granite	\$0.006	- \$0.004	\$0.007	- \$0.005	\$0.015	- \$0.011
Basalt	\$0.010	- \$0.008	\$0.011	- \$0.008	\$0.025	- \$0.019
Gabbro	\$0.009	- \$0.007	\$0.010	- \$0.008	\$0.023	- \$0.017
Shale	\$0.006	- \$0.004	\$0.006	- \$0.005	\$0.014	- \$0.011
Sandstone	\$0.006	- \$0.004	\$0.006	- \$0.005	\$0.014	- \$0.010
Siltstone	\$0.006	- \$0.004	\$0.006	- \$0.005	\$0.014	- \$0.010
Conglomer	\$0.005	- \$0.004	\$0.006	- \$0.004	\$0.012	- \$0.009
Breccia	\$0.004	- \$0.003	\$0.004	- \$0.003	\$0.009	- \$0.007
Limestone	\$0.004	- \$0.003	\$0.005	- \$0.004	\$0.011	- \$0.008
Schist	\$0.004	- \$0.003	\$0.004	- \$0.003	\$0.009	- \$0.007
Slate	\$0.005	- \$0.004	\$0.006	- \$0.004	\$0.013	- \$0.010
Gneiss	\$0.006	- \$0.004	\$0.006	- \$0.005	\$0.014	- \$0.011

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

25,000 lbs.

3.88 inch  
2,120 psi

5.00 inch  
1,273 psi

6.25 inch  
815 psi

Ingersoll-Rand DM30 -Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)					
	5.50		6.00		6.75	
Granite	3,347	- 4,528	3,275	- 4,431	3,180	- 4,302
Basalt	1,753	- 2,372	1,716	- 2,321	1,666	- 2,254
Gabbro	1,977	- 2,675	1,934	- 2,617	1,878	- 2,541
Shale	3,512	- 4,752	3,437	- 4,649	3,337	- 4,515
Sandstone	3,661	- 4,954	3,583	- 4,847	3,479	- 4,707
Siltstone	3,645	- 4,931	3,567	- 4,826	3,463	- 4,686
Conglomer	4,206	- 5,690	4,116	- 5,568	3,996	- 5,407
Breccia	5,806	- 7,855	5,681	- 7,686	5,516	- 7,463
Limestone	4,822	- 6,524	4,719	- 6,384	4,582	- 6,199
Schist	5,913	- 8,000	5,786	- 7,829	5,619	- 7,602
Slate	3,851	- 5,210	3,768	- 5,098	3,659	- 4,950
Gneiss	3,504	- 4,741	3,429	- 4,639	3,330	- 4,505

Steel Life (feet/rod)

	Hole Diameter (inches)					
	5.50		6.00		6.75	
Granite	41,556	- 56,222	40,663	- 55,014	39,485	- 53,421
Basalt	24,332	- 32,920	23,809	- 32,212	23,119	- 31,279
Gabbro	26,875	- 36,360	26,298	- 35,579	25,536	- 34,549
Shale	43,248	- 58,513	42,319	- 57,255	41,093	- 55,597
Sandstone	44,765	- 60,564	43,803	- 59,263	42,534	- 57,546
Siltstone	44,600	- 60,341	43,642	- 59,045	42,377	- 57,334
Conglomer	50,211	- 67,932	49,132	- 66,473	47,709	- 64,547
Breccia	65,567	- 88,708	64,158	- 86,802	62,299	- 84,288
Limestone	56,230	- 76,076	55,022	- 74,441	53,428	- 72,285
Schist	66,573	- 90,070	65,143	- 88,135	63,256	- 85,582
Slate	46,673	- 63,146	45,670	- 61,789	44,347	- 59,999
Gneiss	43,172	- 58,409	42,244	- 57,154	41,020	- 55,498

Penetration Rate (feet/hour)

	Hole Diameter (inches)					
	5.50		6.00		6.75	
Granite	32	- 43	27	- 36	21	- 28
Basalt	18	- 25	15	- 21	12	- 16
Gabbro	20	- 28	17	- 23	13	- 18
Shale	33	- 45	28	- 37	22	- 29
Sandstone	34	- 46	29	- 39	23	- 31
Siltstone	34	- 46	29	- 39	22	- 30
Conglomer	38	- 52	32	- 44	25	- 34
Breccia	50	- 68	42	- 57	33	- 45
Limestone	43	- 58	36	- 49	28	- 38
Schist	51	- 69	43	- 58	34	- 46
Slate	36	- 48	30	- 40	24	- 32
Gneiss	33	- 45	28	- 37	22	- 29

30,000 lbs.      5.50 inch      6 inch      6.75 inch  
1,263 psi      1,061 psi      838 psi

Ingersoll-Rand DM30 -Rotary

Bit Cost (\$/foot)

	Hole Diameter (inches)					
	5.50		6.00		6.75	
Granite	\$0.51	- \$0.38	\$0.56	- \$0.42	\$0.67	- \$0.49
Basalt	\$0.97	- \$0.72	\$1.07	- \$0.79	\$1.28	- \$0.94
Gabbro	\$0.86	- \$0.64	\$0.95	- \$0.70	\$1.13	- \$0.84
Shale	\$0.48	- \$0.36	\$0.54	- \$0.40	\$0.64	- \$0.47
Sandstone	\$0.47	- \$0.34	\$0.51	- \$0.38	\$0.61	- \$0.45
Siltstone	\$0.47	- \$0.35	\$0.52	- \$0.38	\$0.61	- \$0.45
Conglomer	\$0.40	- \$0.30	\$0.45	- \$0.33	\$0.53	- \$0.39
Breccia	\$0.29	- \$0.22	\$0.32	- \$0.24	\$0.39	- \$0.29
Limestone	\$0.35	- \$0.26	\$0.39	- \$0.29	\$0.46	- \$0.34
Schist	\$0.29	- \$0.21	\$0.32	- \$0.24	\$0.38	- \$0.28
Slate	\$0.44	- \$0.33	\$0.49	- \$0.36	\$0.58	- \$0.43
Gneiss	\$0.49	- \$0.36	\$0.54	- \$0.40	\$0.64	- \$0.47

Steel Cost (\$/foot per rod)

	Hole Diameter (inches)					
	5.50		6.00		6.75	
Granite	\$0.014	- \$0.010	\$0.014	- \$0.011	\$0.015	- \$0.011
Basalt	\$0.024	- \$0.018	\$0.025	- \$0.018	\$0.025	- \$0.019
Gabbro	\$0.022	- \$0.016	\$0.022	- \$0.016	\$0.023	- \$0.017
Shale	\$0.014	- \$0.010	\$0.014	- \$0.010	\$0.014	- \$0.011
Sandstone	\$0.013	- \$0.010	\$0.013	- \$0.010	\$0.014	- \$0.010
Siltstone	\$0.013	- \$0.010	\$0.013	- \$0.010	\$0.014	- \$0.010
Conglomer	\$0.012	- \$0.009	\$0.012	- \$0.009	\$0.012	- \$0.009
Breccia	\$0.009	- \$0.007	\$0.009	- \$0.007	\$0.009	- \$0.007
Limestone	\$0.010	- \$0.008	\$0.011	- \$0.008	\$0.011	- \$0.008
Schist	\$0.009	- \$0.007	\$0.009	- \$0.007	\$0.009	- \$0.007
Slate	\$0.013	- \$0.009	\$0.013	- \$0.009	\$0.013	- \$0.010
Gneiss	\$0.014	- \$0.010	\$0.014	- \$0.010	\$0.014	- \$0.011

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

30,000 lbs.      5.50 inch      6 inch      6.75 inch  
1,263 psi      1,061 psi      838 psi

**Ingersoll-Rand DM45 -Rotary**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	5.00		6.75		7.875	
Granite	3,619	- 4,897	3,358	- 4,543	3,231	- 4,372
Basalt	1,896	- 2,565	1,759	- 2,380	1,693	- 2,290
Gabbro	2,138	- 2,893	1,984	- 2,684	1,909	- 2,582
Shale	3,798	- 5,139	3,524	- 4,768	3,391	- 4,588
Sandstone	3,960	- 5,357	3,674	- 4,971	3,535	- 4,783
Siltstone	3,942	- 5,333	3,658	- 4,948	3,519	- 4,762
Conglomer	4,549	- 6,154	4,220	- 5,710	4,061	- 5,494
Breccia	6,279	- 8,495	5,825	- 7,881	5,606	- 7,584
Limestone	5,215	- 7,056	4,839	- 6,547	4,656	- 6,300
Schist	6,395	- 8,652	5,934	- 8,028	5,710	- 7,725
Slate	4,164	- 5,634	3,864	- 5,228	3,718	- 5,030
Gneiss	3,790	- 5,128	3,517	- 4,758	3,384	- 4,578

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	5.00		6.75		7.875	
Granite	44,942	- 60,803	41,698	- 56,415	40,124	- 54,286
Basalt	26,314	- 35,602	24,415	- 33,033	23,494	- 31,786
Gabbro	29,065	- 39,323	26,967	- 36,485	25,950	- 35,108
Shale	46,772	- 63,280	43,397	- 58,713	41,759	- 56,497
Sandstone	48,412	- 65,499	44,919	- 60,772	43,223	- 58,478
Siltstone	48,234	- 65,258	44,753	- 60,548	43,064	- 58,263
Conglomer	54,302	- 73,468	50,383	- 68,166	48,482	- 65,593
Breccia	70,909	- 95,936	65,792	- 89,013	63,309	- 85,653
Limestone	60,812	- 82,275	56,423	- 76,337	54,293	- 73,456
Schist	71,998	- 97,409	66,802	- 90,379	64,280	- 86,968
Slate	50,476	- 68,291	46,833	- 63,362	45,065	- 60,971
Gneiss	46,689	- 63,168	43,320	- 58,609	41,685	- 56,397

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	5.00		6.75		7.875	
Granite	50	- 68	27	- 37	20	- 27
Basalt	29	- 39	16	- 21	12	- 16
Gabbro	32	- 44	17	- 24	13	- 17
Shale	52	- 71	28	- 38	21	- 28
Sandstone	54	- 73	29	- 40	21	- 29
Siltstone	54	- 73	29	- 40	21	- 29
Conglomer	61	- 82	33	- 45	24	- 33
Breccia	80	- 108	43	- 59	32	- 43
Limestone	68	- 92	37	- 50	27	- 37
Schist	81	- 109	44	- 59	32	- 44
Slate	56	- 76	31	- 41	22	- 30
Gneiss	52	- 70	28	- 38	21	- 28

45,000 lbs.                      5.00 inch                      7 inch                      7.88 inch  
2,292 psi                      1,258 psi                      924 psi

**Ingersoll-Rand DM45 -Rotary**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	5.00		6.75		7.875	
Granite	\$0.51	- \$0.38	\$0.63	- \$0.47	\$0.81	- \$0.60
Basalt	\$0.97	- \$0.72	\$1.21	- \$0.89	\$1.54	- \$1.14
Gabbro	\$0.86	- \$0.64	\$1.07	- \$0.79	\$1.37	- \$1.01
Shale	\$0.48	- \$0.36	\$0.60	- \$0.45	\$0.77	- \$0.57
Sandstone	\$0.46	- \$0.34	\$0.58	- \$0.43	\$0.74	- \$0.55
Siltstone	\$0.47	- \$0.35	\$0.58	- \$0.43	\$0.74	- \$0.55
Conglomer	\$0.40	- \$0.30	\$0.50	- \$0.37	\$0.64	- \$0.48
Breccia	\$0.29	- \$0.22	\$0.37	- \$0.27	\$0.47	- \$0.34
Limestone	\$0.35	- \$0.26	\$0.44	- \$0.33	\$0.56	- \$0.41
Schist	\$0.29	- \$0.21	\$0.36	- \$0.27	\$0.46	- \$0.34
Slate	\$0.44	- \$0.33	\$0.55	- \$0.41	\$0.70	- \$0.52
Gneiss	\$0.49	- \$0.36	\$0.61	- \$0.45	\$0.77	- \$0.57

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	5.00		6.75		7.875	
Granite	\$0.006	- \$0.005	\$0.015	- \$0.011	\$0.018	- \$0.013
Basalt	\$0.011	- \$0.008	\$0.025	- \$0.019	\$0.030	- \$0.022
Gabbro	\$0.010	- \$0.007	\$0.023	- \$0.017	\$0.027	- \$0.020
Shale	\$0.006	- \$0.004	\$0.014	- \$0.011	\$0.017	- \$0.013
Sandstone	\$0.006	- \$0.004	\$0.014	- \$0.010	\$0.016	- \$0.012
Siltstone	\$0.006	- \$0.004	\$0.014	- \$0.010	\$0.016	- \$0.012
Conglomer	\$0.005	- \$0.004	\$0.012	- \$0.009	\$0.015	- \$0.011
Breccia	\$0.004	- \$0.003	\$0.009	- \$0.007	\$0.011	- \$0.008
Limestone	\$0.005	- \$0.003	\$0.011	- \$0.008	\$0.013	- \$0.010
Schist	\$0.004	- \$0.003	\$0.009	- \$0.007	\$0.011	- \$0.008
Slate	\$0.006	- \$0.004	\$0.013	- \$0.010	\$0.016	- \$0.012
Gneiss	\$0.006	- \$0.004	\$0.014	- \$0.011	\$0.017	- \$0.013

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

45,000 lbs.                      5.00 inch                      6.75 inch                      7.88  
2,292 psi                      1,258 psi                      924

**Ingersoll-Rand DM M2 -Rotary**

**Bit Life (feet/bit)**

	Hole Diameter (inches)					
	9.00		9.875		11.00	
Granite	3,312	- 4,481	3,236	- 4,378	3,150	- 4,262
Basalt	1,735	- 2,347	1,695	- 2,294	1,650	- 2,233
Gabbro	1,956	- 2,647	1,912	- 2,586	1,861	- 2,518
Shale	3,476	- 4,702	3,396	- 4,595	3,306	- 4,473
Sandstone	3,623	- 4,902	3,540	- 4,790	3,446	- 4,663
Siltstone	3,607	- 4,880	3,525	- 4,769	3,431	- 4,642
Conglomer	4,162	- 5,631	4,067	- 5,502	3,959	- 5,356
Breccia	5,745	- 7,773	5,614	- 7,595	5,465	- 7,393
Limestone	4,772	- 6,457	4,663	- 6,309	4,539	- 6,141
Schist	5,852	- 7,917	5,718	- 7,736	5,566	- 7,531
Slate	3,811	- 5,156	3,723	- 5,038	3,624	- 4,904
Gneiss	3,468	- 4,692	3,389	- 4,585	3,299	- 4,463

**Steel Life (feet/rod)**

	Hole Diameter (inches)					
	9.00		9.875		11.00	
Granite	41,124	- 55,639	40,183	- 54,365	39,115	- 52,921
Basalt	24,079	- 32,578	23,528	- 31,832	22,903	- 30,986
Gabbro	26,596	- 35,983	25,987	- 35,159	25,297	- 34,225
Shale	42,800	- 57,905	41,820	- 56,580	40,709	- 55,077
Sandstone	44,300	- 59,936	43,286	- 58,564	42,136	- 57,008
Siltstone	44,137	- 59,715	43,127	- 58,348	41,981	- 56,798
Conglomer	49,690	- 67,228	48,552	- 65,689	47,262	- 63,943
Breccia	64,887	- 87,788	63,401	- 85,778	61,717	- 83,499
Limestone	55,647	- 75,287	54,373	- 73,563	52,928	- 71,609
Schist	65,883	- 89,135	64,374	- 87,095	62,664	- 84,781
Slate	46,189	- 62,490	45,131	- 61,060	43,932	- 59,438
Gneiss	42,724	- 57,803	41,746	- 56,479	40,637	- 54,979

**Penetration Rate (feet/hour)**

	Hole Diameter (inches)					
	9.00		9.875		11.00	
Granite	21	- 29	18	- 24	14	- 19
Basalt	12	- 17	10	- 14	8	- 11
Gabbro	14	- 18	11	- 15	9	- 12
Shale	22	- 30	18	- 25	15	- 20
Sandstone	23	- 31	19	- 26	15	- 21
Siltstone	23	- 31	19	- 26	15	- 21
Conglomer	26	- 35	21	- 29	17	- 23
Breccia	34	- 46	28	- 38	22	- 30
Limestone	29	- 39	24	- 32	19	- 26
Schist	34	- 46	28	- 38	23	- 31
Slate	24	- 32	20	- 27	16	- 22
Gneiss	22	- 30	18	- 25	15	- 20

75,000 lbs.      9 inch      10 inch      11 inch  
1,179 psi      979 psi      789 psi

**Ingersoll-Rand DM M2 -Rotary**

**Bit Cost (\$/foot)**

	Hole Diameter (inches)					
	9.00		9.875		11.00	
Granite	\$0.94	- \$0.69	\$1.28	- \$0.94	\$1.55	- \$1.14
Basalt	\$1.79	- \$1.32	\$2.44	- \$1.80	\$2.95	- \$2.18
Gabbro	\$1.59	- \$1.17	\$2.16	- \$1.60	\$2.62	- \$1.94
Shale	\$0.89	- \$0.66	\$1.22	- \$0.90	\$1.47	- \$1.09
Sandstone	\$0.86	- \$0.63	\$1.17	- \$0.86	\$1.41	- \$1.05
Siltstone	\$0.86	- \$0.64	\$1.17	- \$0.87	\$1.42	- \$1.05
Conglomer	\$0.75	- \$0.55	\$1.02	- \$0.75	\$1.23	- \$0.91
Breccia	\$0.54	- \$0.40	\$0.74	- \$0.54	\$0.89	- \$0.66
Limestone	\$0.65	- \$0.48	\$0.89	- \$0.66	\$1.07	- \$0.79
Schist	\$0.53	- \$0.39	\$0.72	- \$0.53	\$0.88	- \$0.65
Slate	\$0.81	- \$0.60	\$1.11	- \$0.82	\$1.34	- \$0.99
Gneiss	\$0.89	- \$0.66	\$1.22	- \$0.90	\$1.48	- \$1.09

**Steel Cost (\$/foot per rod)**

	Hole Diameter (inches)					
	9.00		9.875		11.00	
Granite	\$0.015	- \$0.011	\$0.018	- \$0.013	\$0.029	- \$0.022
Basalt	\$0.025	- \$0.019	\$0.031	- \$0.023	\$0.050	- \$0.037
Gabbro	\$0.023	- \$0.017	\$0.028	- \$0.020	\$0.045	- \$0.033
Shale	\$0.014	- \$0.011	\$0.017	- \$0.013	\$0.028	- \$0.021
Sandstone	\$0.014	- \$0.010	\$0.017	- \$0.012	\$0.027	- \$0.020
Siltstone	\$0.014	- \$0.010	\$0.017	- \$0.012	\$0.027	- \$0.020
Conglomer	\$0.012	- \$0.009	\$0.015	- \$0.011	\$0.024	- \$0.018
Breccia	\$0.009	- \$0.007	\$0.011	- \$0.008	\$0.018	- \$0.014
Limestone	\$0.011	- \$0.008	\$0.013	- \$0.010	\$0.022	- \$0.016
Schist	\$0.009	- \$0.007	\$0.011	- \$0.008	\$0.018	- \$0.013
Slate	\$0.013	- \$0.010	\$0.016	- \$0.012	\$0.026	- \$0.019
Gneiss	\$0.014	- \$0.011	\$0.017	- \$0.013	\$0.028	- \$0.021

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

75,000 lbs.      9 inch      9.875 inch      11  
1,179 psi      979 psi      789

**Bucyrus International 59R -Rotary**

		Hole Diameter (inches)							
		12.25		15.00		16.00			
Granite	3379.984	-	4572.919	3213.372	-	4347.504	3162.023	-	4278.031
Basalt	1770.653	-	2395.589	1683.371	-	2277.502	1656.471	-	2241.108
Gabbro	1996.573	-	2701.246	1898.155	-	2568.092	1867.823	-	2527.054
Shale	3546.993	-	4798.873	3372.149	-	4562.319	3318.263	-	4489.414
Sandstone	3697.769	-	5002.863	3515.492	-	4756.254	3459.315	-	4680.25
Siltstone	3681.304	-	4980.588	3499.839	-	4735.076	3443.912	-	4659.411
Conglomer	4247.818	-	5747.048	4038.427	-	5463.755	3973.894	-	5376.445
Breccia	5863.339	-	7932.753	5574.314	-	7541.719	5485.238	-	7421.204
Limestone	4870.335	-	6589.277	4630.259	-	6264.468	4556.268	-	6164.363
Schist	5972.24	-	8080.09	5677.846	-	7681.792	5587.116	-	7559.039
Slate	3888.976	-	5261.555	3697.274	-	5002.194	3638.192	-	4922.26
Gneiss	3539.394	-	4788.591	3364.924	-	4552.544	#REF!	-	4479.796

		Hole Diameter (inches)							
		12.25		15.00		16.00			
Granite	41969.55	-	56782.33	39900.72	-	53983.32	39263.11	-	53120.68
Basalt	24574.25	-	33247.51	23362.89	-	31608.62	22989.56	-	31103.52
Gabbro	27142.87	-	36722.71	25804.9	-	34912.52	25392.55	-	34354.62
Shale	43679.22	-	59095.42	41526.11	-	56182.39	40862.54	-	55284.61
Sandstone	45210.83	-	61167.6	42982.23	-	58152.42	42295.38	-	57223.16
Siltstone	45044.11	-	60942.03	42823.72	-	57937.98	42139.41	-	57012.14
Conglomer	50711.07	-	68609.09	48211.33	-	65227.1	47440.93	-	64184.78
Breccia	66219.99	-	89591.75	62955.76	-	85175.45	61949.75	-	83814.36
Limestone	56790.17	-	76833.76	53990.78	-	73046.35	53128.02	-	71879.08
Schist	67236.6	-	90967.16	63922.26	-	86483.06	62900.8	-	85101.08
Slate	47137.81	-	63774.69	44814.22	-	60631	44098.1	-	59662.13
Gneiss	43601.73	-	58990.58	41452.44	-	56082.72	40790.04	-	55186.53

		Hole Diameter (inches)							
		12.25		15.00		16.00			
Granite	19.00236	-	25.70907	12.60139	-	17.04894	11.05531	-	14.95719
Basalt	11.03265	-	14.92652	7.316286	-	9.898504	6.418644	-	8.684048
Gabbro	12.205	-	16.51264	8.093728	-	10.95034	7.100701	-	9.606831
Shale	19.78892	-	26.77325	13.123	-	17.75464	11.51293	-	15.57631
Sandstone	20.49398	-	27.72715	13.59055	-	18.38722	11.92312	-	16.13128
Siltstone	20.41721	-	27.62329	13.53965	-	18.31835	11.87846	-	16.07085
Conglomer	23.02897	-	31.15684	15.27163	-	20.66162	13.39794	-	18.12663
Breccia	30.19898	-	40.85745	20.02642	-	27.09456	17.56936	-	23.77031
Limestone	25.83581	-	34.95433	17.13298	-	23.17992	15.03092	-	20.33595
Schist	30.66998	-	41.49468	20.33876	-	27.51714	17.84338	-	24.14104
Slate	21.38157	-	28.92801	14.17916	-	19.18357	12.43951	-	16.82992
Gneiss	19.75326	-	26.725	13.09935	-	17.72265	11.49218	-	15.54824

165,000 lbs.      12.25 inch      15 inch      16 inch  
1,400 psi      934 psi      821 psi

**Bucyrus International 59R -Rotary**

		Hole Diameter (inches)							
		12.25		15.00		16.00			
Granite	\$1.69	-	\$1.25	\$2.79	-	\$2.06	\$3.01	-	\$2.22
Basalt	\$3.22	-	\$2.38	\$5.32	-	\$3.93	\$5.75	-	\$4.25
Gabbro	\$2.86	-	\$2.11	\$4.72	-	\$3.49	\$5.10	-	\$3.77
Shale	\$1.61	-	\$1.19	\$2.66	-	\$1.96	\$2.87	-	\$2.12
Sandstone	\$1.54	-	\$1.14	\$2.55	-	\$1.88	\$2.75	-	\$2.03
Siltstone	\$1.55	-	\$1.15	\$2.56	-	\$1.89	\$2.76	-	\$2.04
Conglomer	\$1.34	-	\$0.99	\$2.22	-	\$1.64	\$2.39	-	\$1.77
Breccia	\$0.97	-	\$0.72	\$1.61	-	\$1.19	\$1.74	-	\$1.28
Limestone	\$1.17	-	\$0.87	\$1.93	-	\$1.43	\$2.09	-	\$1.54
Schist	\$0.96	-	\$0.71	\$1.58	-	\$1.17	\$1.70	-	\$1.26
Slate	\$1.47	-	\$1.08	\$2.42	-	\$1.79	\$2.62	-	\$1.93
Gneiss	\$1.61	-	\$1.19	\$2.66	-	\$1.97	#REF!	-	\$2.12

		Hole Diameter (inches)							
		12.25		15.00		16.00			
Granite	\$0.027	-	\$0.020	\$0.040	-	\$0.030	\$0.041	-	\$0.030
Basalt	\$0.046	-	\$0.034	\$0.068	-	\$0.051	\$0.070	-	\$0.051
Gabbro	\$0.042	-	\$0.031	\$0.062	-	\$0.046	\$0.063	-	\$0.047
Shale	\$0.026	-	\$0.019	\$0.039	-	\$0.028	\$0.039	-	\$0.029
Sandstone	\$0.025	-	\$0.019	\$0.037	-	\$0.028	\$0.038	-	\$0.028
Siltstone	\$0.025	-	\$0.019	\$0.037	-	\$0.028	\$0.038	-	\$0.028
Conglomer	\$0.022	-	\$0.017	\$0.033	-	\$0.025	\$0.034	-	\$0.025
Breccia	\$0.017	-	\$0.013	\$0.025	-	\$0.019	\$0.026	-	\$0.019
Limestone	\$0.020	-	\$0.015	\$0.030	-	\$0.022	\$0.030	-	\$0.022
Schist	\$0.017	-	\$0.013	\$0.025	-	\$0.019	\$0.025	-	\$0.019
Slate	\$0.024	-	\$0.018	\$0.036	-	\$0.026	\$0.036	-	\$0.027
Gneiss	\$0.026	-	\$0.019	\$0.039	-	\$0.029	\$0.039	-	\$0.029

(Based on 12 foot drilling rod length.)

**Steel Cost Adjustment Factor**

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

165,000 lbs.      12.25 inch      15 inch      16  
1,400 psi      934 psi      821

Ingersoll-Rand TBH4 - Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)					
	5.00		6.750		7.875	
Granite	3,526	- 4,770	3,271	- 4,426	3,148	- 4,259
Basalt	1,847	- 2,499	1,714	- 2,319	1,649	- 2,231
Gabbro	2,083	- 2,818	1,932	- 2,614	1,859	- 2,516
Shale	3,700	- 5,006	3,433	- 4,645	3,303	- 4,469
Sandstone	3,857	- 5,219	3,579	- 4,842	3,444	- 4,659
Siltstone	3,840	- 5,195	3,563	- 4,820	3,428	- 4,638
Conglomer.	4,431	- 5,995	4,111	- 5,562	3,956	- 5,352
Breccia	6,116	- 8,275	5,675	- 7,678	5,461	- 7,388
Limestone	5,080	- 6,873	4,714	- 6,377	4,536	- 6,137
Schist	6,230	- 8,429	5,780	- 7,820	5,562	- 7,525
Slate	4,057	- 5,488	3,764	- 5,092	3,622	- 4,900
Gneiss	3,692	- 4,995	3,426	- 4,635	3,296	- 4,460

Steel Life (feet/rod)

	Hole Diameter (inches)					
	5.00		6.750		7.875	
Granite	43,780	- 59,231	40,620	- 54,957	39,087	- 52,882
Basalt	25,634	- 34,681	23,784	- 32,178	22,886	- 30,964
Gabbro	28,313	- 38,306	26,270	- 35,542	25,279	- 34,200
Shale	45,563	- 61,644	42,275	- 57,195	40,679	- 55,036
Sandstone	47,161	- 63,806	43,757	- 59,201	42,106	- 56,966
Siltstone	46,987	- 63,570	43,596	- 58,983	41,950	- 56,756
Conglomer.	52,898	- 71,568	49,081	- 66,403	47,228	- 63,897
Breccia	69,076	- 93,456	64,091	- 86,711	61,672	- 83,438
Limestone	59,239	- 80,147	54,964	- 74,363	52,890	- 71,556
Schist	70,136	- 94,890	65,075	- 88,042	62,618	- 84,719
Slate	49,171	- 66,525	45,622	- 61,724	43,900	- 59,394
Gneiss	45,482	- 61,535	42,200	- 57,094	40,607	- 54,939

Penetration Rate (feet/hour)

	Hole Diameter (inches)					
	5.00		6.750		7.875	
Granite	45	- 60	24	- 33	18	- 24
Basalt	26	- 35	14	- 19	10	- 14
Gabbro	29	- 39	16	- 21	11	- 15
Shale	46	- 63	25	- 34	18	- 25
Sandstone	48	- 65	26	- 35	19	- 26
Siltstone	48	- 65	26	- 35	19	- 26
Conglomer.	54	- 73	29	- 40	22	- 29
Breccia	71	- 96	39	- 52	28	- 38
Limestone	61	- 82	33	- 45	24	- 33
Schist	72	- 97	39	- 53	29	- 39
Slate	50	- 68	27	- 37	20	- 27
Gneiss	46	- 63	25	- 34	18	- 25

37,700 lbs.      5,000 inch      6,750 inch      7,875 inch  
1,920 psi      1,054 psi      774 psi

Ingersoll-Rand TBH4 - Rotary

Bit Cost (\$/foot)

	Hole Diameter (inches)					
	5.00		6.750		7.875	
Granite	\$0.40	- \$0.29	\$0.65	- \$0.48	\$0.83	- \$0.61
Basalt	\$0.76	- \$0.56	\$1.24	- \$0.92	\$1.58	- \$1.17
Gabbro	\$0.68	- \$0.50	\$1.10	- \$0.81	\$1.40	- \$1.04
Shale	\$0.38	- \$0.28	\$0.62	- \$0.46	\$0.79	- \$0.58
Sandstone	\$0.36	- \$0.27	\$0.59	- \$0.44	\$0.76	- \$0.56
Siltstone	\$0.37	- \$0.27	\$0.60	- \$0.44	\$0.76	- \$0.56
Conglomer.	\$0.32	- \$0.23	\$0.52	- \$0.38	\$0.66	- \$0.49
Breccia	\$0.23	- \$0.17	\$0.38	- \$0.28	\$0.48	- \$0.35
Limestone	\$0.28	- \$0.20	\$0.45	- \$0.33	\$0.58	- \$0.43
Schist	\$0.23	- \$0.17	\$0.37	- \$0.27	\$0.47	- \$0.35
Slate	\$0.35	- \$0.26	\$0.57	- \$0.42	\$0.72	- \$0.53
Gneiss	\$0.38	- \$0.28	\$0.62	- \$0.46	\$0.79	- \$0.59

Steel Cost (\$/foot per rod)

	Hole Diameter (inches)					
	5.00		6.750		7.875	
Granite	\$0.013	- \$0.010	\$0.015	- \$0.011	\$0.018	- \$0.014
Basalt	\$0.023	- \$0.017	\$0.026	- \$0.019	\$0.031	- \$0.023
Gabbro	\$0.021	- \$0.015	\$0.023	- \$0.017	\$0.028	- \$0.021
Shale	\$0.013	- \$0.010	\$0.014	- \$0.011	\$0.018	- \$0.013
Sandstone	\$0.012	- \$0.009	\$0.014	- \$0.010	\$0.017	- \$0.013
Siltstone	\$0.012	- \$0.009	\$0.014	- \$0.010	\$0.017	- \$0.013
Conglomer.	\$0.011	- \$0.008	\$0.012	- \$0.009	\$0.015	- \$0.011
Breccia	\$0.008	- \$0.006	\$0.010	- \$0.007	\$0.012	- \$0.009
Limestone	\$0.010	- \$0.007	\$0.011	- \$0.008	\$0.014	- \$0.010
Schist	\$0.008	- \$0.006	\$0.009	- \$0.007	\$0.011	- \$0.008
Slate	\$0.012	- \$0.009	\$0.013	- \$0.010	\$0.016	- \$0.012
Gneiss	\$0.013	- \$0.010	\$0.014	- \$0.011	\$0.018	- \$0.013

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

37,700 lbs.      5,000 inch      6,750 inch      7,875  
1,920 psi      1,054 psi      774 psi

# ROTARY BLASTHOLE DRILLS

Bucyrus manufactures electric rotary blasthole drills with the most innovative features on the market, including programmed drill control, rack and pinion pull-down, hydrostatic propel drives and more. [Contact us](#) today for more information about any of our performance-packed drills!



## 59R

Max. hole size: 444 mm (17-1/2 in)  
Max. bit loading: 74,830 kg (165,000 lbs)  
Working weight: 183,673 kg (405,000 lbs)



## 49RIII

Max. hole size: 406 mm (16 in)  
Max. bit loading: 63,975 kg (141,000 lbs)  
Working weight: 154,224 kg (340,000 lbs)



## 39HR

Max. hole size: 349 mm (13-3/4 in)  
Max. bit loading: 55,000 kg (122,000 lbs)  
Working weight: 122,500 kg (270,000 lbs)



## 35HR Series

Max. hole size: 270 mm (10-5/8 in)  
Max. bit loading: 34,000 kg (75,000 lbs)  
Working weight: 54,432 kg (120,000 lbs)





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## Infrastructure - Drilling Solutions



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Ingersoll-Rand drills are designed and manufactured to a stringent set of quality standards, assuring you of the most efficient and reliable drills available anywhere.

Now in our second century, we are proud of the comprehensive line of Ingersoll-Rand drilling equipment for the mining, exploration, oil and gas, quarry and water well industries around the world.

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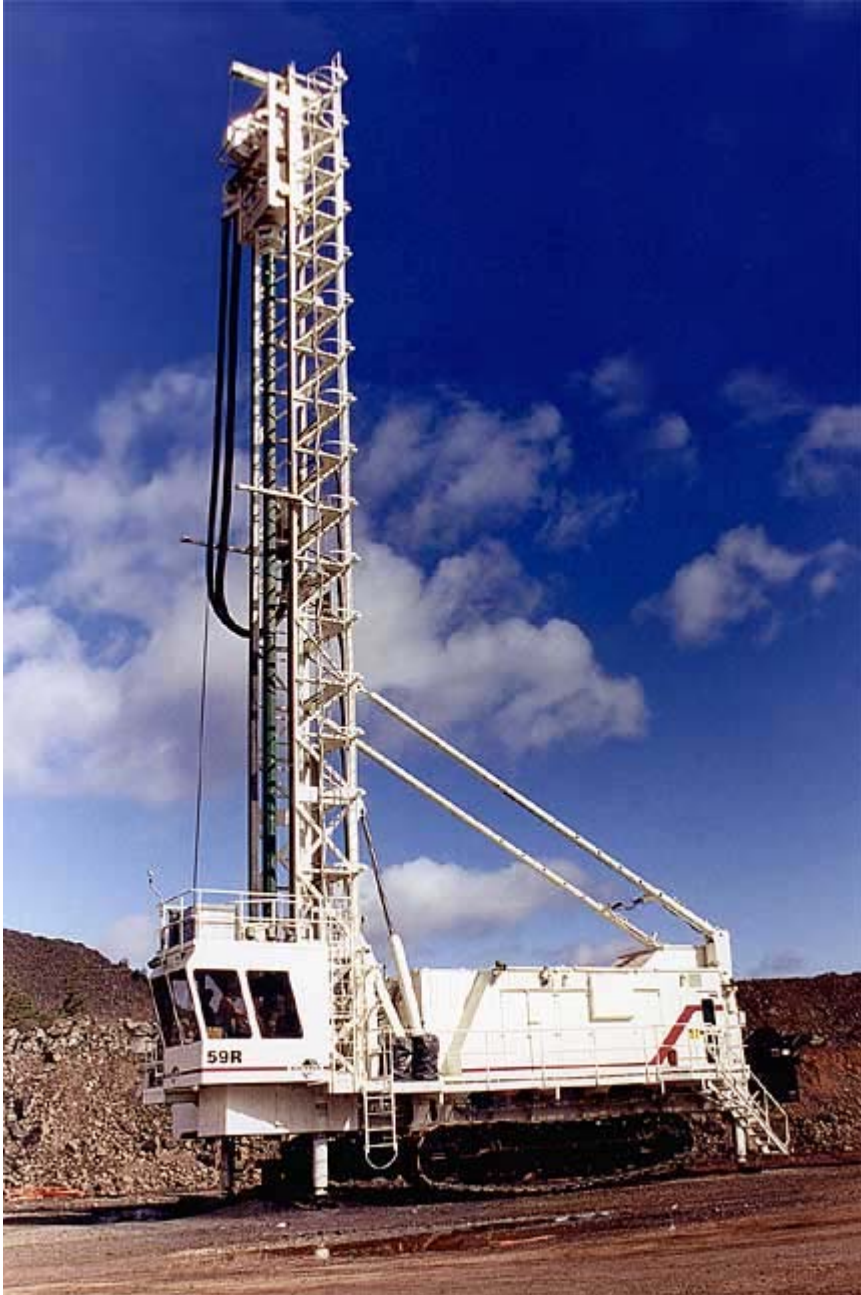
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## Infrastructure - Drilling Solutions

### Rotary - DM45/LP

**Select Model:**

T4BH
DM25/SP
DM30
DM45/LP
DM50/LP
DM-L/LP
DM45/SP
DM-LSP
DM-M2
DM-M3
DM-H2
351



The DM45/LP is a hydraulic rotary head drive, multi-pass, crawler-mounted drill rig with a 45,000 lb. (20,400 kg) bit load capacity. The standard two-motor spur gear rotary head is rated from 9,000 ft-lb. (12,204 N-m) at 0-100 RPM and 5,400 ft-lb. (732 N-m) at 0-160 RPM. The DM45/LP can drill from 5-1/8 to 7-7/8 in. (130 to 200 mm) diameter blastholes to depths of 180 ft. (55 m) with a 30 ft. (9.1 m) drill pipe change. Two low-pressure Ingersoll-Rand compressor options are available with your choice of Caterpillar or Cummins engines.

[ SPECS ]    [ FEATURES ]    [ LITERATURE ]

<b>Nominal Hole Diameter</b>	
Diameter	6-8 in.
<b>Power Pack</b>	
Engine #1	Cummins QSX15 (425 HP @ 1800 rpm)
Compressor #1	900 @ 110 CFM @ PSI / 25.5 @ 758 m3/min@kPA
Engine #2	CAT C15 (425 HP @ 1800 RPM)
Compressor #2	900 @ 110 CFM @ PSI / 25.5 @ 758 m3/min@kPA
Engine #3	Cummins QSX15 (475 HP @ 1800 RPM)
Compressor #3	1050 @ 110 CFM @ PSI / 29.7 @ 758 m3/min@kPA
Engine #4	Cat C15 (475 HP @ 1800 RPM)
Compressor #4	1050 @ 110 CFM @ PSI / 29.7 @ 758 m3/min@kPA
<b>Rotation</b>	
Type	2-motor variable displacement, high torque/high speed
Head Torque	High torque: 9,000 ft-lb @ 100 rpm
Speed	High speed: 5,400 ft-lb @ 160 rpm rpm
<b>Feed System</b>	
Type	Hydraulic cyls. w/cable pulldown & chain pullback
Bit Load	45,000 lb / 20,411 kg
<b>Tower</b>	
Pipe Length	30 ft. / 9.1 m.
Fabrication	4-member open front w/rectangular hollow steel tubing/double cut lacing
<b>Undercarriage</b>	
Model	Caterpillar 325L or equivalent

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**Blasthole Drills**

Rotary

Large

Mid-range

Hydraulic Crawler

Pneumatic Crawl

DHD

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<b>Length</b>		15.3 ft. / 4.66 m
<b>Capacity</b>	<b>Carousel</b>	Capable of 180 ft.
<b>Option #1</b>	<b>Options</b>	Contact your local IR distributor for a complete list of options.
	<b>Weight &amp; Dimensions</b>	
<b>Height (Tower Up)</b>		43 ft. / 13.11 m
<b>Approx. Working Weight</b>		77,000 - 85,000 lbs. / 34,900 - 38,600 kg.
	<b>Material To Be Drilled</b>	
<b>Soft</b>		Yes
	<b>Drill Application</b>	
<b>Mining</b>		Yes
<b>Quarry</b>		Yes
	<b>Drilling Method</b>	
<b>Rotary</b>		Yes



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## Infrastructure - Drilling Solutions

### Rotary - DM30

**Select Model:**

T4BH
DM25/SP
DM30
DM45/LP
DM50/LP
DM-L/LP
DM45/SP
DM-LSP
DM-M2
DM-M3
DM-H2
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The DM30 is a hydraulic tophead drive, multi-pass, crawler-mounted drill rig designed for blastholes ranging from 5-1/8 to 6-3/4 in. (130 to 171 mm) in diameter. On-board depth capability is up to 150 ft. (45.7 m). For rotary drilling, the DM30 can assert a bit load force up to 30,000 lb. (13,608 kg) and rotation speeds of 0-130 RPM. This rig can also be used with downhole drills when equipped with a high-pressure air compressor option.

[ SPECS ] [ FEATURES ] [ LITERATURE ]

<b>Nominal Hole Diameter</b>	
Diameter	5-6 in.
<b>Power Pack</b>	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #3	Cummins QSX15 (425 HP @ 1800 RPM)
Compressor #3	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Engine #4	CAT C15 (425 HP @ 1800 RPM)
Compressor #4	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
<b>Floating Sub Base</b>	Isolates components from drilling and propel shock loads/maintains alignment
<b>Rotation</b>	
Type	Rotary Tophead
Head Torque	5,400 ft.-lb. / 7,322 N-m
Speed	0-100 rpm
<b>Feed System</b>	
Type	Single cylinder, cable feed
Bit Load	30,000 lb / (13,608) kg
<b>Tower</b>	
Pipe Length	30 ft. / 9.1 m.
Construction	4 member open front with hollow steel tubing.

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Rotary

Large

Mid-range

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DHD

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31 July 07

	<b>Undercarriage</b>	
<b>Manufacturer</b>		Caterpillar
	<b>Options</b>	
<b>Option #1</b>		Contact your local IR distributor for a complete list of options.
	<b>Weight &amp; Dimensions</b>	
<b>Height (Tower Up)</b>		44.3 ft. / 13.4 m
<b>Approx. Working Weight</b>		68,000 lbs. / 30,844 kg.
	<b>Material To Be Drilled</b>	
<b>Hard</b>		Yes
<b>Medium</b>		Yes
<b>Soft</b>		Yes
	<b>Drill Application</b>	
<b>Mining</b>		Yes
<b>Quarry</b>		Yes
	<b>Drilling Method</b>	
<b>Rotary</b>		Yes
<b>DHD</b>		Yes



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## Infrastructure - Drilling Solutions

### Rotary - DM25/SP

**Select Model:**

T4BH
<b>DM25/SP</b>
DM30
DM45/LP
DM50/LP
DM-L/LP
DM45/SP
DM-LSP
DM-M2
DM-M3
DM-H2
351



The DM25SP is a crawler-mounted rotary table drill rig designed for single-pass blasthole drilling to depths of up to 50 ft. (15.2 m) and diameters of 3-1/2 to 6-3/4 in. (89 to 171 mm). This drill is capable of rotary drilling with 25,000 lb. (11,340 kg) of bit load at 0-200 rpm. The DM25SP can also be used with downhole drills when equipped with a high-pressure air compressor option.

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**Blasthole Drills**

Rotary

Large

Mid-range

Hydraulic Crawler

Pneumatic Crawl

DHD

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**Exploration Drills**

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<b>Nominal Hole Diameter</b>		5-6 in.
<b>Diameter</b>		
<b>Power Pack</b>		
<b>Engine #1</b>		Cummins QSX15 (525 HP @ 1800 RPM)
<b>Compressor #1</b>		900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
<b>Engine #2</b>		CAT C15 (525 HP @ 1800 RPM)
<b>Compressor #2</b>		900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
<b>Engine #3</b>		Cummins QSX15 (425 HP @ 1800 RPM)
<b>Compressor #3</b>		900/110 CFM @ PSI / 25.5/758 m3/min@kPA
<b>Engine #4</b>		CAT C15 (425 HP @ 1800 RPM)
<b>Compressor #4</b>		900/110 CFM @ PSI / 25.5/758 m3/min@kPA
<b>Rotation</b>		
<b>Type</b>		Rotary Table Drive
<b>Speed</b>		0-170 rpm
<b>Torque</b>		3,500 / (4,746 N-m)
<b>Feed System</b>		
<b>Type</b>		Heavy-duty chains through cluster sprocket
<b>Pulldown</b>		25,000 lbs. / 11,340 kg.
<b>Tower</b>		
<b>Construction</b>		4 main member, open front, rectangular steel tubing
<b>#1 Single pass depth</b>		40 ft. / 12.2 m.
<b>#2 Single pass depth</b>		50 ft. / 15.2 m.
<b>Undercarriage</b>		

<b>Type</b>	Excavator
<b>Option #1</b>	Options Contact your local IR distributor for a complete list of options.
<b>Weight</b>	Weight & Dimensions Varies according to drill pipe: 60,000 - 62,000 lb / 27,216-28,123 kg
<b>Hard</b>	Material To Be Drilled Yes
<b>Medium</b>	Yes
<b>Soft</b>	Yes
<b>Quarry</b>	Drill Application Yes
<b>Rotary</b>	Drilling Method Yes
<b>DHD</b>	Yes



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## Infrastructure - Drilling Solutions

### Rotary - DM-M2

**Select Model:**

T4BH
DM25/SP
DM30
DM45/LP
DM50/LP
DM-L/LP
DM45/SP
DM-LSP
DM-M2
DM-M3
DM-H2
351



Designed for rotary or downhole drilling of up to 10-5/8 in. (270 mm) diameter blastholes, the DM-M2 provides 75,000 lb. (34,000 kg) of bit load and a 35 ft. (10 m) drill pipe change. Advanced frame and tower design and a unique, patented carriage feed system allow on-board drill depths to 175 ft. (53 m). Compressor/engine packages in both low-pressure, [1900 CFM @ 110 PSI (51 m<sup>3</sup>/min. @ 758 kPa)] for rotary drilling and high pressure [1250 CFM @ 350 PSI (35.4 m<sup>3</sup>/min. @ 2,413 kPa)], for downhole drilling, are available.

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	<b>Nominal Hole Diameter</b>	
Diameter	9-11 in.	
	<b>Power Pack</b>	
Engine #1	Caterpillar 3412E / EPA certified	
Compressor #1	1900 @ 100 CFM @ PSI / 53.8 @ 690 m <sup>3</sup> /min@kPA	
Engine #2	Cummins QSK19 / EPA certified	
Compressor #2	1900 @ 100 CFM @ PSI / 53.8 @ 690 m <sup>3</sup> /min@kPA	
Engine #3	Caterpillar 3412E / EPA certified	
Compressor #3	1250 @ 350 CFM @ PSI / 35.4 @ 2413 m <sup>3</sup> /min@kPA	
	<b>Rotation</b>	
Type	Two-motor, variable displacement	
Speed Range	0-150 rpm, variable	
Head Torque	0-8,640 ft-lbs (0-11,714 Nm) (forward)	
	<b>Feed System</b>	
Type	Patented carriage feed	
Weight on Bit	0 to 75,000 lb. / 0 to 34,019 kg	
	<b>Tower</b>	
Pipe Length	35 ft. / 10.7 m.	
Construction	4 member open front with hollow steel tubing.	
	<b>Undercarriage</b>	
Model	Caterpillar 330EL or equivalent	
	<b>Carousel</b>	
Size	Holds 2 to 4 drill pipe depending on pipe diameter	

	<b>Options</b>	Contact your local IR distributor for a complete list of options.
<b>Option #1</b>		
	<b>Weight &amp; Dimensions</b>	
<b>Height (Tower Up)</b>		56.2 ft. / 17.1 m
<b>Approx. Working Weight</b>		120,000 - 133,500 lbs. / 54,400 - 60,555 kg.
	<b>Material To Be Drilled</b>	
<b>Medium</b>		Yes
<b>Soft</b>		Yes
	<b>Drill Application</b>	
<b>Mining</b>		Yes
	<b>Drilling Method</b>	
<b>Rotary</b>		Yes
<b>DHD</b>		Yes



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## Infrastructure - Drilling Solutions

### Rotary - T4BH

**Select Model:**

T4BH
DM25/SP
DM30
DM45/LP
DM50/LP
DM-L/LP
DM45/SP
DM-LSP
DM-M2
DM-M3
DM-H2
351



The T4BH is a truck-mounted, hydraulic tophead drive multipass rotary drill specifically designed for production blasthole drilling to depths of 150 ft. (45.7 m) with a 25 ft. (7.6 m) drill pipe change. Nominal hole size is 5-1/8 to 7-7/8 in. (130 to 200 mm) for rotary or DHD drilling methods. Feed pressure generates a bit load force of up to 30,000 lb. (12,610 kg). An angle drilling option is available. All drill functions are controlled from the newly designed operator cab.

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	Nominal Hole Diameter	
Diameter	6-9 in.	
	Carrier	
Chassis (Standard)	Crane Carrier, Custom, 3 axle, 6X4	
Engine	CAT C10 (305 HP)	
	Power Pack	
Engine #1	Cummins QSX19 (525 HP @ 1800 RPM)	
Compressor #1	IR HR2-900/350 CFM @ PSI / 25.5/2413 m3/min@kPA	
Engine #2	Cummins QSX19 (600 HP @ 1800 RPM)	
Compressor #2	1050 @ 350 CFM @ PSI / 129.7 @ 2413 m3/min@kPA	
Engine #3	Cummins QSK-19C (700 HP @ 2100 RPM)	
Compressor #3	IR HR2.5 - 1250/350 CFM @ PSI / (35.39 @ 2413) m3/min@kPA	
Floating Sub Base	Isolates components from drilling and propel shock loads/maintains alignment	
	Rotation	
Type	Rotary Tophead	
Speed Range	0-160 RPM (std.)	
Head Torque	6,500 ft-lb. / (8,814 N-m)	
Option	7,165 ft-lb @ 0-130 RPM / 9,716 N-m @ 0-130 RPM	
	Feed System	
Type	Hydraulic cylinders w/cable and chain	
Pulldown	0-37,700 lbs. / 17,108 kg.	

	<b>Tower</b>	
<b>Pipe Length</b>		25 ft. / 7.6 m.
<b>Construction</b>		4 member open front with ASTM A500 GRB steel tubing.
	<b>Cab &amp; Controls</b>	
<b>Operator Cab</b>		New cab designed to optimize operator comfort and safety
<b>Controls</b>		All operational functions controlled from driller console in cab
	<b>Options</b>	
<b>Option #1</b>		Contact your local distributor for a complete list of options.
	<b>Weight &amp; Dimensions</b>	
<b>Height (Tower Up)</b>		28-3/4 ft. / 8.7 m
<b>Approx. Working Weight</b>		58,000 lbs. / 26,309 kg.
	<b>Material To Be Drilled</b>	
<b>Hard</b>		Yes
<b>Medium</b>		Yes
<b>Soft</b>		Yes
	<b>Drill Application</b>	
<b>Mining</b>		Yes
<b>Quarry</b>		Yes
	<b>Drilling Method</b>	
<b>Rotary</b>		Yes



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## Infrastructure - Drilling Solutions

### DHD - DM-M2

**Select Model:**

<a href="#">CM695D</a>
<a href="#">DM25/SP</a>
<a href="#">DM30</a>
<a href="#">DM45/HP</a>
<a href="#">DM45/SP</a>
<a href="#">DM-L/HP</a>
<a href="#">DM-M2</a>



Designed for rotary or downhole drilling of up to 10-5/8 in. (270 mm) diameter blastholes, the DM-M2 provides 75,000 lb. (34,000 kg) of bit load and a 35 ft. (10 m) drill pipe change. Advanced frame and tower design and a unique, patented carriage feed system allow on-board drill depths to 175 ft. (53 m). Compressor/engine packages in both low-pressure, [1900 CFM @ 110 PSI (51 m<sup>3</sup>/min. @ 758 kPa)] for rotary drilling and high pressure [1250 CFM @ 350 PSI (35.4 m<sup>3</sup>/min. @ 2,413 kPa)], for downhole drilling, are available.

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	<b>Nominal Hole Diameter</b>	
Diameter	9-11 in.	
	<b>Power Pack</b>	
Engine #1	Caterpillar 3412E / EPA certified	
Compressor #1	1900 @ 100 CFM @ PSI / 53.8 @ 690 m <sup>3</sup> /min@kPA	
Engine #2	Cummins QSK19 / EPA certified	
Compressor #2	1900 @ 100 CFM @ PSI / 53.8 @ 690 m <sup>3</sup> /min@kPA	
Engine #3	Caterpillar 3412E / EPA certified	
Compressor #3	1250 @ 350 CFM @ PSI / 35.4 @ 2413 m <sup>3</sup> /min@kPA	
	<b>Rotation</b>	
Type	Two-motor, variable displacement	
Speed Range	0-150 rpm, variable	
Head Torque	0-8,640 ft-lbs (0-11,714 Nm) (forward)	
	<b>Feed System</b>	
Type	Patented carriage feed	
Weight on Bit	0 to 75,000 lb. / 0 to 34,019 kg	
	<b>Tower</b>	
Pipe Length	35 ft. / 10.7 m.	
Construction	4 member open front with hollow steel tubing.	
	<b>Undercarriage</b>	
Model	Caterpillar 330EL or equivalent	
	<b>Carousel</b>	
Size	Holds 2 to 4 drill pipe depending on pipe diameter	

	<b>Options</b>	Contact your local IR distributor for a complete list of options.
<b>Option #1</b>		
	<b>Weight &amp; Dimensions</b>	
<b>Height (Tower Up)</b>		56.2 ft. / 17.1 m
<b>Approx. Working Weight</b>		120,000 - 133,500 lbs. / 54,400 - 60,555 kg.
	<b>Material To Be Drilled</b>	
<b>Medium</b>		Yes
<b>Soft</b>		Yes
	<b>Drill Application</b>	
<b>Mining</b>		Yes
	<b>Drilling Method</b>	
<b>Rotary</b>		Yes
<b>DHD</b>		Yes



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## Infrastructure - Drilling Solutions

### DHD - DM30

**Select Model:**

<a href="#">CM695D</a>
<a href="#">DM25/SP</a>
<a href="#">DM30</a>
<a href="#">DM45/HP</a>
<a href="#">DM45/SP</a>
<a href="#">DM-L/HP</a>
<a href="#">DM-M2</a>



The DM30 is a hydraulic tophead drive, multi-pass, crawler-mounted drill rig designed for blastholes ranging from 5-1/8 to 6-3/4 in. (130 to 171 mm) in diameter. On-board depth capability is up to 150 ft. (45.7 m). For rotary drilling, the DM30 can assert a bit load force up to 30,000 lb. (13,608 kg) and rotation speeds of 0-130 RPM. This rig can also be used with downhole drills when equipped with a high-pressure air compressor option.

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<b>Nominal Hole Diameter</b>	
Diameter	5-6 in.
<b>Power Pack</b>	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #3	Cummins QSX15 (425 HP @ 1800 RPM)
Compressor #3	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Engine #4	CAT C15 (425 HP @ 1800 RPM)
Compressor #4	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
<b>Floating Sub Base</b>	Isolates components from drilling and propel shock loads/maintains alignment
<b>Rotation</b>	
Type	Rotary Tophead
Head Torque	5,400 ft-lb. / 7,322 N-m
Speed	0-100 rpm
<b>Feed System</b>	
Type	Single cylinder, cable feed
Bit Load	30,000 lb / (13,608) kg
<b>Tower</b>	
Pipe Length	30 ft. / 9.1 m.
Construction	4 member open front with hollow steel tubing.

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	<b>Undercarriage</b>	Caterpillar
<b>Manufacturer</b>		
	<b>Options</b>	Contact your local IR distributor for a complete list of options.
<b>Option #1</b>		
	<b>Weight &amp; Dimensions</b>	
<b>Height (Tower Up)</b>		44.3 ft. / 13.4 m
<b>Approx. Working Weight</b>		68,000 lbs. / 30,844 kg.
	<b>Material To Be Drilled</b>	
<b>Hard</b>		Yes
<b>Medium</b>		Yes
<b>Soft</b>		Yes
	<b>Drill Application</b>	
<b>Mining</b>		Yes
<b>Quarry</b>		Yes
	<b>Drilling Method</b>	
<b>Rotary</b>		Yes
<b>DHD</b>		Yes



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## Infrastructure - Drilling Solutions

### DHD - DM25/SP

**Select Model:**

<a href="#">CM695D</a>
<a href="#">DM25/SP</a>
<a href="#">DM30</a>
<a href="#">DM45/HP</a>
<a href="#">DM45/SP</a>
<a href="#">DM-L/HP</a>
<a href="#">DM-M2</a>



The DM25SP is a crawler-mounted rotary table drill rig designed for single-pass blasthole drilling to depths of up to 50 ft. (15.2 m) and diameters of 3-1/2 to 6-3/4 in. (89 to 171 mm). This drill is capable of rotary drilling with 25,000 lb. (11,340 kg) of bit load at 0-200 rpm. The DM25SP can also be used with downhole drills when equipped with a high-pressure air compressor option.

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<b>Nominal Hole Diameter</b>	
Diameter	5-6 in.
<b>Power Pack</b>	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #3	Cummins QSX15 (425 HP @ 1800 RPM)
Compressor #3	900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Engine #4	CAT C15 (425 HP @ 1800 RPM)
Compressor #4	900/110 CFM @ PSI / 25.5/758 m3/min@kPA
<b>Rotation</b>	
Type	Rotary Table Drive
Speed	0-170 rpm
Torque	3,500 / (4,746 N-m)
<b>Feed System</b>	
Type	Heavy-duty chains through cluster sprocket
Pulldown	25,000 lbs. / 11,340 kg.
<b>Tower</b>	
Construction	4 main member, open front, rectangular steel tubing
#1 Single pass depth	40 ft. / 12.2 m.
#2 Single pass depth	50 ft. / 15.2 m.
<b>Undercarriage</b>	

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<b>Type</b>	Excavator
<b>Option #1</b>	Options Contact your local IR distributor for a complete list of options.
<b>Weight</b>	Weight & Dimensions Varies according to drill pipe: 60,000 - 62,000 lb / 27,216-28,123 kg
<b>Hard</b>	Material To Be Drilled Yes
<b>Medium</b>	Yes
<b>Soft</b>	Yes
<b>Quarry</b>	Drill Application Yes
<b>Rotary</b>	Drilling Method Yes
<b>DHD</b>	Yes



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## Infrastructure - Drilling Solutions

### DHD - DM45/SP

**Select Model:**

<a href="#">CM695D</a>
<a href="#">DM25/SP</a>
<a href="#">DM30</a>
<a href="#">DM45/HP</a>
<a href="#">DM45/SP</a>
<a href="#">DM-L/HP</a>
<a href="#">DM-M2</a>



The DM45/SP is a crawler-mounted hydraulic rotary table drive, drill rig designed to produce 50 ft. (15.2 m) of clean hole in a single pass. Hole diameter capability is 5-1/2 to 6-3/4 in. (139.7 to 171.5 mm) to a depth of up to 50 ft. (15.2 m) with a downhole hammer (high-pressure air package). Feed pressure generates a bit load force of up to 25,000 lb. (11,340 kg). An optional angle drilling system is available.

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	<b>Nominal Hole Diameter</b>		
Diameter			5-7 in.
	<b>Power Pack</b>		
Engine #1			Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1			900/350 CFM @ PSI / 25.5/2413 m3/min@kPA
Engine #2			CAT C15 (525 HP @ 1800 RPM)
Compressor #2			900/350 CFM @ PSI / 25.5/2413 m3/min@kPA
Engine #3			Cummins QSX15 (600 HP @ 1800 RPM)
Compressor #3			1070/350 CFM @ PSI / 30.30/2,413 m3/min@kPA
Engine #4			CAT C16 (600 HP @ 1800 RPM)
Compressor #4			1070/350 CFM @ PSI / 30.30/2413 m3/min@kPA
	<b>Rotation</b>		
Type			Rotary table w/kelly drive
Speed			0-200 rpm
Torque			4,000 ft-lb / (5,424 N-m)
	<b>Feed System</b>		
Type			Chain and cable
Pulldown			25,000 lbs. / 11,340 kg.
	<b>Tower</b>		
Type			Single Pass
Pipe Length			50 ft. / 15.2 m.
			4 member open front with rectangular steel

<b>Construction</b>	tubing
<b>Type</b>	Undercarriage Excavator-type
<b>Option #1</b>	Options Contact your local IR distributor for a complete list of options.
<b>Height (Tower Up)</b>	Weight & Dimensions 76-1/2 ft. / 23.3 m
<b>Approx. Working Weight</b>	75,000 - 78,000 lbs. / 34,020 - 35,400 kg.
<b>Hard</b>	Material To Be Drilled Yes
<b>Medium</b>	Yes
<b>Mining</b>	Drill Application Yes
<b>Quarry</b>	Yes
<b>DHD</b>	Drilling Method Yes



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## Infrastructure - Drilling Solutions

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**Select Model:**

<a href="#">LM100A</a>
<a href="#">CM348</a>
<a href="#">ECM350</a>



This agile, powerful drill climbs steep grades over roughest ground, and takes the punishment. You have seen thousands of them on construction jobs of all kinds around the world. The basic ECM350 design has seen many improvements in its years of service ? but every drill produced has set the world standard for reliability and performance in its time. The ECM350 is also a fine quarry drill when teamed with an Ingersoll-Rand air compressor. This high-performance team gets more work done faster, more efficiently, and keeps doing it longer than anything else in its class.

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	Nominal Hole Diameter	
Diameter		2-1/2 - 5-1/2 in.
	Drifter	
Drifter #1		VL140
Hole Diameter #1		2.5-4 " / 64-102 mm
Rotation Speed #1		0 - 72 rpm
Frequency #1		2100 BPM
Air Consumption #1		750 SCFM @ 100 PSI / 21.2 m3/min @ 7 kg/cm2
Stroke #1		5-1/2 in. / 140 mm.
Bore #1		5-1/2 in. / 140 mm.
Weight #1		421 lb. / 191 kg.
	Guide	
Guide Dump #1		180 °
Guide Swing (L/R)		50 deg / 35 deg
	Boom	
Boom Swing (L/R) #1		40 ° / 35 °
Boom Lift (Up/Down) #1		45 ° / 15 °
	Air Rotary Head	
Weight		554 lb. / 252 kg.
Torque Max.		1492 Nm @ 8.4 kg/cm <sup>2</sup> / (1100 lb-ft @ 120 PSI)
Rotation		0 - 72
Air Consumption		120 CFM @ 50 RPM & 90 PSI / 3.4 m3/min @ 50 RPM & 6.3 kg/cm2
Gear Ratio		33:1
Horse Power		2.23 kw @ 6.3 kg/cm <sup>2</sup> (3.0 hp @ 90 psig) / 3.13 kw @ 8.4 kg/cm <sup>2</sup> (4.2 hp @ 120 psig)
	General	
Feed/Pullback Force		3,000 lb / 1,361 kg

<b>Downhole Drills</b>	
O.D. #1	3.62 in. / 92 mm.
Length (bit ext.) #1	45.7 in. / 1161 mm.
Air Consumption @ 10.5 kg/cm <sup>2</sup> (150 PSIG) #1	5.1 m <sup>3</sup> /min / (180 SCFM)
Air Consumption @ 17.6 kg/cm <sup>2</sup> (250 PSIG) #1	9.9 m <sup>3</sup> /min / (350 SCFM)
Drill #2	DHD350R
Hole Diameter #2	5-1/8 - 5-1/2 in. / 130-140 mm.
Weight (less bit) #2	151 lb. / 68.5 kg.
O.D. #2	4.5 in. / 114 mm.
Length (bit ext.) #2	54.6 in. / 1388 mm.
Air Consumption @ 10.5 kg/cm <sup>2</sup> (150 PSIG) #2	7.9 m <sup>3</sup> /min / (280 SCFM)
Air Consumption @ 17.6 kg/cm <sup>2</sup> (250 PSIG) #2	14.7 m <sup>3</sup> /min / (520 SCFM)
<b>Crawler Drill Specifications</b>	
Net weight	12,900 lb. / 5851 kg.
Overall shipping length	12 ft. 0 in. / 3645 mm.
Width	8 ft 0 in. / 2438 mm.
Height (vertical guide)	18 ft. 10 in. / 5753 mm.
Steel change	12 ft. / 3645 mm.
Drill travel	14 ft. 3 in. / 4356 mm.
Max. horizontal boom swing	40° left, 35° right
Max. vertical boom movement	45° above, 15° below
Max. guide swing	50° left, 35° right
Max guide dump	180°
Ground clearance	12 in. / 292 mm.
Grouser width	10 in. / 254 mm.
<b>Weight &amp; Dimensions</b>	
Ground Clearance	12 " / 292 mm
Shipping Width	96 " / 2438 mm
Shipping Length	144 " / 3645 mm
Approx. Working Weight	12,900 lbs. / 5851 kg.
<b>Material To Be Drilled</b>	
Hard	Yes
Medium	Yes
Soft	Yes
<b>Drill Application</b>	
Mining	Yes
Construction	Yes
Quarry	Yes
<b>Drilling Method</b>	
Drifter	Yes



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## Infrastructure - Drilling Solutions

### Hydraulic Crawler - ECM-720

**Select Model:**

<a href="#">ECM470</a>
<a href="#">ECM580</a>
<a href="#">ECM590</a>
<a href="#">ECM660II</a>
<a href="#">ECM-720</a>



They said it couldn't be done...they were wrong. The new ECM-720 crawler drill delivers a perfect balance of productivity and cost efficiency. Hole straightness, faster penetration rates, long accessory life, and increased profitability are just a few of the results you can expect with the ECM-720.

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	Nominal Hole Diameter	
Diameter		4-1/2 - 5-1/2 in.
	Drifter	
Type		Montabert HC-200A
	Boom & Guide	
Boom Swing		45 deg right / 20 deg left maximum
Vertical Boom Movement		50 deg up / 20 deg down maximum
Guide Swing		20 deg right / 90 deg left maximum
Guide Dump		135 deg maximum
Boom Extension		36 in. / 914 mm
Guide Extension		5 ft / 1,524 mm
Overall Guide Length		27 ft 6 in / 8.4 m
Drifter Travel		16 ft. 11 in. / 5.15 m
	Engine	
Type		CAT 3176 C-10
Rated Power		365 HP / 272 kW
Operating Speed		1,800 rpm
	Compressor	
Type		Ingersoll-Rand Rotary Screw
Volume		480 CFM / 13.6 m3/min
Pressure		150 PSI / 10.3 BAR
	Cab & Controls	
Operator Cab		ROPS/FOPS
Noise level		80 dBA
	General	
Gradeability		35 deg (70 percent) °
Tramming Speed		2.0 mph / 3.3 km/hr
Ground clearance		17 in. / 432 mm.
Grouser Width		13-3/4 in. / 349 mm mm.
Rod Changer Capacity		(6) 12 ft (3.66 m) / (6) 14 ft (4.27 m) opt.
	Shipping Information	
Weight		45,900 lb / 20,820 kg

<b>Width</b>		8 ft 3 in / 2.5 m
<b>Length</b>		35 ft 8 in / 10.9 m
<b>Height</b>		10 ft 8 in / 3.3 m
	<b>Material To Be Drilled</b>	
<b>Hard</b>		Yes
<b>Medium</b>		Yes
<b>Soft</b>		Yes
	<b>Drill Application</b>	
<b>Mining</b>		Yes
<b>Construction</b>		Yes
<b>Quarry</b>		Yes
	<b>Drilling Method</b>	
<b>Drifter</b>		Yes



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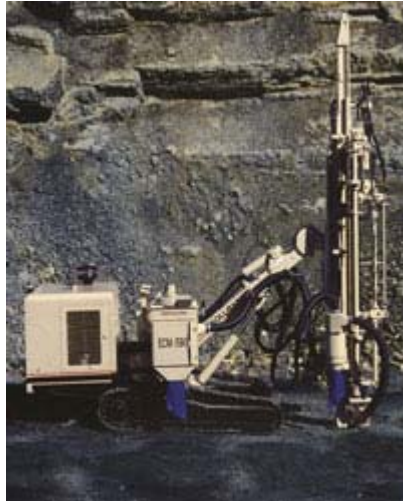


## Infrastructure - Drilling Solutions

### Hydraulic Crawler - ECM590

**Select Model:**

<a href="#">ECM470</a>
<a href="#">ECM580</a>
<a href="#">ECM590</a>
<a href="#">ECM660II</a>
<a href="#">ECM-720</a>



The ECM-590 is a self-contained, cableless hydraulic crawler drill capable of drilling up to 4 in. (102 mm) holes. It is available in either a YH70 drifter and rod rack configuration for smaller hole work, or with a YH80 and rod changer for higher production requirements. An extended guide option for 20 ft. (6.1 m) starter steel is available.

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Drilling Solutions

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	<b>Nominal Hole Diameter</b>		
Diameter	2-1/2 - 4-1/2 in.		
	<b>Drifter</b>		
Drifter #1	YH70		
Hole Diameter #1	2.5-4 " / 64-102 mm		
Rotation Speed #1	0-200 rpm		
Frequency #1	2800 BPM		
Weight #1	419 lb. / 190 kg.		
Steel Size #1	T45/T38		
Drifter #2	YH80A		
Hole Diameter #2	2.5-4.5 in. / 64-114 mm.		
Rotation Speed #2	0-200 rpm		
Frequency #2	2600 BPM		
Weight #2	462 lb. / 210 kg.		
Steel Size #2	T51/T45		
Hydraulic Pressure	2130 psi / 150 kg/cm?		
	<b>Boom &amp; Guide</b>		
Horizontal Boom Swing	30 deg R / 34.6 deg L		
Vertical Boom Movement	51 deg up / 15 deg down		
Guide Swing	48 deg R / 40 deg L		
Guide Dump	180 deg		
Boom Extension - YH70 (YH80A)	48 in (30 in) / 1,219 mm (762 mm)		
Drifter Travel - YH70 (YH80A)	15 ft 4 in (14 ft) / 3,099 mm (4,267 mm)		
Guide Extension	4 ft / 1,219 mm		
Overall Guide Length	23 ft 8 in / 7,214 mm		
	<b>Engine</b>		
Type	Cummins 6CT8.3		
Rated Power	215 HP / 159 kW		
Operating Speed	2350 rpm		

<b>IR Rotary Screw Compressor</b>	
<b>Compressor pressure(max)</b>	140 psig / 9.8 kg/cm2
<b>Compressor volume</b>	250 cfm / 7 m <sup>3</sup> /min
<b>General</b>	
<b>Gradeability</b>	35 °
<b>Tramming Speed</b>	2 mph / 3.3 km/hr
<b>Grouser Width</b>	12 in. / 305 mm.
<b>Steel length</b>	starter rod 14 ft. / 4.27 m.
<b>Weight &amp; Dimensions</b>	
<b>Length</b>	232.9 " / 5918 mm
<b>Weight #2</b>	24,500 lb. / 11,150 kg.
<b>Ground Clearance</b>	18 " / 457 mm
<b>Shipping Width</b>	95.98 " / 2438 mm
<b>Shipping Height</b>	112 " / 2845 mm
<b>Material To Be Drilled</b>	
<b>Hard</b>	Yes
<b>Medium</b>	Yes
<b>Soft</b>	Yes
<b>Drill Application</b>	
<b>Construction</b>	Yes
<b>Drilling Method</b>	
<b>Drifter</b>	Yes



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## Infrastructure - Drilling Solutions

### Pneumatic Crawler - LM100A

**Select Model:**

<a href="#">LM100A</a>
<a href="#">CM348</a>
<a href="#">ECM350</a>



The LM100A is a small class pneumatic Crawler?, capable of drilling 1-3/4" to 4- 1/2" (44 - 114 mm) diameter holes. It can be equipped with either of two drifters or a BRH rotary head for downhole drilling. The LM100A is ideal for applications in confined areas where hand-held tools are not enough, and is light enough to transport by helicopter. Like all Ingersoll-Rand crawler drills, the LM100A is "Abuse Resistant". It keeps coming back for more!

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Nominal Hole Diameter	
Diameter	1-3/4 - 2-1/2 in.
Carrier	72 " / 1845 mm
Overall Track Length	9 " / 230 mm
Ground Clearance	20 °
Oscillation	4.5 HP
Air Motors	30 °
Gradeability	0-2 mph / 0-3.2 km/hr
Tramming Speed	
Type	Ingersoll-Rand YD90
Hole Diameter #1	1.75-2.5 " / 44-64 mm
Frequency #1	1600 BPM
Air Consumption #1	375 scfm @ 100 psi & 50 rpm / 10.6 m3/min @ 7 kg/cm2 & 50 rpm
Stroke #1	3.4 in. / 85 mm.
Bore #1	3.5 in. / 90 mm.
Steel Size #1	10 ft / 3048 mm
Drifter #2	VL120
Hole Diameter #2	2 - 3.5 in. / 51 - 89 mm.
Frequency #2	1900 BPM
Air Consumption #2	600 SCFM @ 50 RPM & 100 psi / 17.0 m3/min @ 50 RPM & 7 kg/cm2
Stroke #2	3.62 in. / 92 mm.
Bore #2	4.75 in. / 120 mm.
Steel Size #2	10 ft / 3048 mm
Guide Dump #1	75 °
Guide Swing (L/R)	45 deg/45 deg

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<b>Guide Extension #1</b>	29 " / 750 mm
<b>Drill Rod Length</b>	10 ft. / 3 m
<b>Feed Motor Pull</b>	3000 lbs. / 1360 kg.
<b>Boom</b>	
<b>Boom Swing (L/R) #1</b>	30/35 °
<b>Boom Lift (Up/Down) #1</b>	45/30 °
<b>Coverage Length</b>	107 " / 2720 mm
<b>Max. Drill Height (Horizontal)</b>	99 " / 2510 mm
<b>BRH Rotary Head</b>	
<b>Weight</b>	304 lbs. / 138 kg.
<b>Torque Maximum</b>	700 lb.-ft. / 96.7 kg.-m
<b>Rotation Range</b>	0 - 50 RPM
<b>Air Consumption</b>	120 SCFM @ 50 RPM & 100 psi / 3.39 m3/min @ 50 RPM & 7 kg/cm2
<b>Gear Ratio</b>	20:1
<b>Horse Power @ 100 psi (7 kg/cm)</b>	4.5 HP / 3.35 kW
<b>Weight &amp; Dimensions</b>	
<b>Width</b>	75 " / 1905 mm
<b>Length (Boom @45°)</b>	195 " / 4950 mm
<b>Minimum Height</b>	44 " / 1120 mm
<b>Height (Boom @45°)</b>	188 " / 4775 mm
<b>Hole Size</b>	1.75-4.5 " / 44-114 mm
<b>Weight Less Drifter</b>	5400 lbs. / 2450 kg.
<b>Material To Be Drilled</b>	
<b>Hard</b>	Yes
<b>Medium</b>	Yes
<b>Soft</b>	Yes
<b>Drill Application</b>	
<b>Mining</b>	Yes
<b>Construction</b>	Yes
<b>Quarry</b>	Yes
<b>Drilling Method</b>	
<b>Drifter</b>	Yes



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