795F AC
Mining Truck

**Engine**

<table>
<thead>
<tr>
<th>Engine Model</th>
<th>Cat® C175-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Power – SAE J1995</td>
<td>2536 kW   3,400 hp</td>
</tr>
</tbody>
</table>

**Operating Specifications**

<table>
<thead>
<tr>
<th>Nominal Payload Capacity</th>
<th>313 tonnes 345 tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Machine Operating Weight (GMW)</td>
<td>570 678 kg 1,257,000 lb</td>
</tr>
</tbody>
</table>
The Cat® 795F AC is a completely new truck model for Caterpillar, filling the gap between the 793F and 797F and providing a Cat truck for every customer preference. The truck has a Cat integrated AC drive system, developed and supported by Caterpillar.

795F AC Features

High Performance Engine
The Cat® C175-16 engine offers the perfect balance between power, robust design and economy.

Focus on Safety
Wide access stairways, standard object detection, industry leading dynamic retarding, four corner wet disc brakes and traction control with automatic front brake assist inspire operator confidence.

Enhanced Serviceability
Modular components, grouped service locations and more ground accessible maintenance points translate into less downtime.

Reliable AC Electric Drive System
The Cat AC electric drive power train is 100% Caterpillar designed, integrated and supported.

Comfortable Cab
Spacious and quiet the cab also offers excellent visibility with intuitive, easy to learn controls.

Mechanical Drive Legacy
Using many components from the 797F – the 795F AC emphasis is on durability.

Truck Body Options
A large number of Caterpillar designed and built body choices ensures the body will fit the application and enhance the performance of the truck.

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Power Train – Engine
The Cat® C175-16 engine is built for power, reliability and efficiency.

Engine
The Cat® C175-16 quad turbocharged and air-to-air aftercooled diesel engine has enhanced power management capability for maximum hauling performance in the most demanding mining applications.

Design
The C175-16 is a 16-cylinder, four-stroke design that uses long, effective power strokes for optimum efficiency.

EPA Compliant
The Cat C175-16 engine is compliant with U.S. Environmental Protection Agency Tier 2 emissions requirements.

Variable Cooling
Variable fan speed directs maximum power to the power train, saving fuel when operating conditions allow.

Long Life
High displacement with a low rpm rating means more time on the haul roads and less time in the shop.

Cat Common Rail Fuel System
Electronically controlled, this high pressure fuel system senses operating conditions and controls fuel delivery for good fuel efficiency while allowing the engine to meet emissions regulations without sacrificing performance, reliability or durability.

Cooling System
The flexible core design offers long life, high durability, and ease of service.

Starter Options
Air start systems are available as well as an electric start option which eliminates the air system from the truck.

Innovative Layout
Service Technicians will appreciate the engine layout with good top end access and turbo’s grouped up front. Internal oil and fuel passages make for a clean layout that is easier to service and reduces engine exchange time at planned replacement. A sight level gauge replaces the dip stick.
Power Train – Cat AC Electric Drive
More power to the ground for greater productivity.

Why Electric Drive?
Cat mechanical drive trucks are the standard of the industry and are favored in most applications. Some customers, however, prefer electric drive for specific applications and situations.

100% Caterpillar
Designed and manufactured by Caterpillar, the 795 is the first AC electric drive truck that is single sourced from one manufacturer and supported by the best dealer network in the industry. The 795 power train works seamlessly with the C-175 engine and offers unsurpassed Safety, Serviceability and Performance.

Modular Design for Excellent Serviceability
The modular design allows ease of component removal and installation. The engine, generator, motors, inverter, grid, and final drives can be removed independently. The rear mounted generator results in better chassis weight balance and is connected to the engine with an isolated drive shaft making generator alignment simple.

Superior Control Yields Excellent Operator Confidence
The Cat AC drive system has the best retarding, braking, and control in the industry. Class leading dynamic retarding coupled with full time traction control with automatic front brake blending at all speeds results in superior operator control and confidence.

High Voltage – Lower Heat
The Cat AC drive is a high voltage system (2,400 volts) that operates at relatively low current. The result is lower heat generation and longer component life.

The Cat AC Electric Drive in Propel
The C175-16 diesel engine drives the rear mounted Generator through an isolation coupler. The AC power is rectified to a nominal 2,400 volts to form the DC link.

The DC link supplies power to the Inverter where IGBT’s convert the DC signal to 3-phase AC to drive the traction motors. Motor output drives the wheels through a double reduction final drive.
**Cat AC Electric Drive in Retard**

During retarding the wheel motors become generators. Motor power is fed back through the DC link. The power is fed to the contactor and chopper circuits and then exhausted through the radial grid. An AC fan blows air across the grid to dissipate the power and control retarding speed.

**Generator/Alternator**

The chassis mounted 795F AC traction generator is a three-phase, two bearing design. The excitation system is brushless which has longer maintenance intervals than brush type systems.

**Inverter**

The Inverter uses Mitsubishi Electric IGBT Phase Modules to control the rimpull, direction and speed of the truck. Mitsubishi Electric is the leader in IGBT technology.

**Traction Motors**

Each traction motor is a 3-phase AC induction type. The high voltage, low current motor is mounted to the rear axle and is trolley capable.

**Radial Grid**

The radial design grid features the highest retarding power in the industry. The grid sits well back on the deck for excellent visibility to the right side.

**Variable Blower Cooling**

Cooling air is provided by a variable flow system that adjusts cooling flow to the needs of the system. This allows maximum power to the motors for excellent propel performance.

**Additional Features**

The grid dry function dries the grid quickly in inclement weather. Automatic roll back prevention prevents the machine from moving in a direction opposite the operator’s intent. Grid power monitoring with front brake blending to prevent grid overheating.
Engine/Power Train Integration
Electronically combined power train components optimize performance.

Control Software and Integration
Caterpillar links the power train components with a complete system of proprietary software. The 100% Caterpillar design allows the software developers full access to all subsystems. The result is a control and integration package that works seamlessly. The 795 is simple to learn and simple to operate. In addition, the truck has excellent operating traits.

- Excellent slow speed control for safety within the service areas.
- Excellent throttle response on acceleration to move out of the loading or dump areas.
- Dynamic retarding with automatic front brake assist.
- Automatic traction control in forward and reverse.

Cat Data Link
All computer systems are linked to:
- Optimize power train performance.
- Increase reliability and component life.
- Reduce operating costs.
Cat Braking Systems
Superior braking control lets operators focus on productivity.

**Industry Leading Dynamic Retarding**
The radial grid is rated at 4.75 MW (6,365 hp) – allowing excellent control of the truck speed in long retarding applications. The radial design is light, efficient and quiet.

**Four Corner Oil Cooled Brakes for Additional Retarding**
In addition to class leading dynamic retarding – Cat four corner, oil cooled service brakes give additional retarding capability. These are the same sized brakes used on the 797. The 795 offers exceptional non-fade braking and supplemental retarding at all speeds.

**Traction Control with Automatic Front Brake Blending**
If the truck senses any slip – the front brakes will automatically engage. The addition of front braking keeps the truck moving in the intended direction and the operator in control. This blended braking capability is an industry first and has been enthusiastically received by operators. In addition, the operator can select full time front brake blending.

**Automatic Retarding Control**
Operator controlled – ARC engages automatically and maintains speed consistently. A simple toggle switch is used to adjust retarding speed.

**Control to Prevent Exceeding Retarding Capability**
Built into the software is a Grid Thermal Calculator that constantly monitors power to the grid. When dynamic retarding capability is exceeded the mechanical brakes are blended in automatically. This will continue as long as necessary. Often this is a transient condition. The operator is alerted to take corrective action if this continues. The brake blending is smooth and seamless.

**Brake Design**
Cat oil cooled brakes are designed with large discs and plates for reliable and adjustment free operation. They are enclosed and sealed to prevent contamination and provide long life.

**Parking Brake**
The oil cooled, spring applied, hydraulically released parking brake on all wheels provide superior parking capability on grades up to 15%.

**Anti-Rollback**
Automatically applies service brakes to prevent the truck from rolling from a stop opposite the intended direction of travel.

**Reverse Shift Inhibit**
Ensures reverse propulsion is not applied when the machine is moving forward.
Structures
Building on the legacy of superior, long life structures.

Box Section Design
The 795F AC uses a box-section design, incorporating forgings and castings in high stress areas with deep penetration, continuous wrap-around welds to resist fatigue from racking loads.

- **Steel Structures** – Mild steel used throughout the frame provides flexibility, durability and resistance to impact and allows for field repairs with common weld practices.
- **Castings** – Large radii castings dissipate stress in areas of high stress concentration. Castings allow welds to be placed in lower stress areas for longer frame life.

Integral Four-Post ROPS Cab
Resiliently mounted to the main frame to reduce vibration and sound, the integral ROPS cab is designed as an extension of the truck frame.

Suspension System
Designed to dissipate haul road and loading impacts for longer frame life and a more comfortable ride.

- **Durable Design** – Large diameter cylinders with nitrogen over oil design for long life and minimal maintenance.
- **Front Cylinders** – Have preset caster and camber and are mounted to the frame. They also serve as steering king pins for a tight turning radius.
- **Rear Cylinders** – Allows axle oscillation and absorb bending and twisting loads from the haul road isolating them from the main frame.

Four-Bar Link Rear Suspension
Directs a more even load distribution into the main frame – operators report a more secure feeling of the truck being well connected and under control.

Steering System
Single tie rod steering system is simpler and requires less maintenance.
Truck Body Systems
Caterpillar designed and built for rugged performance and reliability.

Cat Bodies for Cat Trucks
Integral to the truck the body is designed to fit with the chassis and work as part of the truck system. Each body is sized to meet the payload requirements without compromise to vehicle balance, braking or control.

Cat Body Choices
Body options include the popular MSD II (Mine Specific Design) and Gateless Coal Bodies. Liner options fit the body to the application.

- **MSD II Body** – Based on a mine site evaluation the body is sized and configured to meet the specific needs dictated by fragmentation, abrasion, cohesion, and the loading tool. This body achieves an excellent balance of payload and durability.
- **Gateless Coal Body** – Eliminating problematic tail gates – the Gateless Coal Body is intended for dedicated coal haulage.
Monitoring System
Vital machine health and payload data for the operator.

**VIMS™ 3G Monitoring System**
Provides critical health and payload information in real-time to keep the 795 performing at optimum levels. VIMS is able to monitor information from all vehicle systems. 10 different machine parameters can be viewed at once. Data can be downloaded easily by Service Technicians for troubleshooting, planning and lowering costs.

**Advisor Display**
The Advisor display provides real-time performance, maintenance and diagnostic data to the operator or service technician. A large number of machine parameters can be viewed including temperature, pressure, speed, and payload.

**Payload Management**
Information is available to manage payloads to improve fleet effectiveness and loading tool match and to prevent overloading to help extend component life and lower operating and maintenance costs.

**External Payload Indicators**
Standard external lights or optional digital display to help loading tool operator reach payload target and minimize overloading.

**Road Analysis Control**
Optional system measures frame rack, bias and pitch to help identify haul road problems so they can be repaired. This leads to improved cycle time, component lives and fuel efficiency.

**VIMSpc**
Is off-board software reporting program that allows service personnel to view machine health and productivity data. The reports can then be used to plan more effective machine management to reduce downtime and lower operating costs.

**VIMS Supervisor**
Optional software allows mine personnel to monitor and manage VIMS data for early problem detection and better fleet management.
Operator’s Station
Ergonomically designed for all-day comfort, control and productivity.

Enhanced Operator Awareness
The standard Cat Detect system uses Radar and Cameras to give the operator audible alarms and visual awareness of detected objects at start up and low speeds. This shows a strong commitment to operator and operational safety.

Ergonomic Cab Layout
Controls are intuitive and within easy reach making the operator more comfortable, productive and safe. Operator feedback for the 795 is easy to learn and easy to control.

Viewing Area
The large viewing area offers exceptional visibility, allowing the operator to drive with confidence for high productivity. The right hand platform is free of obstructions for a clear view.

1) Air suspension seat with three-point operator restraint 2) Hoist lever 3) Secondary brake pedal 4) Advisor display
5) Adjustable steering column 6) Vehicle directional control 7) Gauges 8) Storage compartment
9) Full size trainer seat 10) Electric powered operator window 11) Turn signal and wiper controls
17) Dome lights
Customer Support
Best dealer network with best service and parts support.

Commitment to Meet Your Needs
Cat dealer 24/7 support offers solutions, services and products to help lower costs, enhance productivity and manage your fleet anywhere in the world. Expert technicians have the knowledge, experience, training, parts and tooling to keep your 795 running at high availability.

Product Support
Caterpillar supports the 795 with a worldwide network of parts distribution, dealer service centers and technical training facilities. Our global dealer network is ready to meet your support needs around the clock and around the world.

Service Support
Cat dealers offer a wide range of service plans to maximize uptime and return on your investment, including:

- Preventive Maintenance Programs
- Diagnostic Services such as Scheduled Oil Sampling and Technical Analysis
- Rebuild and Remanufactured Product Options
- Customer Support Agreements

Application Awareness
Application and site-specific factors such as material density, loading practices, payload, speed, grade and haul road design and maintenance influence the cost to operate and maintain your haulage fleet. Your Cat dealer can provide help in understanding the effects application factors and operating practices have on maintenance and operating costs. They also offer training to help operators improve productivity, decrease downtime, reduce operating costs and enhance safety.
Serviceability
Reduced maintenance time results in more productivity.

Modular Design
Major components can be serviced individually with minimal removal and installation time. Work platforms and step/stairs are located in key service areas. Rear mounted generator is separate from the engine and can be removed without removing the body – wheel motors are separate from final drives. Engine turbos (4) are grouped in the front of the engine.

Ground Level Access
Grouped service points allow convenient access to tank levels, filters, drains and S·O·S™ oil sampling ports. The battery box, Auto Lube system and VIMS data port are also ground level accessible.

Servicing Ease
Bumper Service Center features lock out tag out, battery box and disconnects for battery and power train. Chassis filters for steering, braking and hoist systems are designed for 1,000 hour life.

Sealer Electrical Connectors
Electrical connectors are sealed to lock out dust and moisture. Harnesses are braided for protection. Wires are color coded for ease of diagnosis and repair.
Safety
Cat mining machines/systems are designed with safety as the first priority.

Product Safety is a Commitment
Caterpillar continues to be the industry leader in proactive development of machines and features that exceed safety standards.

Cat Detect Object Detection
Standard on the 795 Cat Detect is a fully integrated radar and camera system that provides audible and visual indications of detected objects around the truck while the truck is stopped and at low speeds. Cameras supplement the radar system and are selectable by a touch screen interface.

Integrated Blended Braking with Traction Control
Front brakes are automatically blended when slip is sensed to give excellent control in slippery conditions. The operator can also choose full time front brake blending. Front brakes are also automatically blended when dynamic retarding approaches 90% of its capacity. Front brake blending yields superior control and high operator confidence.

Access/Egress
Standard 60 mm (24") stairways with an optional Powered Access Stairway allow easy and safe access and egress.

GVW within Tire Manufacturers Guidelines
At rated GVW the 795F AC is within tire loading guidelines for approved 56/80R63 and 59/80R63 tires. Manufacturer’s Guidelines.
Sustainability
A variety of features improve sustainability in areas of decreasing waste, extending component life and lowering emissions levels.

Sustainability Features
The 795F AC Mining Truck offers continuous rear axle filtration, extended life filters and extended maintenance intervals which aid in decreasing the amount of waste contributed to our environment.

Remanufacturing Options
Cat trucks are designed to be rebuilt and have logged over 100,000 frame hours in many applications. Components are designed to be remanufactured for multiple service lives.

Engines with Advanced Technology
Engines with advanced technology contribute less emissions to the environment while maintaining fuel efficiency.

Advanced Surface Technology (AST)
Advanced Surface Technology (AST) is a replacement for hard chrome coatings on some steel parts, including suspension and hoist cylinder rods. This technology improves wear resistance and reduces repair time. Chrome has been eliminated to reduce environmental impact.
### Engine

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<thead>
<tr>
<th>Model</th>
<th>Cat® C175-16</th>
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<tr>
<td>Gross Power –</td>
<td>2536 kW 3,400 hp</td>
</tr>
<tr>
<td>SAE J1995</td>
<td></td>
</tr>
<tr>
<td>Bore</td>
<td>175 mm 6.9 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>220 mm 8.7 in</td>
</tr>
<tr>
<td>Displacement</td>
<td>85 L 5,187 in³</td>
</tr>
</tbody>
</table>

- Power ratings apply at 1,800 rpm when tested under the specified condition for the specified standard.
- Ratings based on SAE J1995 standard air conditions of 25° C (77° F) and 99 kPa (29.61 Hg) dry barometer. Power based on fuel having API gravity of 35 at 16° C (60° F) and an LHV of 42 780 kJ/kg (18,390 Btu/lb) when engine used at 30° C (86° F).
- No engine derating required up to 3203 m (10,500 ft) altitude.
- Compliant with U.S. Environmental Protection Agency Tier 2 emissions standards.

### Weights – Approximate

<table>
<thead>
<tr>
<th>Gross Machine</th>
<th>570 678 kg 1,257,000 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Weight (GMW)</td>
<td>202 270 kg 445,524 lb</td>
</tr>
<tr>
<td>Body Weight Range</td>
<td>38 500-54 500 kg (84,900-120,000 lb)</td>
</tr>
</tbody>
</table>

- GMW depends on tire selection. Consult your tire manufacturer for maximum loaded top speed.
- Chassis weight with 100% fuel, hoist, body mounting group, rims and tires.
- Body weight varies depending on how body is equipped.

### Operating Specifications

| Nominal Payload Capacity | 313 tonnes 345 tons |
| Top Speed – Loaded       | 64 km/h 40 mph |
| Steer Angle              | 34 degrees |
| Turning Diameter – Front | 34 m 112 ft |
| Turning Circle  clearance Diameter | 38.7 m 127 ft |

- Refer to the Cat® Mining Truck 10/10/20 Overload Policy (AEXQ0250) for maximum gross machine weight limitations.

### Final Drives

- Total Reduction Ratio 35:1

### AC Drive System

- Generator/Alternator Brushless, remote mounted, dual bearing
- Controls IGBT Inverter Technology, air cooled, pressurized cabinet with filtration
- Wheel Motor Rear axle mounted Cat AC induction
- Cooling System Variable speed, hydraulic cooling system

### Body Hoists

| Pump Flow – High Idle | 935 L/min 247 gal/min |
| Relief Valve Setting – Raise | 24 500 kPa 3,553 psi |
| Body Raise Time – High Idle | 26 Seconds |
| Body Lower Time – Float | 20 Seconds |
| Body Power Down – High Idle | 20 Seconds |

- Twin, two-stage hydraulic cylinders mounted inside main frame; double-acting cylinders in second stage.
- Power raise in both stages; power down in second stage.
- Automatic body-lower modulation reduces impact on frame.

### Braking System

- Oil Cooled Brakes – Retarding Capable at All Speeds
- Controls
  - Outside Diameter | 1067 mm 42 in |
  - Brake Surface – Front | 132 258.4 cm² 20,500.09 in² |
  - Brake Surface – Rear | 198 388 cm² 30,750.2 in² |
- Electric Retarding
  - Radial Grid Design | 4750 kW (6,370 hp) rated power |
  - Brushless AC Motor | 2400 kW (3,218 hp) output power |
  - Dynamic Retarding Power | 4750 kW 6,370 hp |
  - Blended Four Corner Retarding |
### Weight Distributions – Approximate

<table>
<thead>
<tr>
<th></th>
<th>Front Axle – Empty</th>
<th>Rear Axle – Empty</th>
<th>Front Axle – Loaded</th>
<th>Rear Axle – Loaded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48%</td>
<td>52%</td>
<td>33%</td>
<td>67%</td>
</tr>
</tbody>
</table>

### Capacity – MSD II – 100% fill factor

<table>
<thead>
<tr>
<th></th>
<th>Struck</th>
<th>Heaped (SAE 2:1)</th>
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<tbody>
<tr>
<td></td>
<td>121.5–211 m³</td>
<td>181–252 m³</td>
</tr>
<tr>
<td></td>
<td>159–276 yd³</td>
<td>237–330 yd³</td>
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</table>

- Contact your local Cat dealer for body recommendations.

### Service Refill Capacities

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank</td>
<td>3596 L</td>
<td>950 gal</td>
</tr>
<tr>
<td>Fuel Tank (optional)</td>
<td>7192 L</td>
<td>1,900 gal</td>
</tr>
<tr>
<td>Cooling System</td>
<td>1100 L</td>
<td>291 gal</td>
</tr>
<tr>
<td>Crankcase</td>
<td>310 L</td>
<td>82 gal</td>
</tr>
<tr>
<td>Final Drives, Each</td>
<td>341 L</td>
<td>90 gal</td>
</tr>
<tr>
<td>Steering Tank</td>
<td>210 L</td>
<td>55.5 gal</td>
</tr>
<tr>
<td>Steering System</td>
<td>300 L</td>
<td>79 gal</td>
</tr>
<tr>
<td>(Includes Tank)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brake/Hoist</td>
<td>508 L</td>
<td>134.2 gal</td>
</tr>
<tr>
<td>Brake/Hoist System</td>
<td>1500 L</td>
<td>396.3 gal</td>
</tr>
</tbody>
</table>

### Tires

- 56/80R63
- 59/80R63 (Bridgestone only)
- Productive capabilities of the 795F AC truck are such that, under certain job conditions, TKPH (TMPH) capabilities could be exceeded and, therefore, limit production.
- Caterpillar recommends the customer evaluate all job conditions and consult the tire manufacturer for proper tire selection.

### ROPS

- ROPS (Rollover Protective Structure) for cab offered by Caterpillar meets ISO 3471:2008 ROPS criteria.
- FOPS (Falling Objects Protective Structure) meets ISO 3449:2005 Level II FOPS criteria.

### Sound

- The operator sound pressure level measured according to work cycle procedures specified in ISO 6394 and 6396 is 76 dB(A) for cab offered by Caterpillar when properly installed and maintained and tested with doors and windows closed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

### Steering

- Gross Machine Operating Weight is 570 166 kg (1,257,000 lb).
Dimensions

All dimensions are approximate.
Shown with 220 m³ (288 yd³) MSD II Body.

1. Height to Top of ROPS  6327 mm  20 ft 9 in
2. Overall Length  15 146 mm  49 ft 9 in
3. Wheelbase  6725 mm  22 ft 1 in
4. Rear Axle to Tail  4411 mm  14 ft 6 in
5. Ground Clearance  750 mm  2 ft 6 in
6. Dump Clearance  1664 mm  5 ft 6 in
7. Loading Height – Empty  7040 mm  23 ft 2 in
8. Overall Height – Body Raised  15 445 mm  50 ft 8 in
9. Centerline Front Tire Width  6235 mm  20 ft 6 in
10. Engine Guard Clearance  1208 mm  4 ft 0 in
11. Overall Canopy Width  9449 mm  31 ft 0 in
12. Outside Body Width  8970 mm  29 ft 5 in
13. Inside Body Width  7856 mm  25 ft 9 in
14. Front Canopy Height  7800 mm  25 ft 8 in
15. Rear Axle Clearance  1016 mm  3 ft 4 in
16. Centerline Rear Dual Tire Width  5675 mm  18 ft 8 in
17. Overall Tire Width  8966 mm  29 ft 6 in
To determine gradeability performance: Read from gross weight down to the percent of total resistance. Total resistance equals actual percent grade plus 1% for each 10 kg/t (20 lb/ton) of rolling resistance. Usable rimpull will depend upon traction available and weight on drive wheels.

*At sea level, 30° C (86° F).
Contact factory for performance estimates based upon site specific temperatures and altitudes.
To determine retarding performance: Read from gross weight down to the percent effective grade. Effective grade equals actual % grade minus 1% for each 10 kg/t (20 lb/ton) of rolling resistance. The following charts are based on these conditions: 32°C (90°F) ambient temperature, at sea level, with 56/80R63 tires.

GROSS WEIGHT

SPEED

TOTAL RESISTANCE (Grade Plus Rolling)

E – Empty
L – Loaded

*At sea level, 30°C (86°F).
Contact factory for performance estimates based upon site specific temperatures and altitudes.
Standard equipment may vary. Consult your Cat dealer for details.

ELECTRICAL
- Alarm, Back-up
- Brushless Alternator, 150 ampere
- Batteries, 210-amp hour, low maintenance, 12-volt (2)
- Converter, 12-volt electrical
- Electrical System, 24-volt, 10, 15 and 20 amp
- Battery Charge Receptacle
- Lighting System
  - Back-up and Hazard Lights
  - Directional Signals (front and rear LED)
  - Front Stair Access/Service Deck
  - Stop/Tail Lights (LED)
- Engine Compartment
- VIMS, Blue Light (LED)
- Headlights, with Lo-Hi Beam Selector

OPERATOR ENVIRONMENT
- Air Conditioner with Automatic Climate Control
- 12-volt DC Power Supply (3)
- Coat Hook
- Cup Holder
- Diagnostic Connection Port
- Dome Courtesy Light
- Map Lights (2)
- Entertainment Radio Ready
  - 20 amp Switched/10 amp Memory
- Converter, Speakers and Wiring Harnesses
- Gauge/Indicators
  - Gauge Panel:
    - Drive Train (system temperature)
    - Brake Oil Temperature
    - Engine Coolant Temperature
    - Fuel Level
    - Torque Converter Oil Temperature
    - Electric Engine Control Fault Indicator
    - Electric Hour Meter
    - Speedometer
    - Tachometer
- Heater/Defroster, 10 310 kCal (40,912 BTU)
- Hoist, Body Control (electric)
- Horn (2)
- Cat Detect (Radar and Camera) System
- Mirrors, Right and Left
- ROPS Cab, Insulated/Sound Suppressed
- Air Starter, Turbine
- Air System Dryer
- Automatic Lubrication System
- Aux “Buddy” Dumping Quick Connect
- Aux Steering Quick Connect (towing)
- Blended Retarding System
- Driveline Guards
- Exhaust
- Fuel Tank, 3596 L (950 gal)
- Fast Fill Fuel System
- Fuel Filter with Water Separator
- Ground Level Battery Lockout
- Ground Level Engine Shut-down
- Ground Level Engine Start Lockout
- Ground Level Machine Lockout
- Ground Level Transmission Lockout
- Ground Level VIMS Data Port
- Hi-speed Crankcase Oil Change
- Hydraulic Filters, 1,000 hour
- Payload Indicator Lights
- Reservoirs (2 separate)
  - Brake/Hoist, Steering/Fan
- Rock Ejectors
- Service Points, Ground Level
- Sight Level Gauges for Hydraulic/Engine Oil
- S•O•SSM Sample Ports
- Supplemental Steering (automatic)
- Tie Down Eyes
- Tow Hooks and Pin (front)
  - Tow Pin (rear) (Empty truck only)
- Traction Control System
- Vandalism Protection Locks
- Vital Information Management System (VIMS)
  - Includes VIMS Payload Monitor with MAX Payload and Speed Manager

ANTIFREEZE
- Extended Life Coolant to –35°C (–30°F)
Optional equipment may vary. Consult your Cat dealer for details.

Access Platform, Rear Part of Chassis
Additional Lighting
Additional Retarding for Downhill Hauls
Air Start, Turbine, TDI
Antifreeze/Coolant Protects to –50°C (–58°F)

Body

**MSD II Body:**
- Body, MSD II, 181 m³ (237 yd³)
- Body, MSD II, 220 m³ (288 yd³)

**MSD II Body Attachments:**
- Extensions, 400 mm (~15 in) 206 m³ (270 yd³); Fits 181 m³ (237 yd³) body
- Extensions, 395 mm (~15 in) 237 m³ (310 yd³); Fits 220 m³ (288 yd³) body
- Extensions, 550 mm (~21 in) 248 m³ (324 yd³); Fits 220 m³ (288 yd³) body
- Extensions, 675 mm (~26 in) 252 m³ (330 yd³); Fits 220 m³ (288 yd³) body

**Films, Body**

**Gateless Coal Body:**
- Body, Gateless Coal, 352 m³ (460 yd³)

**Gateless Coal Body Attachments:**
- Extensions, 440 mm (~17 in) 382 m³ (500 yd³)
- Extensions, 875 mm (~34 in) 413 m³ (540 yd³)
- Extensions, 1060 mm (~41 in) 428 m³ (560 yd³)

**Body Heat**

**Body Mounting Groups**
- MSD II Body
- Gateless Coal Body

**Brake Wear Indicator Gauge**

**Cabin Air PreCleaner**

**Camera Only Vision System**

**Cat Comfort Air Suspension Trainer Seat**

**Cat Comfort Heated Operator Seat**

**Electric Powered Window, Right Side**

**Electric Starting System**

**Engine (High Altitude)***

**Engine Coolant and Oil Heater for Cold Weather Starts**

**Engine Delay Shutdown Timer**

**Filtration, Final Drive Oil Cooler**

**External Digital Payload Display**

**Fuel Tank (7192 L/1,900 gal)**

**Gauge, Brake Wear Indicator**

**Ground Access, Powered**

**Ground Access, Fixed, Reversed**

**Ground Access, Powered, Reversed**

**Heated Mirrors, RH**

**Heated Mirrors, LH**

**High Intensity Discharge (HID) Lighting**
- (front and rear)

**Horn, Air or Electric, LH or RH**

**Instructions (ANSI or ISO)**

**Language Monitors – English, Spanish, French, German, Italian, Portuguese, Dutch, Norwegian, Swedish, Estonian, Latin, Lithuanian, Slovakian, Slovenian, Greek, Roman, Russian, Polish, Czech, Hungarian, Icelandic, Finnish, Danish, Thai, Indonesian, Vietnamese, Malaysian, Chinese, Japanese, Korean, Croatian, Serbian, Mongolian, Hebrew, Turkish, Arabic**

**Machine Access, Reversed**

**Portable Fire Extinguisher**

**Retractable Front Sun Visor**

**Road Analysis Control (RAC)**

**Seat, Full Size, Trainer**

**Service Center, Pressurized System**

**Service Center, Non-Pressurized System**

**SL-V Grease Injectors**

**Wheel Chocks**

**Wheels, Wedge, 1041 mm (41 in)**

*For certain markets only.