

# PRODUCT SPECIFICATIONS FOR 794 AC



<b>Gross Power - SAE J1995</b>	2610 kW
<b>Standard Gross Power - SAE J1995</b>	2610 kW
<b>Engine Model</b>	Cat® C175-16
<b>Optional Gross Power - SAE J1995</b>	2312 kW
<b>Optional Gross Power - SAE J1995 (Option 2)</b>	2051 kW
<b>Rated Speed</b>	1800 r/min
<b>Net Power - SAE J1349</b>	2539 kW
<b>Emissions Rating</b>	Fuel Optimized
<b>Bore</b>	175 mm
<b>Stroke</b>	220 mm
<b>Displacement</b>	85 l
<b>Note (1)</b>	Contact factory for high altitude configuration.
<b>Note (2)</b>	Tier 4 / EU Stage V option available for regions that require these emissions standards.
<b>Note (3)</b>	Tier 4 / EU Stage V engine option Net Power - SAE J1349: 3434 HP (2561 kW)
<b>Nominal Rated Payload</b>	297 t

**Rated Gross Machine Weight** 521631 kg

**Chassis Weight** 193338 kg

**Body Weight** 29187 kg

**Note (1)** Consult your tire manufacturer for maximum tire load.

**Note (2)** Chassis weight with full fuel and fluids, standard & mandatory attachments, hoist, body mounting group, rims, and tires

**Note (3)** Refer to Cat Mining Truck 10/10/20 Overload Policy (AEXQ0250) for maximum gross machine weight limitations.

**Note (4)** Tier 4 Final / Stage V chassis weight: 426312 lb (193372 kg)

**Total Reduction Ratio** 35:1

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**Top Speed - Loaded** 60 km/h

**Generator/Alternator** Brushless, engine mounted, dual bearing

**Controls** IGBT Inverter Technology, air cooled, pressurized cabinet with filtration

**Wheel Motor** High-torque AC induction, rear axle mounted

**Cooling System** Variable speed, hydraulically driven cooling system

**Standard Tires** 53/80 R63

**Rims** 36" x 63"

**Note (1)** Quick Change Rims optional.

**Note (2)** Caterpillar recommends the customer evaluate all job conditions and consult tire manufacturer for proper tire selection and TKPH (TMPH) capabilities.

**Service Brakes** Four-Corner, Wet Disc, Oil Cooled, Hydraulically Actuated

**Front Wet Disc Brake Surface Area** 131473 cm<sup>2</sup>

**Rear - Wet Disc Brake Surface Area** 198388 cm<sup>2</sup>

**Standards** ISO 3450:2011

**Parking Brake** Four-corner, Multi-disc, Spring applied, Hydraulically Released

**Load Brake** Rear service brakes

**Dynamic Retarding Power - Continuous** 4086 kW

**Front Axle - Empty** 49 %

**Rear Axle - Empty** 51 %

**Front Axle - Loaded** 33 %

**Rear Axle - Loaded** 67 %

**Pump Flow - High Idle (HAA at 1,800 rpm)** 840 l/min

**Pump Flow - High Idle (LAA at 1.960 rpm)** 910 l/min

<b>Relief Valve Setting - Raise</b>	20884 kPa
<b>Body Raise Time - High Idle</b>	24 s
<b>High Idle Body Lower Time - Float</b>	20 s
<b>Total Cycle Time</b>	44 s
<b>Note (1)</b>	Twin, two-stage hydraulic cylinders mounted inside main frame; double-acting cylinders in both stages.
<b>Note (2)</b>	Power raise in both stages; power down in both stages possible.
<b>Note (3)</b>	Automatic body-lower modulation reduces impact on frame.
<b>Struck</b>	108-133 m <sup>3</sup> (142-175 yd <sup>3</sup> )
<b>Heaped (SAE 2:1)</b>	180-222 m <sup>3</sup> (236-290 yd <sup>3</sup> )
<b>Dump Body Plate Thickness Varies Depending on Body Selection - Floor Plate</b>	16 mm
<b>Dump Body Plate Thickness Varies Depending on Body Selection - Front Plate</b>	9 mm
<b>Dump Body Plate Thickness Varies Depending on Body Selection - Side Plate</b>	8 mm
<b>Dump Body Plate Thickness Varies Depending on Body Selection - Canopy Plate</b>	5 mm
<b>Note</b>	Contact your local Cat dealer for body recommendations.

<b>Fuel Tank</b>	4922 l
<b>Cooling System</b>	799 l
<b>Crankcase</b>	310 l
<b>Final Drive - Each</b>	254 l
<b>Hydraulic Tank</b>	1121 l
<b>Hydraulic System - Including Tank</b>	1458 l
<b>Diesel Exhaust Fluid Tank</b>	378 l
<b>Note (1)</b>	DEF Tank only available for EPA Tier 4 / EU Stage V engine option.
<b>ROPS Standards</b>	ROPS (Rollover Protective Structure) meets ISO 3471:1994.
<b>FOPS Standards</b>	FOPS (Falling Object Protective Structure) meets ISO 3449:1992.
<b>Sound Standards (1)</b>	The operator sound pressure level measured according to work cycle procedures specified in ISO 6394 and 6396 is 75 dB(A) for cab offered by Caterpillar when properly installed, maintained, and tested with doors and windows closed.
<b>Sound Standards (2)</b>	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.
<b>Steering Standards</b>	ISO 5010:2007
<b>Note</b>	Gross Machine Operating Weight is 521 631 kg (1,150,000 lb).

<b>Steer Angle</b>	39 °
<b>Height - Top of ROPS</b>	6779 mm
<b>Overall Length</b>	15463.5 mm
<b>Wheel Base</b>	6644.5 mm
<b>Rear Axle - Tail</b>	4716 mm
<b>Ground Clearance</b>	906 mm
<b>Dump Clearance</b>	1555 mm
<b>Loading Height - Empty</b>	6995 mm
<b>Overall Height - Body Raised</b>	14747 mm
<b>Centerline Front Tire Width</b>	7024 mm
<b>Front Axle Clearance</b>	969 mm
<b>Canopy Width (without optional rock deflectors)</b>	9068 mm
<b>Outside Body Width</b>	9062 mm
<b>Inside Body Width</b>	8560 mm
<b>Front Canopy Height</b>	8024 mm
<b>Rear Axle - Clearance</b>	934 mm
<b>Centerline of Rear Dual Tire Width</b>	5727 mm
<b>Overall Tire Width</b>	8738 mm

**Overall Canopy Width**

9611 mm

**794 AC STANDARD EQUIPMENT  
POWER TRAIN**

## C175-16 Diesel Engine

- Turbocharging (4)/aftercooled
- Air to air after cooler (ATAAC)
- Air cleaner (4) with precleaner
- Elevated low idle control
- Multi-point oil pressure sensing
- Pre-lubrication/engine

## Braking system:

- Brake release towing
- Oil-cooled, multi-disc (front and rear) (service, retarding, parking, secondary)
- Automatic Retarder Control
- Electric dynamic retarding with blended low speed
- Extended life brake disc material

## Cat AC drive train:

- IGBT controlled AC induction motors
- AC generator
- AC cooled radial grid

## Body-up reverse neutralizer

## Programmable top speed

## Rear axle continuous lube/filtration

## Reverse shift inhibitor

## Directional shift management

## Neutral coast inhibitor

## Body-up shift inhibitor

## Neutral start inhibitor

# **ELECTRICAL**

## Alarm, backup

## Brushless alternator 150 amp charging

## Batteries - 12V (8) 90 amp hour

## Converter, 12V electrical

## Electrical system, 24V, 10, 15, 20 amp fuses and breakers

## Battery charge receptacle

## Lighting, signals/service:

- Halogen lighting package
- Backup and hazard lighting
- Directional signals (front and rear LED)
- Front stair access/service deck
- Stop/tail lights (LED)
- Engine compartment
- Inverter energy LED warning lights

# **OPERATOR ENVIRONMENT**

## Air conditioner

## 12V DC power supply (1)

## Cup holder (2)

## Diagnostic connection port

Dome courtesy light  
Entertainment radio ready:  
- 20 amp switched/10 amp memory converter  
- Speakers, and wiring harnesses  
Gauges/indicators  
Gauge panel:  
- Hydraulic oil temperature  
- Engine coolant temperature  
- Fuel level  
- DEF level (Tier 4 / Stage V only)  
- Electric engine control fault indicator  
- Electric hour meter  
- Speedometer  
- Tachometer  
- VIMS message center advisor  
Heater/defroster  
Storage space behind seat  
ROPS cab, insulated/sound suppressed  
Seat, operator, air suspension  
Seatbelt, operator, three points  
Seat, trainer, air suspension  
Seatbelt, trainer, two point  
Steering wheel, tilt, telescopic  
Tinted glass  
Window, electric powered, operator/passenger  
Wiper, windshield, intermittent control and washer  
Fixed access ladder

## **FLUIDS**

Extended life coolant to -35° C (-30° F)

## **OTHER STANDARD EQUIPMENT**

Traction control system  
Auxiliary "buddy" dumping quick connect  
Auxiliary steering quick connect (towing)  
Rotating component guards  
Fast fill fuel system (LH and RH side)  
Fast fill DEF system (RH side) - Tier 4 / Stage V only  
Fuel filter with water separator  
Ground level battery lockout  
Machine lockout  
Engine start lockout  
ECM cabinet lockout  
Ground level engine shut-down  
Rock ejectors (chain)  
Tow hooks and pin (front)  
Tow pin (rear) (empty truck only)

Mudflaps

Coolant level gauge (on radiator)

Automatic lubrication system

S•O•S<sup>SM</sup> sample points (hydraulic, cooling, engine)



## **794 AC OPTIONAL EQUIPMENT**

### **OPTIONAL EQUIPMENT**

2050 kW (2,750 hp) and 2312 kW (3,100 hp) options available

HAA arrangements available

Throttle lock

Timer, engine shutdown

Body heat exhaust

Gel batteries (8)

High Intensity Discharge (HID) lighting package

LED lighting package

Fog lights

LED work lights

English or Metric gauges

Payload, digital display

Powered access ladder

Inverter platform

Fast fill fuel system (front and right)

Rims: Six (6) position and quick change

ANSI and ISO service instructions

Retarding indicator light

Cab pedestal for additional display

Radio/CD player

Front bumper center tow attachment

Brake wear indicator tool

Coolant -50° C (-58° F)

HE dump body rock box liner

HE dump body canopy rock deflectors

Heated mirrors (LH and RH)

Rear axle oil cooler

Standard accumulators and Australia/Canada certified accumulators

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Hot start, for cold weather

Diesel fuel warmer

Wheel chocks (ANSI or ISO)

Portable fire extinguisher

Murphy gauge

High efficiency dump body

- 1543 kg/m<sup>3</sup> (2,600 lb/yd<sup>3</sup>) density body

- 1721 kg/m<sup>3</sup> (2,900 lb/yd<sup>3</sup>) density body

- 1839 kg/m<sup>3</sup> (3,100 lb/yd<sup>3</sup>) density body

- 2076 kg/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>) density body

Canopy extension

Body rock box

Side profile lighting

Central service

Language monitors – English, Spanish, Italian, Portuguese, Dutch, Norwegian, Swedish, Estonian, Latin, Lithuanian, Slovakian, Slovenian, Greek, Romanian, Russian, Polish, Czech, Hungarian, Icelandic, Finnish, Danish, Thai, Indonesian, Vietnam, Malaysian, Chinese

