

Product Specifications For 745



Engine

Engine Model	Cat® C18
Gross Power (SAE J1995)	381 kW
Net Power (SAE J1349)	370 kW
Engine Power (ISO 14396)	376 kW
Bore	145 mm
Stroke	183 mm
Displacement	18.1 l
Note (1)	Advertised power is tested at 1,700 rpm.
Note (2)	Advertised power is tested per the specified standard in effect at the time of manufacture.
Note (3)	The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, muffler and fan at minimum speed.
Note (4)	Net power when the fan is at maximum speed is 348 kW (467 hp) per the SAE reference conditions.
Note (5)	Two engine emission options are available: 1. Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA. 2. Noncertified configuration that is equivalent to U.S. EPA Tier 2 and EU Stage II.
No Engine De-rating Required Below	3050 m
Peak Engine Torque Gross (SAE J1995)	2618 N·m

Peak Engine Torque Net (SAE J1349)	2558 N·m
Peak Engine Torque Speed	1200 r/min

Weights

Rated Payload	41 t
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Body Capacities

Heaped (SAE 2:1)	25.5 m ³
Struck	19.9 m ³
Tailgate Heaped SAE 2:1	27.3 m ³
Tailgate Struck	20.9 m ³

Air Conditioning System

Air Conditioning	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas. • If equipped with R134a (Global Warming Potential = 1430), the system contains 1.1 kg (2.4 lb) of refrigerant which has a CO2 equivalent of 1.716 metric tonnes (1.891 tons).
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Transmission

Forward - 1	6.1 km/h
Forward - 2	8.1 km/h
Forward - 3	11.2 km/h
Forward - 4	14.1 km/h
Forward - 5	18.7 km/h
Forward - 6	22.9 km/h

Forward - 7	31.5 km/h
Forward - 8	37.9 km/h
Forward - 9	54.8 km/h
Reverse - 1	6.4 km/h
Reverse - 2	14.6 km/h

Sound Levels

Interior Cab	72 dB(A)
Note (1)	The declared dynamic operator sound pressure level is 72 dB(A) when ISO 6396:2008 is used to measure the value for an enclosed cab. The measurement was conducted at 70% of the cooling fan's maximum speed. The sound level may vary at different cooling fan speeds. The measurement was conducted with the cab doors and the cab windows closed. The cab was properly installed and maintained.
Note (2)	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 noisy environments.

Operating Weights

Front Axle - Empty	19180 kg
Center Axle - Empty	7100 kg
Rear Axle - Empty	6830 kg
Total - Empty	33110 kg
Front Axle - Rated Load	5880 kg
Center Axle - Rated Load	17560 kg
Rear Axle - Rated Load	17560 kg

Total - Rated Load	41000 kg
Front Axle - Loaded	25060 kg
Center Axle - Loaded	24660 kg
Rear Axle - Loaded	24390 kg
Total - Loaded	74110 kg

Body Plate

Type	High Strength Brinell HB450 Wear Resistant Steel
Front	7 mm
Chute	14 mm
Side	11 mm
Base	14 mm

Body Hoist

Raise (manual)	12 s
Raise (automatic)	13 s
Lower (manual)	10 s
Lower (automatic)	10 s

Service Refill Capacities

Fuel Tank	550 l
Cooling System	90 l
Brake Cooling Tank	67 l

Steering/Hoist Hydraulic System	140 l
Engine Crankcase	52 l
Transmission - OTG	75 l
Final Drive - Each	5 l
Axles - Each	60 l

Standards

Brakes	ISO 3450 – 2011
Cab - FOPS	ISO 3449 Level II
Cab - ROPS	ISO 3471 – 2008
Steering	ISO 5010 – 2019

Turning Circle

Turning Dimensions - Steer Angle - Left/Right	45°
Turning Dimensions - SAE Turning Radius	8625 mm
Turning Dimensions - Clearance Radius	9082 mm
Turning Dimensions - Inside Radius	4413 mm
Turning Dimensions - Aisle Width	5917 mm
Note	Dimensions are for machines equipped with 29.5R25 tires.

Steering

Lock to Lock	4.8 seconds @ 60 rpm
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Optimal Loader/Truck Pass Matching

Hydraulic Excavator: 390 - Passes	4
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Hydraulic Excavator: 374 - Passes	5
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Wheel Loader: 982 - Passes	4
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Wheel Loader: 980 - Passes	4-5
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Wheel Loader: 972 - Passes	4-5
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Note

An optimum system match gives you a major productivity advantage. Having matched loading and hauling tools results in increased production and lower system costs per unit of volume moved.

745 Standard Equipment

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

OPERATOR ENVIRONMENT

Mirrors: exterior

Seats:

- Fully adjustable, air suspension
- Padded trainer with lap belt

Glass windows:

- Front, laminated and tinted
- Sides and rear, toughened and tinted

Adjustable air vents

Machine operation monitoring system includes:

- Action lamp
- Engine oil pressure
- Primary steering system
- Left and right turn signal
- High beam
- Coolant temperature
- Tachometer
- Parking brake
- Fuel level
- Transmission oil temperature
- Brake system
- Transmission hold
- Hoist control
- Hydraulic system
- Charging system
- Retarder
- Transmission fault
- Traction control system
- Check engine lamp

Air conditioning

Sun visor

Liquid Crystal Display (LCD):

- Alert indicator
- Selected gear and direction
- Speed or auto shift
- Review Operation and Maintenance Manual (OMM)
- Primary steering failure
- Seat belt warning
- Secondary steering failure
- Diesel Particulate Filter (DPF) regeneration filter
- Secondary steering energy source engaged
- Hour meter
- Retarder active

Secondary steering – electro hydraulic

Window blinds

Windows opening side, tinted

Touch screen display incorporating the rearview camera video feed

Windshield wiper and washer, two speed, intermittent (front)

Two seat belts, operator's retractable

Tilt and telescopic steering wheel

Heater and defroster with four-speed fan

Combined gear selection and hoist control lever

Storage:

- Cup holder
- Flask receptacle
- Under seat storage
- Door pocket
- Behind seat storage
- Coat hook

TECHNOLOGY

Product Link Cellular PLE643

Cat® Detect with Stability Assist

OTHER STANDARD EQUIPMENT

Sound suppression (standard in some countries*)

*EFTA countries are EU countries plus Iceland, Norway, Lichtenstein, Switzerland, Türkiye and UK.

Mud flaps: wheel arch and body mounted with transportation tiebacks

S·O·S sampling valves

Vandalism protection: lockable caps

ELECTRICAL AND LIGHTING

Batteries (two) maintenance free

Electrical system: 24-volt, 5A 24- to 12-volt converter

Horn

Lighting systems:

- Cab interior
- Two head lamps
- Two width marker
- Two reversing
- Work light
- Two stop/tail lights
- Front and rear direction indicators

Main disconnect switch

Remote starting receptacle (cables not included)

POWERTRAIN

Auto shift nine-speed forward and two reverse transmission

Cat C18 engine

Differentials: standard with automatic clutched inter- and cross-axle differential locks

Dual circuit oil immersed, enclosed brakes – all wheels

Retarder: engine compression brake and hydraulic

Three axle, six-wheel drive

SAFETY

Reverse alarm

Rearview camera

Rollover protective structure/falling objects protective structure (ROPS/FOPS) cab

GUARDS

Rear window

Radiator

Crankcase

Front dump body spill guard, integral part of fabricated body

745 Optional Equipment

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

OPERATOR ENVIRONMENT

Infrared glass – high ambient cab

Seat, heated/cooled

Mirrors, heated and motorized

Operator, seat belt, four-point

Radio, Bluetooth® stereo system

Windshield wiper and washer, two speed (rear)

TECHNOLOGY

Cat Payload monitoring system

Machine Security System (MSS)

Product Link Dual PLE683

ELECTRICAL AND LIGHTING

Flashing LED beacon

Ether start

Engine block heater

Roof mounted LED work lights

Cold weather start attachment

OPTIONAL EQUIPMENT

Auto lube installation for automatic greasing of bearings

Wheel chocks

Bare chassis (no body) standard wheel base

Bare chassis (no body) long wheel base

Tailgate Ready

Body liners

Cold weather coolant -51° C (-60° F)

Exhaust heated body

Fast fuel fill

Fuel additive – anti-waxing

Scissor tailgate

875/65 R29 wide tires