

Product Specifications For 740 EJ



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 370 kW (496 hp) per the SAE reference conditions.
Note (5)	The Cat C18 meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
Note (6)	Diesel exhaust fluid (DEF) used in Cat SCR systems must meet the requirements outlined in ISO 22241-1:2006. ISO 22241-1:2006 requirements are met by many brands of DEF, including those that carry the AdBlue® or API certifications.

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	38 t
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Body Capacities

Heaped (SAE 2:1)	23 m ³
Struck	18 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 maximum cooling fan's 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 or when not properly maintained or doors/windows open for extended periods or in noisy environments.

Operating Weights

Front Axle - Empty	20550 kg
Center Axle - Empty	7710 kg
Rear Axle - Empty	7450 kg
Total - Empty	35710 kg
Front Axle - Rated Load	1603 kg
Center Axle - Rated Load	18198 kg

Rear Axle - Rated Load	18198 kg
Total - Rated Load	37999 kg
Front Axle - Loaded	22154 kg
Center Axle - Loaded	25908 kg
Rear Axle - Loaded	25648 kg
Total - Loaded	73710 kg

Body Plate

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

Blade Eject/Retract

Eject (manual)	17 s
Eject (automatic)	16 s
Retract (manual)	21 s
Retract (automatic)	21 s

Service Refill Capacities

Fuel Tank	550 l
DEF Tank	25 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 – 2005
Cab - ROPS	ISO 3471 – 2008
Steering	ISO 5010 – 2019

Turning Circle

Turning Dimensions - Steer Angle - Left/Right	45°
Turning Dimensions - SAE Turning Radius	8624 mm
Turning Dimensions - Clearance Radius	9045 mm
Turning Dimensions - Inside Radius	4413 mm
Turning Dimensions - Aisle Width	5925 mm

Note	Dimensions are for machines equipped with 29.5R25 tires.
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Steering

Lock to Lock

4.8 seconds @ 60 rpm

Optimal Loader/Truck Pass Matching

Hydraulic Excavator: 4
390 - Passes

Hydraulic Excavator: 5
374 - Passes

Wheel Loader: 982 - 4
Passes

Wheel Loader: 980 - 4–5
Passes

Wheel Loader: 972 - 4–5
Passes

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.

740 EJ Standard Equipment

NOTE

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

OPERATOR ENVIRONMENT

Air conditioning

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

Windows opening side, tinted

Adjustable air vents

Two seat belts, operator's retractable

Storage:

– Cup holder

– Flask receptacle

– Under seat storage

– Door pocket

– Behind seat storage

– Coat hook

Mirrors: exterior

Tilt and telescopic steering wheel

Sun visor

Heater and defroster with variable speed fan

Secondary steering – electro hydraulic

Combined gear selection and eject control lever

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

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
- DPF regeneration filter
- Secondary steering energy source engaged
- Hour meter
- Retarder active

Glass windows: laminated and tinted-front toughened and tinted-sides and rear

Touchscreen display incorporating the rearview camera video feed

Seats:

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

TECHNOLOGY

Product Link Cellular PLE643

Cat Detect with Stability Assist

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

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

OTHER STANDARD EQUIPMENT

Hydraulic Tailgate

Mud flaps: wheel arch and body mounted with transportation tiebacks

Sound suppression (standard in some countries*)

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

S·O·S sampling valves

Tires, six 29.5R25, radial

Vandalism protection: lockable caps for fuel tank and hydraulic oil tank

740 EJ Optional Equipment

NOTE

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

OPERATOR ENVIRONMENT

Mirrors, heated motorized

Operator seat belt, four-point

Radio, Bluetooth® stereo system

Window blinds

Windshield wiper and washer, two speed (rear)

TECHNOLOGY

Machine Security System (MSS)

Cat® Payload monitoring system

Product Link Dual PLE683

ELECTRICAL AND LIGHTING

Cold weather start attachment

Engine block heater

Ether start

Flashing LED beacon

Roof-mounted LED work lights

OPTIONAL EQUIPMENT

Auto lube installation for automatic greasing of bearings

Body liners

Cold weather coolant -51° C (-60° F)

Exhaust heated body

Fast fuel fill

875/65 R29 wide tires

Fuel additive – anti-waxing

Fender extension