

730 Articulated Truck

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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| Engine | | |
|-------------------------------|---------|-----------------------|
| Engine Model | Cat C13 | |
| Gross Power (SAE J1995:2014) | 280 kW | 375 hp |
| Net Power (SAE J1349:2011) | 274 kW | 367 hp |
| Engine Power (ISO 14396:2002) | 276 kW | 370 hp |
| Bore | 130 mm | 5.1 in |
| Stroke | 157 mm | 6.2 in |
| Displacement | 12.5 L | 762.8 in ³ |

• Advertised power is tested at 1,800 rpm.

• 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.

- Net power when the fan is at maximum speed is 254 kW (341 hp) per the SAE reference conditions.
- Meets U.S. EPA Tier 4 Final, EU Stage V, Korea Tier 4 Final, and Japan 2014 emission standards.
- DEF used in Cat SCR systems must meet the requirements outlined in ISO 22241-1. ISO 22241-1 requirements are met by many brands of DEF, including those that carry the AdBlue or API certifications.

| No Engine Derating Below | 3810 m | 12,500 ft |
|--|-----------|--------------|
| Peak Engine Torque Gross (SAE J1995:2014) | 2141 N·m | 1,579 lbf-ft |
| Peak Engine Torque Net (SAE J1349:2011) | 2107 N·m | 1,554 lbf-ft |
| Peak Engine Torque Speed | 1,200 rpm | |
| \A/ | | |

Weights

Rated Payload

28 tonnes 31 tons

Air Conditioning System

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.1 kg of refrigerant which has a CO, equivalent of 1.716 metric tonnes.

Body Capacities

| Heaped SAE 2:1 | 17.5 m ³ | 23.0 yd ³ |
|-------------------------|---------------------|----------------------|
| Struck | 13.3 m ³ | 17.4 yd ³ |
| Tailgate Heaped SAE 2:1 | 18.8 m ³ | 24.6 yd ³ |
| Tailgate Struck | 13.9 m ³ | 18.2 yd ³ |

Transmission

| 8 km/h | 5 mph |
|---------|---|
| 15 km/h | 9 mph |
| 22 km/h | 14 mph |
| 34 km/h | 21 mph |
| 47 km/h | 29 mph |
| 55 km/h | 34 mph |
| 9 km/h | 6 mph |
| | 15 km/h 22 km/h 34 km/h 47 km/h 55 km/h |

Sound Levels

Interior Cab

• 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.

72 dB(A)

• Hearing protection may be needed when operating with an open operator station and cab or when not properly maintained or with doors/windows open for extended periods or in noisy environments.

Operating Weights

| 15 000 kg 4560 kg | 33,069 lb 10,053 lb |
|----------------------|--|
| 4560 kg | 10,053 lb |
| | · · · · · · · · · · · · · · · · · · · |
| 4340 kg | 9,568 lb |
| 23 900 kg | 52,690 lb |
| 3280 kg | 7,231 lb |
| 12 360 kg | 27,249 lb |
| 12 360 kg | 27,249 lb |
| 28 000 kg | 61,729 lb |
| 18 280 kg | 40,300 lb |
| 16 920 kg | 37,302 lb |
| 16 700 kg | 36,817 lb |
| 51 900 kg | 114,420 lb |
| | 23 900 kg 3280 kg 12 360 kg 12 360 kg 28 000 kg 18 280 kg 16 920 kg 16 700 kg |

Body Plate

High strength Brinell HB450 wear resistant steel

| Body Plate Thickness | | |
|-----------------------------|-------|---------|
| Front Plate | 7 mm | 0.28 in |
| Base Plate | 13 mm | 0.51 in |
| Side Plates | 11 mm | 0.43 in |

Service Refill Capacities

| • | | | |
|---------------------------|---------------|-----------|--|
| Fuel Tank | 412 L | 108.8 gal | |
| DEF Tank | 20 L | 5.3 gal | |
| Cooling System | 83 L | 21.9 gal | |
| Hydraulic System | 110 L | 29.1 gal | |
| Engine Crankcase | 38 L | 10.0 gal | |
| Transmission | 47 L | 12.4 gal | |
| Final Drives/Differential | 125 L | 33.0 gal | |
| Output Transfer Gear Box | 24 L | 6.3 gal | |
| Body Hoist | | | |
| Raise Time | 12 Second | ls | |
| Lower Time | 8 Seconds | 5 | |
| Standards | | | |
| Dualaa | 100 2450 2011 | | |

| Brakes | ISO 3450:2011 |
|----------|------------------------|
| Cab/FOPS | ISO 3449:2005 Level II |
| Cab/ROPS | ISO 3471:2008 |
| Steering | ISO 5010:2019 |

Dimensions

All dimensions are approximate.



| | | mm | ft/in |
|----|--|--------|-------|
| 1 | Body Height Fully Tipped | 6468 | 21'3" |
| 2 | Load Over Height | 2916 | 9'5" |
| 3 | Ground Clearance – Body Fully Tipped | 563 | 1'10" |
| 4 | Body Length | 5783 | 19'0" |
| 5 | Body Length Inside | 5411 | 17'9" |
| 6 | Ground Clearance | 545 | 1'9" |
| 7 | Rear Axle Center to Body Rear | 1556 | 5'1" |
| 8 | Mid Axle to Rear Axle Center | 1700 | 5'7" |
| 9 | Mid Axle to Front Axle (Centers) | 3979 | 13'1" |
| 10 | Front Axle Center to Machine Front | 3210 | 10'6" |
| 11 | Overall Length | 10 445 | 34'3" |
| 12 | Overall Length with Tailgate | 10 593 | 34'8" |
| 13 | Height Transport Position | 3508 | 11'6" |
| 14 | Overall Width | 3676 | 12'1" |
| 15 | Width Over Tailgate/Width Including Tailgate | 2984 | 9'10" |
| 16 | Body Width | 2902 | 9'6" |
| 17 | Track Width | 2275 | 7'6" |
| 18 | Width Over Tire | 2877 | 9'5" |
| 19 | Width Over Fenders | 2950 | 9'8" |
| 20 | Max Laden Over Tire Bulge | 2950 | 9'8" |
| | | | |

Turning Circle

Dimensions are for machines equipped with 23.5R25 tires.

Turning Dimensions

| Steer Angle – From Center Left/Right | 45° | |
|--------------------------------------|---------|--------|
| SAE Turning Radius | 7470 mm | 294 in |
| Clearance Radius | 8075 mm | 318 in |
| Inside Radius | 3879 mm | 153 in |
| Aisle Width | 5332 mm | 210 in |

Steering

Lock to Lock

4.75 seconds at 60 rpm



Optimal Loader/Truck Pass Matching

| Hydraulic Excavators | 349 | /352 | 3 | 36 |
|----------------------|--------------|--------------|------|------|
| Passes | 4 | -5 | 5 | -6 |
| Wheel Loaders | 972M/972M XE | 966M/966M XE | 962M | 950M |
| Passes | 3-4 | 4 | 4-5 | 5 |

An optimum system match gives you a major productivity advantage. The 730 is an excellent match for the Cat 349/352 and 336 Hydraulic Excavators and Cat 972M, 966M, 962M, and 950M Wheel Loaders. Having matched loading and hauling tools results in increased production and lower system costs per unit of volume moved.

Gradeability/Speed/Rimpull

To determine performance, read from Gross Weight down to % Total Resistance. Total Resistance equals actual % grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Usable Rimpull depends on traction available.



1A – 1st Gear (Converter Drive) 1B – 1st Gear (Direct Drive) 2A – 2nd Gear (Converter Drive)

- 2B 2nd Gear (Direct Drive)
- 3 3rd Gear
- 4 4th Gear
- 5 5th Gear
- 6 6th Gear

E – Empty 23 725 kg (52,305 lb) L – Loaded 51 725 kg (114,034 lb)

* at sea level

Retarding Performance

To determine performance, read from Gross Weight down to % Effective Grade. Effective Grade equals actual % favorable grade plus 1% for each 10 kg/metric ton (20 lb/ton) of Rolling Resistance. From this point, read horizontally to the curve with the highest attainable speed range. Then, go down to Maximum Speed. Retarding effect on these curves represents full application of the retarder.



L – Loaded 51 725 kg (114,034 lb)

- 3 3rd Gear
- 4 4th Gear
- 5 5th Gear
- 6 6th Gear

Standard and Optional Equipment

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

| | Standard | Optional |
|--|--------------|--------------|
| OPERATOR ENVIRONMENT | | |
| Air conditioning with R134a refrigerant | \checkmark | |
| Adjustable air vents | \checkmark | |
| Combined gear selection and hoist control lever | \checkmark | |
| Glass windows: front, laminated and tinted; sides and rear, toughened and tinted | \checkmark | |
| Heater and defroster with four-speed fan | \checkmark | |
| Infrared glass, high ambient cab | | \checkmark |
| Liquid Crystal Display (LCD): alert indicator, selected gear and direction, speed or auto shift, review Operation and Maintenance Manual (OMM), primary steering failure warning, seat belt warning, secondary steering failure warning, Diesel Particulate Filter (DPF) regeneration filter, secondary steering energy source engaged, hour meter, retarder active | ~ | |
| Mirrors, extensive arrangement for improved visibility | ~ | |
| Mirrors, heated motorized | | \checkmark |
| Machine operation monitoring system: 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 | V | |
| Radio, Bluetooth® stereo system | | \checkmark |
| Seats: operator – fully adjustable, air suspension, retractable lap belt; trainer – padded with retractable lap belt | ~ | |
| Seat, heated/cooled | | \checkmark |
| Operator seat belt, four-point | | \checkmark |
| Secondary steering, electro hydraulic | \checkmark | |
| Storage: cup holder, flask receptacle, under seat storage, door pocket, behind operator seat storage, coat hook | ~ | |
| Sun visor | \checkmark | |
| Tilt and telescopic steering wheel | \checkmark | |
| Touchscreen display incorporating the rearview camera video feed | ~ | |
| Window blinds | | ✓ |
| Windows (tinted) opening both sides | \checkmark | |
| Windshield wiper and washer, two speed, intermittent (front) | ~ | |
| Window wiper and washer, two speed (rear) | \checkmark | |

| | Standard | Optional |
|--|--------------|--------------|
| TECHNOLOGY | | |
| Cat Detect with Stability Assist | \checkmark | |
| Cat Production Measurement payload monitoring system | | \checkmark |
| Machine Security System (MSS) | | ~ |
| Product Link [™] Elite: PLE641 (cellular) | √ | |
| Product Link Elite: PLE631 (satellite) | | \checkmark |
| ELECTRICAL AND LIGHTING | | |
| Batteries (two) maintenance free | \checkmark | |
| Cold weather start attachment | | ~ |
| Engine block heater | | ~ |
| Ether start | | ~ |
| Electrical system: 24-volt, 10A 24- to 12-volt converter | \checkmark | |
| Flashing LED beacon | | ✓ |
| Horn | √ | |
| Lighting systems: cab interior, two head lamps, two width marker, two reversing, work light/cab access light, two stop/tail lights, front and rear direction indicators | √ | |
| Main disconnect switch | \checkmark | |
| Remote starting receptacle (cables not included) | √ | |
| Roof-mounted High Intensity Discharge (HID) work lights | | √ |
| POWER TRAIN | | |
| Auto shift six-speed forward and single-speed reverse transmission | \checkmark | |
| Cat C13 engine | \checkmark | |
| CX31 transmission | ✓ | |
| Cat Clean Emission Module (CEM) and exhaust aftertreatment package | ~ | |
| Differentials: standard with automatic clutched inter- and cross-axle differential locks | \checkmark | |
| Dual circuit oil immersed, enclosed brakes – all wheels | √ | |
| Retarder: engine compression brake | \checkmark | |
| Three axle, six-wheel drive | √ | |
| SAFETY | | |
| Reverse alarm | ~ | |
| Rearview camera | ✓ | |
| ROPS/FOPS cab | ✓ | |
| GUARDS | | |
| Axle | ~ | |
| Crankcase | \checkmark | |
| Front dump body spill guard, integral part of fabricated body | √ | |
| Radiator | \checkmark | |
| Rear window | \checkmark | |

Standard and Optional Equipment

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

| | Standard | Optional |
|---|----------|--------------|
| OTHER STANDARD AND OPTIONAL EQUIPMENT | | |
| Auto lube installation for automatic greasing of bearings | | ~ |
| Bare chassis (no body) standard wheel base | | \checkmark |
| Bare chassis (no body) long wheel base | | \checkmark |
| Body liners | | \checkmark |
| Cold weather coolant -51° C (-60° F) | | \checkmark |
| Exhaust heated body | | \checkmark |
| Fast fuel fill | | \checkmark |
| Fuel additive, anti-waxing | | \checkmark |

| | Standard | Optional | |
|---|--------------|--------------|--|
| OTHER STANDARD AND OPTIONAL EQUIPMENT (CONTINUED) | | | |
| Mud flaps: wheel arch and body mounted with transportation tiebacks | √ | | |
| Scissor tailgate | | \checkmark | |
| S·O·S SM sampling valves | \checkmark | | |
| Sound suppression (standard in EFTA)* | \checkmark | | |
| Sound suppression (optional outside EFTA)* | | \checkmark | |
| Tires, six 23.5R25, radial | \checkmark | | |
| Tires, six 750/65R25, radial | | \checkmark | |
| Vandalism protection: lockable caps | \checkmark | | |
| Wheel chocks | | \checkmark | |

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

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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