



Cat[®] 773

Off-Highway Truck

The 773 represents a new era. With your long-term success as our goal, we've developed this truck to be more productive and economical. It offers your operators the confidence, comfort, and control to run at peak efficiency, and it can feed your crushers and haul material at a lower cost per ton. When you also consider its eco-friendly performance and fuel efficiency, the Cat[®] 773 Off-Highway Truck is the right truck for our generation and for those to come.

Achieve Greater Productivity

- Haul your materials faster with an accelerated travel speed.
- Put more power to the ground with increased torque.
- Enjoy greater productivity while using a more responsive traction control system (TCS).
- Reduce tire wear with maximum traction by engaging TCS early in the slip.
- Strong, predictable performance helps operators achieve the lowest cost per ton.

Boost Fuel Efficiency

- Up to 13% less fuel consumption.
- Advanced productivity electronic control system (APECS) allows the engine and transmission to communicate on a high level. This communication allows the machine to better utilize the power and torque the engine is producing.
- Automatically optimize fuel consumption with the adaptive economy mode feature, which reduces fuel use without affecting productivity and can be engaged with a single button.
- Gain improvements in fuel efficiency with auto neutral idle.
- Haul your truck at a more fuel-efficient engine speed and gear selection with speed limiting.
- Conserve fuel with integrated engine idle shutdown by the engine automatically initiating when the truck is in park and idle for a preset amount of time.

Designed for Safety

- Improvements in accessibility with safe, ground-level access to fuel fill and daily maintenance points.
- Ensure three points of contact when entering and exiting the machine with strategically placed walkways and grab rails.
- Superior brake performance meets the latest brake standards – ISO 3450:2011.
- The ground-level engine shutoff switch stops all fuel to the engine when activated and shuts down the machine safely.
- Sturdy 4-point mounted cabin meets rollover protective structure/falling objects protective structure (ROPS/FOPS) standard.
- 4-point seat belt provides enhanced safety to the operator.
- Seat belt indicator implements both visual and audible alerts to the operator when seat belt is not fastened.
- Lockout features help the service technician to perform maintenance work on the machine with safe mode.
- Secondary steering activates automatically in case of primary system failure.
- Overload speed limiter works with truck payload system to reduce machine speed automatically when the truck is overloaded.

Work in Comfort

- Completely redesigned cab for a whole new standard in visibility, comfort, and productivity.
- The new operator seat placement provides easier operation and comfort to the operator.
- Improvements in visibility gain enlarged views of the work area and its surroundings.
- Access connectivity and decrease clutter with more storage areas in the newly designed cab.
- Enjoy the easy, automotive-quality shifting with the new transmission controls.
- Automatic cab temperature controls.
- Cat next generation deluxe seat for better operator comfort.



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Technology That Gets Work Done

- Integrated systems give you the ability to make timely, fact-based decisions to maximize efficiency, improve productivity, and lower costs.
- Gain valuable insight into how your machine is performing by continuously monitoring and collecting vital machine data via the advisor display with the software Vital Information Management System (VIMS™). Applicable to both U.S. EPA Tier 4 Final/ EU Stage V and U.S. EPA Tier 2 equivalent.
- Truck production management system (TPMS) provides accurate weighing of the materials, stores 2,400 payload cycles, and reports on weights, haul cycle times, and distances with date and time stamps.
- External payload indicator lights/display alert the loader when to stop, reducing the risk of machine overloading.
- Product Link™ system connects to each machine wirelessly, allowing you to monitor location, hours, fuel use, productivity, idle time, and diagnostic codes.
- VisionLink® wirelessly connects you to your equipment, giving you access to essential information you need to know to run your business.
- The Cat 773 is MineStar™ ready and includes Cat Product Link Elite and VIMS to help optimize equipment management, remote monitoring capabilities, machine availability, and component life while reducing both repair costs and the risk of catastrophic failure.
- Tons kilometers per hour/tons miles per hour (TKPH/TMPH) tire management system works with TPMS for improved tire life.

Reduced Maintenance Costs and Other Costs

- Grouped service points.
- Control particulate matter with two engine-mounted diesel oxidation catalyst canisters (Tier 4).
- NOx reduction system (NRS) technology replaces a portion of intake air with exhaust gas to control combustion temperatures and NOx production (Tier 4).
- Parts commonality with other Cat equipment.
- Resolve problems before failure occurs with VIMS notifications.
- Autostall enables quick operating temperatures for best performance life.
- Prevents hot shutdowns that can reduce component life with the use of delayed engine shutdown.
- Hydraulic oil filter life is extended to 1,000 hours under normal operating conditions.

Application Versatility

- Get the right body option – dual slope or flat floor – for your material and jobsite needs.
- For haul profiles including steep slopes, the dual slope body is available – offering excellent material retention.
- The flat floor body is perfect for metering material, especially when feeding the crusher.
- Optimize your body life by selecting a liner package best suited for your application. We offer steel liners that work for most applications as well as rubber liners for extreme applications.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWERTRAIN			OPERATOR ENVIRONMENT (CONTINUED)		
C27 U.S. EPA Tier 4 Final/EU Stage V compliant or U.S. EPA Tier 2 equivalent diesel engine: air cleaner with precleaner (2), air-to-air aftercooler (ATAAC), electric start, engine idle shutdown, ether starting aid, exhaust muffler, next generation modular radiator (NGMR)	✓		Lights: high intensity discharge (HID)		✓
Braking system: extended life brakes, automatic retarder control (ARC), manual retarder (utilizes rear oil-cooled, multiple disc brakes), brake release motor (towing), dry disc brakes (front), brake disconnect switch (front), oil-cooled multiple disc brakes (rear), brake wear indicator (rear), parking brake, secondary brake, service brake	✓		Mirrors: convex, heated		✓
Cat® engine brake		✓	Mirrors, non-heated	✓	
Demand fan; Mechanically Actuated Electronic Unit Injection (MEUI™)-C fuel system	✓		Power port, 24V and 12V (2)	✓	
Transmission: 7-speed automatic powershift with electronic clutch pressure control (ECPC), advanced productivity electronic control strategy (APECS); automatic neutral idle, autostall, second gear start	✓		Rollover protective structure (ROPS)/ falling objects protective structure (FOPS)	✓	
ELECTRICAL			Seat, next generation deluxe, full air suspension, retractable 4-point seat belt with shoulder harness	✓	
Alarm, backup	✓		Steering wheel, padded, tilt and telescopic	✓	
Batteries, maintenance-free, 12V (2), 1,400 CCA combined	✓		Throttle lock	✓	
Lighting system: all LED backup lights, directional signals/hazard warning, engine compartment light, headlights with dimmer, operator access courtesy lights, side profile lights, stop/tail lights	✓		Visibility package (meets ISO 5006:2017 requirements)		✓
Service center containing: battery jump start, breakers with spare fuses, lockout switch, ports – electronic technician (ET) and advanced health, service lockout switch (power without engine start)	✓		Window, hinged, right side (emergency exit)	✓	
OPERATOR ENVIRONMENT			Window, powered, left side	✓	
Advisor display: air cleaner service indicator, fluid level monitoring, fuel level monitoring, display languages (market based)	✓		Windshield wiper, intermittent, and washer	✓	
Air conditioning/heat	✓		Work area vision system (WAVS)		✓
Automatic temperature control	✓		TECHNOLOGY PRODUCTS		
Cab precleaner		✓	Economy modes, standard and adaptive	✓	
Cup holders (4)	✓		Product Link™	✓	
Diagnostic connection port, 24V	✓		Traction control system (TCS)	✓	
Entertainment radio ready: 5 amp converter, speakers, antenna, wiring harness	✓		Truck production management system (TPMS)	✓	
Gauges/indicators: brake oil temperature gauge, coolant temperature gauge, engine overspeed indicator, fuel level, hour meter, speedometer with odometer, tachometer, transmission gear indicator	✓		Basic health	✓	
			Advanced health		✓
			Tons kilometers per hour/tons miles per hour (TKPH/TMPH) tire management system		✓
			Overload speed limiter	✓	
			OTHER		
			Body: heat, liner, sideboards		✓
			Body down indicator	✓	
			Body safety pin (secures body in up position)	✓	
			Clustered grease fittings	✓	
			Cold weather packages	✓	
			Extended life coolant to -34°C (-30°F)	✓	
			Fluid fill service center		✓
			Fuel tank, 795 L (210 gal)	✓	
			Ground-level battery disconnect	✓	
			Ground-level engine shutdown	✓	
			Rock ejectors	✓	
			Secondary steering (electric)	✓	
			Suspension, front and rear (EU compliant)	✓	
			Tow hooks, front/tow pin, rear	✓	
			Wheel chocks		✓
			Autolube		✓
			Spare rim		✓

Cat® 773 Off-Highway Truck

Technical Specifications

Engine (U.S. EPA Tier 4 Final and EU Stage V)

Engine Model	Cat® C27	
Rated Power	1,800 rpm	
Gross Power – SAE J1995:2014	615 kW	825 hp
Net Power – ISO 14396:2002	605 kW	812 hp
Net Power – SAE J1349:2011	572 kW	768 hp
Net Power – ISO 9249:2007	578 kW	775 hp
Net Torque Speed	1,200 rpm	
Net Torque – SAE J1349:2011	4269 N·m	3,148 lb-ft
Net Torque Rise – SAE J1349:2011	40%	
Bore	137 mm	5.4 in
Stroke	152 mm	6.0 in
Displacement	27 L	1,648 in³

Engine (U.S. EPA Tier 2 Equivalent)

Engine Model	Cat C27	
Rated Power	2,000 rpm	
Gross Power – SAE J1995:2014	615 kW	825 hp
Net Power – ISO 14396:2002	607 kW	813 hp
Net Power – SAE J1349:2011	584 kW	783 hp
Net Power – ISO 9249:2007	590 kW	791 hp
Net Torque Speed	1,300 rpm	
Net Torque – SAE J1349:2011	3896 N·m	2,874 lb-ft
Net Torque Rise – SAE J1349:2011	40%	
Bore	137 mm	5.4 in
Stroke	152 mm	6.0 in
Displacement	27 L	1,648 in³

- The power ratings are tested at the reference conditions for the specified standard.
- Net power advertised is the power available at the rated speed, measured at the flywheel when the engine is equipped with alternator, air cleaner, muffler, and fan.
- MIN NET SAE J1349:2011/ISO 9249:2007 Net power advertised is the power available at the flywheel when the engine is equipped with fan at maximum speed, air intake system, exhaust system, and alternator.
- Net torque rise meets SAE J1349.

Transmission

Speed	km/h	mph
Forward 7 – Tier 4/Stage V	67.0	41.6
Forward 7 – Tier 2	67.6	42.0

- Maximum travel speeds with standard 24.00R35 (E4) tires.

Capacity – Dual Slope – 100% Fill Factor

Struck	26.86 m³	35.13 yd³
Heaped (SAE 2:1)	35.75 m³	46.76 yd³

- Contact your local Cat dealer for body recommendation.
- * ISO 6483:1980.

Capacity – Flat Floor – 100% Fill Factor

Struck	26.25 m³	34.33 yd³
Heaped (SAE 2:1)	35.49 m³	46.41 yd³

- Contact your local Cat dealer for body recommendation.
- * ISO 6483:1980.

Suspension

Empty Loaded Cylinder Stroke Front	234 mm	9.2 in
Empty Loaded Cylinder Stroke Rear	149 mm	5.8 in
Rear Axle Oscillation	8.1°	

Sound

Operator Sound Level (ISO 6396:2008)	76 dB(A)
Machine Sound Level (ISO 6395:2008)	118 dB(A)

- The operator sound pressure level is 76 dB(A), measured according to the test procedures and conditions specified in ISO 6396:2008 for the standard machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.
- The machine sound power level is 118 dB(A), measured according to the test procedures and conditions specified in ISO 6395:2008 for the standard machine configuration. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.

Air Conditioning

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.0 kg (4.4 lbs) of refrigerant which has a CO₂ equivalent of 2.86 metric tonnes (3.152 tons).

Steering

Steering Standards	ISO 5010:2007	
Steer Angle	31°	
Turning Diameter – Front	23.5 m	77'1"
Turning Circle Clearance Diameter	26.1 m	85'8"

ROPS/FOPS

- Rollover Protective Structure (ROPS)/Falling Objects Protective Structure (FOPS) Standards
- ROPS for cab offered by Caterpillar meets ISO 3471:2008 for operator and ISO 13459:2012 for trainer ROPS criteria.
 - FOPS meets ISO 3449:2005 Level II for operator and ISO 13459:2012 Level II for trainer FOPS criteria.

Tires

- | | |
|---------------|---------------|
| Standard Tire | 24.00R35 (E4) |
|---------------|---------------|
- Productive capabilities of the 773 truck are such that, under certain job conditions, TKPH (TMPH) capabilities of standard or optional tires could be exceeded and, therefore, limit production.
 - Caterpillar recommends the customer evaluate all job conditions and consult the tire manufacturer for proper tire selection.

Service Refill Capacities

Fuel Tank	795 L	210.0 gal
Cooling System	171 L	45.0 gal
Differentials and Final Drives	140 L	37.0 gal

Brakes

Brake Surface – Front	655 cm²	257 in²
Brake Surface – Rear	61 269 cm²	9,497 in²
Brake Standards	ISO 3450:2011	

Weight Distributions – Approximate

Front Axle	Loaded 34% Empty 52%
Rear Axle	Loaded 66% Empty 48%

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Build Number: 07B
(Global)

