



Cat[®] 773

Off-Highway Truck

The Cat[®] 773 is engineered with premium performance in mind with simple-to-use technologies like Vital Information Management System (VIMS[™]) software and Product Link[™]—all standard equipment from the factory that boosts jobsite efficiencies. By utilizing rigorous component designs and machine validation processes, it delivers unmatched reliability and durability.

Features may vary by region. Consult your Cat dealer for specific configurations available in your region.

Achieve Greater Productivity

- Productivity improvement up to 7%.
- Up to 3% increase in torque puts more power to the ground.
- Machine speed limit feature allows the machine to run at an optimal gear for the selected speed.
- Various body options, along with liners and sideboard combinations, offer flexibility to move a wide density of material without compromising on payload.

Designed for Safety

- Ground level access to the machine shutoff switch stops all fuel to the engine when activated, shutting down the machine.
- Safe ground level access to daily maintenance points means less servicing time is required.
- Overload speed limiter works with truck payload system to reduce machine speed automatically when the truck is overloaded.
- Equipped with a retractable four-point seat belt and a shoulder harness to improve operator safety.
- Seat belt indicator implements both visual and audible alerts to the operator when seat belt is not fastened.
- Secondary steering automatically engages if the power source for the normal steering fails.
- Save on fuel costs with Engine Overspeed Protection—electronically senses the engine condition and automatically upshifts one gear to prevent engine overspeed.

Boost Fuel Efficiency

- Standard economy mode provides maximum fuel savings with minimal productivity impact.
- Haul your truck at a more fuel-efficient engine speed and gear selection with speed limiting.
- Engine Idle Shutdown automatically initiates when the truck is in park and idles for a preset amount of time—conserving fuel.
- Built with the same reliable Cat[®] 3412E air-to-air aftercooled engine, featuring Hydraulic Electronic Unit Injector (HEUI[™]) for efficient operation.
- Deliver reliable performance in the most extreme haul-road conditions with the Cat front dry caliper and rear oil-cooled multiple disc brakes.

Easy to Operate

- Completely redesigned cab interior for a whole new standard in visibility, comfort, and productivity.
- Enjoy a more automotive-like, all-in-one integrated parking brake.
- Intuitive, ergonomic controls and multifunction display keep operators focused on their work.
- Designed for precise steering, Cat integrated steering and suspension system provides excellent maneuverability, minimal tire wear, and superior ride control.

**Compared with 773E (ASK series)*



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Lower Maintenance Costs

- Safe, convenient maintenance with a machine platform and ground level battery disconnect.
- The Advisor system provides quick, onboard diagnostic data and lowers operating costs.
- Rugged cylinders use a large diameter bore and a low-pressure nitrogen/oil design for long life with minimal maintenance.
- Traction Control System (TCS) engages sooner in the slip, extending tire life and cycle times.

Integrated Cat Technologies

- Second gear reweigh improves accuracy of the haul as it recalculates the payload.
- Instrumentation and Advisor system provide a three-category warning system and quick access to stored diagnostic data.
- Product Link™ system connects to each machine wirelessly, allowing you to monitor location, hours, fuel use, productivity, idle time, and diagnostic codes.
- Vital Information Management System (VIMS™) – User-friendly interface monitor is available in the cabin to monitor key parameters of the machine.
- 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.

Increased Performance and Reliability

- Build operator confidence with Automatic Retarder Control (ARC), providing excellent control while reducing operator effort for a smoother ride.
- Enjoy better productivity with a more responsive Traction Control System, improves control in poor underfoot conditions.
- Standard wet disc braking on rear wheels offers extra protection and enhanced safety.
- Prevent any slippage with an integrated park brake for slope holding capability.

**Compared with 773E (ASK series)*

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWER TRAIN			OPERATOR ENVIRONMENT (CONTINUED)		
Cat® 3412E HEUI™ engine: 12-cylinder diesel, air-to-air aftercooler (ATAAC), hydraulic electronic unit injection, air filter with precleaner (2), automatic cold mode idle control, turbocharger (2)	✓		Left side power window	✓	
Extended life coolant to -35° C (-30° F)	✓		Load counter, automatic: Advisor display	✓	
Braking system: oil-cooled – multiple disc (rear), parking/secondary, caliper disc (front), manual retarder (utilizes rear oil-cooled, multiple disc brakes), brake release motor (towing)	✓		Mirrors, left and right	✓	
Auto retarder control (ARC)		✓	Right side access door	✓	
Traction Control System (TCS)		✓	ROPS cab, insulated/sound suppressed	✓	
IBC (ARC &TCS)		✓	Seat, Cat Comfort, full air suspension and retractable four-point seat belt with shoulder harness	✓	
Transmission: 7-speed automatic power shift with ICM control, body upshift inhibitor, controlled throttle shifting, directional shift management, downshift inhibitor, neutral coast inhibitor, neutral start switch, programmable top gear/speed selection, reverse neutralizer during dumping, reverse shift inhibitor	✓		Seat, trainer with lap belt	✓	
ELECTRICAL			Tachometer	✓	
Alarm, backup	✓		Throttle lock	✓	
Alternator, 115 ampere	✓		Tinted, laminated glass	✓	
Auxiliary jump start receptacle	✓		Transmission gear indicator	✓	
Batteries, maintenance-free, 12V (2), 190 amp-hour	✓		Transmission oil temperature gauge	✓	
Electrical system, 24V	✓		TECHNOLOGY PRODUCTS		
Lighting system: backup light (halogen), directional signals/hazard warning (front and rear LED), headlights – (LED) with dimmer, hazard lights (LED), stop/tail lights (LED)	✓		Product Link™	✓	
OPERATOR ENVIRONMENT			Vital Information Management System (VIMS™)		✓
Air filter service indicator	✓		Truck Payload Management System (TPMS)		✓
Air system pressure gauge	✓		OTHER		
Ashtray and cigarette lighter	✓		Airline dryer	✓	
Audiovisual seat belt reminder	✓		Automatic lubrication system		✓
Brake oil temperature gauge	✓		Body down indicator	✓	
Coat hook, cup holder	✓		Body safety pin (secures body in up position)	✓	
Coolant temperature gauge	✓		Center-mounted rims	✓	
Diagnostic connection port	✓		Cluster/grouped lubrication system		✓
Engine overspeed indicator	✓		Cold weather package		✓
Entertainment radio ready: speakers, antenna, wiring harness	✓		Driveline guards, operator safety vandalism protection lock	✓	
Heated mirrors		✓	Engine crankcase guards	✓	
HVAC	✓		Exhaust Muffler		✓
			Fast fluid fill system		✓
			Fire extinguisher		✓
			Fuel system, Fast fill		✓
			Ground level battery disconnect	✓	
			Ground level machine shutdown	✓	
			Ground level grease fittings	✓	
			Guard, Turbocharger		✓
			Oil change system – high speed		✓
			Reservoirs: transmission, steering, brake – converter, hoist	✓	
			Rock ejectors	✓	
			Supplemental steering, automatic	✓	
			Wheel Chocks		✓

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Technical Specifications

Engine

Engine Model	Cat 3412E	
Rated Engine Speed	2,000 rpm	
Gross Power – SAE J1995	567 kW	760 hp
Net Power – SAE J1349	537 kW	720 hp
Net Torque @ 1,300 rpm	3436 N-m	2,534 lb-ft
Net Torque Rise	33%	
Number of Cylinders	12	
Bore	137 mm	5.4 in
Stroke	152 mm	6.0 in
Displacement	27 L	1,649 in ³

- These engine ratings apply at 2,000 rpm when tested under the specified condition for the specified standard in effect at the time of manufacture.
- Power rating conditions based on standard conditions of 25° C (77° F) and 99 kPa (29.32 in Hg) dry barometer, using 35° C (95° F) API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30° C (86° F) [reference a fuel density of 838.9 g/L (7.001 lb/gal)].
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- No derating required up to 3048 m (10,000 ft) altitude.
- Meets China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 2.

Transmission

Speed	km/h	mph	Speed	km/h	mph
Forward 1	10.8	6.7	Forward 5	37.0	23.0
Forward 3	20.4	12.7	Forward 7	67.8	42.1

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

Brakes

Brake Surface – Front	1395 cm ³	216 in ²
Brake Surface – Rear	61 269 cm ³	9,496 in ²
Brake Standards	ISO 3450:2011	

Operating Weights

Target Gross Machine Weight (TGMW)	99 300 kg	218,920 lbs
Empty Operating Weight, Dual Slope*	40 529 kg	89,351 lbs
Target Payload, Dual Slope	58 771 kg	129,568 lbs

- * Does not include Liner.
- Empty operating weight may vary based on the machine configuration. Refer to Off-Highway Truck Payload Policy.

Weight Distributions – Approximate

Front Axle – Empty	46.6%	Rear Axle – Empty	53.4%
Front Axle – Loaded	33.8%	Rear Axle – Loaded	66.2%

Capacity – Dual Slope – 100% Fill Factor

Struck	26.6 m ³	34.8 yd ³
Heaped (SAE 2:1)*	35.2 m ³	46.0 yd ³

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

Suspension

Effective Cylinder Stroke – Front	234 mm	5.2 in
Effective Cylinder Stroke – Rear	149 mm	5.9 in
Rear Axle Oscillation	± 8.1°	

Sound

Sound Standards	SAE J1166:2008	
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- For cab offered by Caterpillar, the operator sound exposure Leq (Equivalent Sound Pressure Level) is 80 dB(A) when measured according to work cycle procedures specified in SAE J1166:2008. This occurs when the cab is properly installed and maintained. The test was conducted with doors and windows closed.
- 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.

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.4 kg (5.29 lbs) of refrigerant, which has a CO₂ equivalent of 3.43 metric tonnes (3.78 tons)

Steering

Steer Angle	31°	
Turning Diameter Front Wheel Track	22 m	72 ft 2 in
Turning Circle Clearance Diameter	25 m	82 ft 0 in

- Steering standards meet ISO 5010:2007.
- Separate hydraulic system prevents cross-contamination. Steering wheel effort is low and steering wheel cycle times are reduced with a new variable displacement, piston-type steering pump.

ROPS/FOPS

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

Tires

Standard Tire	24.00R35 (E4)	
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- 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	700 L	185 gal
Cooling System	122 L	32 gal
Differentials and Final Drives	155 L	41 gal
Brake/Hoist Hydraulic Tank	133 L	35 gal
Brake/Hoist System (includes tank)	307 L	81 gal
Torque Converter/Transmission System	53 L	14 gal
Torque Converter/Transmission System (includes sump)	72 L	19 gal

AEXQ2668-02 (8-2023)
Replaces AEXQ2668-00
Build number: 05C
(Afr-ME, CIS, Asia Pacific, SE Asia)

