



# Cat<sup>®</sup> 725

## Articulated Truck

***The Cat<sup>®</sup> 725 features a world-class cab design, re-engineered using global operator feedback to advance comfort and ease of operation. Enhancements include new controls, transmission-protection features, hoist-assist system, advanced automatic traction control system, automatic retarder control, stability-assist machine rollover warning system, and a fuel saving ECO mode.***

### **Proven Reliability**

- Cat C9.3 engine delivers proven reliability across a variety of platforms.
- Terrain-based throttle control smooths throttle input over rough terrain to improve ride quality.
- Enhanced reliability through commonality and design simplicity with long life to overhaul.
- Minimized impact of emissions systems allows excellent response and ample power.
- Hydraulic retarder improves response and increases retarding power for controlled descent of grades.
- Aftertreatment technologies reduce emissions, including reducing NOx emissions by 80% compared to U.S. EPA Tier 4 Interim/EU Stage IIIB.

### **Durability**

- All structures and components are proven through extensive testing and customer experience.
- Advanced suspension allows greater speed over rough terrain, while softening impact loads.
- Front suspension oscillates  $\pm 6$  degrees for a smooth ride.
- Frames are designed to handle torque loads, decrease hitch area stress, and optimize suspension geometry.
- Frames are robot-welded for maximum durability.
- Directional shift protection protects the power train when quickly moving from reverse to forward or forward to reverse.

### **Achieve Greater Productivity**

- Advanced Automatic Traction Control (AATC) decreases wheel slippage, delivering maximum traction and increased productivity. Fully automatic with no operator action.
- Automatic Retarder Control (ARC) manages the retarder without any operator interaction. Fully automatic 100% of the time.
- Combined hoist/transmission lever, exclusive to Caterpillar, places multiple controls on transmission lever, incorporates park brake, and reduces operator interaction by as much as 50%.
- Machine wake up initiates machine systems when truck is de-isolated or cab door is opened.
- Low profile exhaust stack reduces overall height and eliminates the need for removal to transport.

### **Boost Fuel Efficiency**

- Economy mode reduces fuel use without affecting productivity and can be engaged with a single button.
- Next generation machine design improves fuel economy with minimized maintenance costs and the same great power and response.
- Innovative air-management systems optimize airflow and enhance power and fuel efficiency.
- Fully automatic retarder control helps prevent engine overspeed, protects power train components without any operator intervention.



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## Easy, Comfortable Operator Environment

- Simple, intuitive control and display layouts allow operator to focus on safe machine operation, while maintaining productivity.
- Redesigned cab structure increases glass area, improving rear quarter visibility.
- Automatic cab climate control.
- Cab-mounted mirrors for excellent visibility, reduced vibration, and easy folding.
- Front visibility mirror gives an improved view immediately in front of the machine.
- Touchscreen allows easy monitoring and adjustment of systems.
- Sliding windows improve ventilation and communication.
- Ample storage prevents cabin clutter.

## 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.
- Product Link™ system connects to each machine wirelessly, allowing you to monitor location, hours, fuel use, productivity, idle time, and diagnostic codes.
- Operator can view real-time load weights on the touchscreen display and set a target weight.
- External payload indicator lights alert the loader when to stop, reducing the risk of machine overloading.
- Stability assist software reports information via online VisionLink®, increasing awareness of machine history if a rollover has occurred.

## Built-In Safety Features

- Cat Detect with Stability Assist provides audible and visual alerts to the operator if the tractor and/or trailer unit is approaching an unstable angle during operation.
- Seat belt indicator provides audible and visible alert if seatbelt is not latched while the machine is on.
- Operator-presence detection system applies parking brake if gear is engaged and operator is not seated.
- Emergency brake switch allows operator to bring the machine to a safe stop in the unlikely event of both main and secondary brake circuits failing.
- Integrated payload lights (when Cat Production Measurement (CPM) option is fitted) with wide angle beam lights on all cab roof corners provide clear visibility to loading tool operator and site controllers.
- Secondary steering activates automatically if low pressure is sensed in primary system.

## Reduced Maintenance Costs

- Durable flexi fender reduces the risk of permanent damages and reduces repair costs.
- Durable design and easier servicing mean maximized uptime and reduced service costs.
- Universal joints are lubricated for life, eliminating any maintenance.
- Coolant formula improves component life by reducing corrosion.
- Entire machine is designed for greater ease of maintenance with side-tilting cab, electrically raised hood, access panels, and Cat Data Link connector.

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>OPERATOR ENVIRONMENT</b>			<b>POWER TRAIN</b>		
Air conditioning with R134a refrigerant	✓		Auto shift six-speed forward and single speed reverse transmission	✓	
Combined gear selection and hoist control lever	✓		Cat C9.3 engine	✓	
Liquid Crystal Display (LCD)	✓		CX31 transmission	✓	
Mirrors: extensive arrangement for improved visibility	✓		Cat Clean Emissions Module (CEM) and exhaust aftertreatment package	✓	
Mirrors, heated motorized		✓	Differentials: standard with automatic clutched inter- and cross-axle differential locks	✓	
Machine operation monitoring system	✓		Dual circuit oil immersed, enclosed brakes – all wheels	✓	
Radio, Bluetooth stereo system		✓	Hydraulic retarder	✓	
Seats: operator – fully adjustable, air suspension, retractable lap belt; trainer – padded with retractable lap belt	✓		Three axle, six-wheel drive	✓	
Seat, heated/cooled		✓	<b>SAFETY</b>		
Seat belt, four-point		✓	Reverse alarm	✓	
Secondary steering – electro hydraulic	✓		Rearview camera	✓	
Sun visor	✓		ROPS/FOPS cab	✓	
Tilt and telescopic steering wheel	✓		<b>GUARDS</b>		
Touchscreen display incorporating the rearview camera video feed	✓		Axle	✓	
Windshield wiper and washer, two speed, intermittent (front)	✓		Crankcase	✓	
Single speed rear wiper		✓	Radiator	✓	
<b>TECHNOLOGY</b>			Rear window	✓	
Cat Detect with Stability Assist	✓		<b>OTHER</b>		
Cat Production Measurement payload monitoring system		✓	Auto lube installation for automatic greasing of bearings		✓
Machine Security System (MSS)		✓	Bare chassis (no body) standard wheel base		✓
PLE631 (satellite)		✓	Body liners		✓
PLE641 (cellular) dependent on location and licensing agreement	✓		Cold weather coolant -51°C (-60°F)		✓
<b>ELECTRICAL AND LIGHTING</b>			Exhaust heated body		✓
Batteries (two) maintenance free	✓		Fast fuel fill		✓
Cold weather start attachment		✓	Fuel additive – anti-waxing		✓
Engine block heater		✓	Mud flaps: wheel arch and body mounted with transportation tiebacks	✓	
Ether start		✓	Scissor tailgate		✓
Electrical system: 24-volt, 5A 24- to 12-volt converter	✓		S•O•S <sup>SM</sup> sampling valves	✓	
Flashing LED beacon		✓	Sound suppression (optional outside EFTA*)		✓
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	✓		Tires, six 23.5R25	✓	
Main disconnect switch	✓		Vandalism protection: lockable caps	✓	
Roof mounted High Intensity Discharge (HID) work lights		✓	Wheel chocks		✓

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

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## Technical Specifications

### Engine

Engine Model	Cat C9.3	
Gross Power – SAE J1995:2014	255 kW	342 hp
Net Power – SAE J1349:2011	249 kW	334 hp
Engine Power – ISO 14396:2002	252 kW	338 hp
Bore	115 mm	4.5 in
Stroke	1149 mm	45.2 in
Displacement	9.3 L	567.5 in <sup>3</sup>

- Advertised power is tested at 1,700 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 249 kW (334 hp) per the SAE reference conditions.
- Meets U.S. EPA Tier 4 Final, either EU Stage V or EU Stage IV\*, Japan 2014, and Korea Tier 4 Final emission standards.
- 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

\* Stage IV engines comply with the transition provisions of the EU nonroad emission regulation.

No Engine Derating Below	914 m	3,000 ft
Peak Engine Torque Gross (SAE J1995:2014)	1729 N·m	1,275 lbf·ft
Peak Engine Torque Net (SAE J1349:2011)	1712 N·m	1,263 lbf·ft
Peak Engine Torque Speed	1,200 rpm	

### Weights

Rated Payload	24 tonnes	26.5 tons
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### Body Capacities

Heaped SAE 2:1	15 m <sup>3</sup>	19.6 yd <sup>3</sup>
Struck	11 m <sup>3</sup>	14.4 yd <sup>3</sup>
Tailgate Heaped SAE 2:1	15.6 m <sup>3</sup>	20.4 yd <sup>3</sup>
Tailgate Struck	11.1 m <sup>3</sup>	14.5 yd <sup>3</sup>

### Transmission

Speed	km/h	mph
Forward 1	8.1	5.0
Forward 2	15.2	9.4
Forward 3	23.2	14.4
Forward 4	35.5	22.1
Forward 5	49.4	30.7
Forward 6	58.4	36.3
Reverse 1	8.9	5.5

### Standards

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

### 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<sub>2</sub> equivalent of 1.716 metric tonnes.

### Sound Levels

Interior Cab	69±2 dB(A)
• The declared dynamic operator sound pressure level is 69±2 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.	
• 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	14 050 kg	30,974 lb
Center Axle – Empty	4646 kg	10,242 lb
Rear Axle – Empty	4426 kg	9,757 lb
Total – Empty	23 122 kg	50,975 lb
Front Axle – Rated Load	2500 kg	5,511 lb
Center Axle – Rated Load	10 750 kg	23,699 lb
Rear Axle – Rated Load	10 750 kg	23,699 lb
Total – Rated Load	24 000 kg	52,910 lb
Front Axle – Loaded	16 549 kg	36,484 lb
Center Axle – Loaded	15 397 kg	33,944 lb
Rear Axle – Loaded	15 176 kg	33,457 lb
Total – Loaded	47 122 kg	103,886 lb

### Body Plate Thickness

Front Plate	7 mm	0.28 in
Base Plate	13 mm	0.51 in
Side Plates	11 mm	0.43 in
Scow Plate	13 mm	0.51 in

### Service Refill Capacities

Fuel Tank	412.0 L	91.0 gal
Cooling System	83.0 L	18.0 gal
Steering/Hoist Hydraulic System	110.0 L	24.0 gal
Engine Crankcase	38.0 L	8.0 gal
Transmission	47.0 L	10.0 gal
OTG	24.0 L	5.0 gal
Final Drives (each)	7.5 L	1.6 gal
Axles (each)	26/28/26 L	6/8/08 gal
Diesel Exhaust Fluid (DEF) Tank	20.0 L	4.0 gal

### Body Hoist

Raise Time	10 Seconds
Lower Time	8 Seconds

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(N Am, Eur, Aus-NZ, Jpn)