



# Cat<sup>®</sup> 317

## Hydraulic Excavator

***The 317 Hydraulic Excavator boosts productivity on your jobsite. Standard, easy-to-use Cat<sup>®</sup> technologies, performance upgrades, and low fuel and maintenance costs allow you to move material all day with speed and precision while keeping more money in your pocket.***

***Not all features are available in all regions. Consult your Cat dealer for specific configurations available in your region.***

### High Performance and Productivity

- Increased breakout forces and hydraulic power increase productivity by up to eight percent over the previous model.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Reduce fuel consumption by up to five percent over the previous model.
- Match your machine to the job with power modes. Let Smart mode automatically match engine and hydraulic power to working conditions. Power mode constantly provides maximum productivity, and Eco mode minimizes fuel consumption in less-demanding applications.
- Get higher production in demanding applications, easier penetration into piles, and faster cycle times with Cat Advansys™ bucket tips. Quickly change tips with a simple lug wrench instead of a hammer or special tool, improving safety and uptime.
- Auxiliary hydraulic options give you the versatility to use a wide range of Cat attachments.
- The Cat C4.4 engine meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 (Tier 4 Final) emission standards.
- Don't let the temperature stop you from working. The 317 has an optional cold-start capability of -25°C (-13°F).

### Boost Efficiency and Productivity with Cat Technology

- Boost productivity up to 45 percent versus traditional grading with the standard Cat Grade with 2D system – includes indicate-only and laser capability.
- Dig with guidance to depth, slope, and horizontal distance to grade. You can set up to four different depth and slope targets to help save time and money.
- Standard 2D E-Fence prevents your machine from moving outside operator-defined parameters.
- Achieve precise load targets and increase loading efficiency with standard Cat Payload which provides on-the-go weighing and real-time estimates of your payload without swinging.
- Upgrade to Cat Grade with Advanced 2D to create and edit grade designs with ease on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Upgrade to Cat Grade with 3D to create and edit designs with ease and see the front linkage's full range of motion on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Know the excavator's exact position relative to GPS and GLONASS systems. The machine automatically compensates for excavator pitch and roll caused by sloping ground conditions.
- Use the excavator's onboard cell technology to quickly connect to 3D services like Trimble Connected Community or Virtual Reference Station.
- Remote Troubleshoot connects you to a dealer service pro to help solve your problem and quickly get you to work.
- Remote Flash works around your schedule to ensure your machine's software is up to date for optimal performance.
- The Cat App helps you manage fleet location, hours, and maintenance schedules; it also alerts you for required maintenance and even allows you to request service from your local Cat dealer
- Standard Product Link™ automatically and accurately collects data from your connected assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.



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## Work in Comfort in the All-New Cab

- Increase operator productivity with an all-new, larger cab. Comfort, Deluxe, and Premium cab options vary by region.
- The Comfort cab is equipped with a mechanical suspension seat. The Deluxe seat is heated and air adjustable, while the Premium seat is heated and cooled and adjusts automatically.
- Get in and out of the cab easier using the tip-up left console.
- Advanced viscous mounts reduce cab vibration.
- Control the excavator comfortably with easy-to-reach controls, all located in front of you.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles. A cup holder, document holder, and coat hook are also provided.
- Use the standard radio's USB ports and Bluetooth® technology to connect personal devices and make hands-free calls.

## Simple to Operate

- Start the engine with the push of a button, a Bluetooth key fob, a smartphone app, or the unique Operator ID function.
- Program your preferred power mode and joystick settings using your Operator ID. The excavator will automatically remember your selections.
- Navigate quickly on the standard high-resolution touchscreen monitor or with the aid of the jog dial control.
- The Cat PL161 Attachment Locator is a Bluetooth device that makes finding your attachments and other gear quick and easy. The excavator's onboard Bluetooth reader or Cat App on your phone will locate the device automatically.
- Save time and energy with work tool recognition. A simple shake of the attached tool confirms its identity, ensuring all attachment settings are correct, so you can get to work quickly and efficiently.
- Not sure how a function works or how to maintain your machine? Simply access the operator's manual through the touchscreen monitor.

## Lower Maintenance Costs

- Expect up to 20 percent less maintenance costs over the previous model.
- Quickly check and service your machine with all daily maintenance points accessible from ground level.
- Check the engine oil level quickly and safely from the ground. Fill and check engine oil on top of the machine with a conveniently located second dipstick.
- Track your machine's filter life and maintenance intervals on the in-cab monitor.
- The new hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3,000-hour replacement interval – 50 percent longer than previous filter designs.
- S-O-S<sup>SM</sup> ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

## Safety

- Access all daily maintenance points from ground level – no need for you to climb on top of the machine.
- The standard ROPS cab meets ISO 12117-2:2008 requirements.
- A ground-level shutoff switch stops all fuel to the engine and shuts down the machine when activated.
- A rearview and right-side-view camera are standard. Upgrade to 360° visibility to easily see objects and personnel around the excavator in a single view.
- New service platform design provides easy, safe, and quick access to the upper service platform. Prevent slipping with the anti-skid punch plate on the platform steps.
- Optional boom and stick lowering check valves prevent reverse flow, keeping your front linkage securely in place should the hydraulic system unexpectedly lose power.
- Brightly colored seatbelts allow easy recognition of properly utilized safety restraints.
- Antennas have theft-prevention bolts; a special tool makes them easy to remove at the end of a shift.

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>BOOMS AND STICKS</b>			<b>HYDRAULIC SYSTEM</b>		
5.1 m (16'9") Reach boom	✓		Boom and stick regeneration circuits	✓	
Variable angle boom		✓ <sup>1</sup>	Automatic hydraulic warm up	✓	
R2.6 m (8'6") stick		✓	Automatic two-speed travel	✓	
R3.1 m (10'2") stick		✓ <sup>2</sup>	Electric main control valve	✓	
<b>CAB</b>			Boom and stick drift reduction valve	✓	
ROPS, sound suppression	✓		Boom and stick lowering check valves		✓
Comfort cab: mechanical suspension seat, 8" touchscreen monitor		✓ <sup>3</sup>	Element-type main hydraulic filter	✓	
Deluxe cab: air suspension heated seat, 10" touchscreen monitor		✓	Single-type electronic main pump	✓	
Premium cab: air suspension heated and cooled seat, 10" touchscreen monitor		✓ <sup>1</sup>	<b>SAFETY AND SECURITY</b>		
<b>CAT TECHNOLOGIES</b>			Rear- and right-side-view cameras	✓	
Cat Product Link	✓		360° visibility		✓
Cat Grade with 2D	✓		Ground level engine shutoff switch	✓	
Cat Grade with Advanced 2D		✓	Service platform with anti-skid plate and countersunk bolts	✓	
Cat Grade with 3D		✓	Signaling/warning horn	✓	
Cat Payload	✓		Hydraulic lock out lever	✓	
2D E-Fence	✓		<b>SERVICE AND MAINTENANCE</b>		
Remote Flash capability	✓		Side entry to service platform	✓	
Remote Troubleshoot capability	✓		Grouped engine oil and fuel filters	✓	
Work tool recognition	✓		Ground level engine oil dipstick	✓	
Work tool tracking	✓		S-O-S sampling ports	✓	
Auto hammer stop	✓		<b>UNDERCARRIAGE AND STRUCTURES</b>		
<b>ELECTRICAL SYSTEM</b>			Grease lubricated track link	✓	
Maintenance free battery	✓		Tie-down points (ISO 15818:2017 compliant)	✓	
LED chassis light, left-side/right-side boom lights, cab lights	✓		500 mm (20") triple grouser shoes		✓
Programmable time-delay LED working lights	✓		600 mm (24") rubber track shoe		✓
360° lighting		✓	700 mm (28") triple grouser shoes		✓
<b>ENGINE</b>			3.05 mt (6,720 lb) counterweight		✓ <sup>3</sup>
C4.4 Tier 4 Final, Stage V, and Japan 2014 diesel engine	✓		3.57 mt (7,870 lb) counterweight	✓	
One-touch low idle with automatic engine speed control	✓				
Automatic engine shutdown	✓				
-18°C (-0°F) cold start capability		✓ <sup>4</sup>			
-25°C (-13°F) cold start capability		✓ <sup>5</sup>			
Electric fuel priming pump	✓				
Two-stage fuel filtration system with water separator and indicator	✓				
Sealed double element air filter with integrated precleaner	✓				
Electric cooling fans	✓				
Biodiesel capability up to B20		✓ <sup>2</sup>			

<sup>1</sup> Europe only

<sup>2</sup> All regions except Japan

<sup>3</sup> Japan only

<sup>4</sup> All regions except Europe

<sup>5</sup> All regions except Australia/New Zealand

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## Technical Specifications

Engine		
Engine Model	C4.4	
Engine Power – ISO 14396:2002	98 kW	131 hp
Net Power – ISO 9249:2007	97 kW	130 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in <sup>3</sup>

- No engine power derate required below 3000 m (9,840 ft) altitude.
- Net power available at the flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,200 rpm.

Hydraulic System		
Main System – Maximum Flow	296 L/min	78 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	25 800 kPa	3,741 psi

Swing Mechanism		
Swing Speed	8.7 rpm	
Maximum Swing Torque	61 kN-m	44,990 lb-ft

Weights		
Operating Weight	17 600 kg	38,900 lb

- Long undercarriage, Reach boom, R2.6 (8'6") stick, GD 0.65 m<sup>3</sup> (0.85 yd<sup>3</sup>) bucket, 500 mm (20") triple grouser shoes and 3.57 mt (7,870 lb) counterweight.

Service Refill Capacities		
Fuel Tank Capacity	271 L	71.6 gal
Cooling System	28 L	7.4 gal
Engine Oil	15 L	4.0 gal
Final Drive	6 L	1.6 gal
Hydraulic System (including tank)	94 L	24.8 gal
Hydraulic Tank	87 L	23.0 gal
DEF Tank	22 L	5.9 gal

Dimensions		
<b>Boom</b>	<b>Reach 5.1 m (16'9")</b>	
<b>Stick</b>	<b>Reach R2.6 m (8'6")</b>	
<b>Bucket</b>	<b>GD 0.65 m<sup>3</sup> (0.85 yd<sup>3</sup>)</b>	
Shipping Height (top of cab)	2930 mm	9'7"
Handrail Height	2940 mm	9'8"
Shipping Length	8550 mm	28'1"
Tail Swing Radius	2500 mm	8'2"
Counterweight Clearance	1010 mm	3'4"
Ground Clearance	430 mm	1'5"
Track Length	3970 mm	13'0"
Length to Center of Rollers	3170 mm	10'5"
Track Gauge	1990 mm	6'6"
Transport Width – 500 mm (20") Shoes	2490 mm	8'2"

Working Ranges		
<b>Boom</b>	<b>Reach 5.1 m (16'9")</b>	
<b>Stick</b>	<b>Reach R2.6 m (8'6")</b>	
<b>Bucket</b>	<b>GD 0.65 m<sup>3</sup> (0.85 yd<sup>3</sup>)</b>	
Maximum Digging Depth	6070 mm	19'11"
Maximum Reach at Ground Line	8760 mm	28'9"
Maximum Cutting Height	8950 mm	29'4"
Maximum Loading Height	6310 mm	20'8"
Minimum Loading Height	2320 mm	7'7"
Maximum Depth Cut for 2400 mm (8'0") Level Bottom	5880 mm	19'3"
Maximum Vertical Wall Digging Depth	5850 mm	19'2"
Minimum Working Equipment Radius	2980 mm	9'9"
Bucket Digging Force (ISO)	124 kN	27,880 lbf
Stick Digging Force (ISO)	80 kN	17,980 lbf

## Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.9 kg of refrigerant which has a CO<sub>2</sub> equivalent of 1.287 metric tonnes.



国土交通省指定  
低騒音型建設機械



オフロード法2014年  
基準適合

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com).

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