

# 317

## HYDRAULIC EXCAVATOR



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**Engine Power**

ISO 14396:2002

97.9 kW (131 hp)

ISO 14396:2002 (DIN)

133 hp (metric)

**Operating Weight**

17 800 kg (39,300 lb)

Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.  
Images may include regional configurations and optional items.



# THE NEW CAT<sup>®</sup> 317

MORE POWER, STABILITY, EFFICIENCY

The Cat<sup>®</sup> 317 Hydraulic Excavator boosts productivity on your jobsite. Standard, easy-to-use Cat 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.



## NEXT GENERATION EXCAVATORS

The new line of Cat excavators offers more choices than ever for your business.

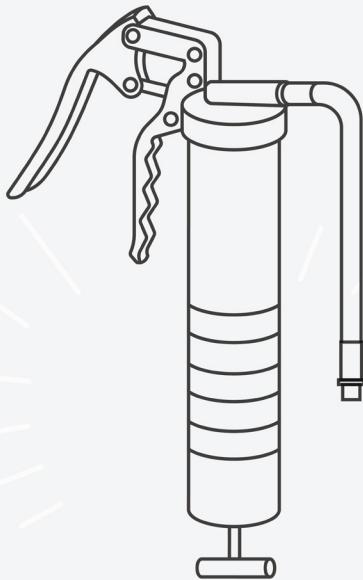
- + MORE MODEL OPTIONS
- + MORE STANDARD TECHNOLOGIES
- + MORE WAYS TO BOOST PERFORMANCE

Ready to help you make your business stronger, Cat next generation excavators give you new ways to get the most work done at a lower cost.



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## UP TO **20% LESS** MAINTENANCE COSTS



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**LESS MAINTENANCE,  
MORE PROFITABILITY**

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NOTE: COMPARISON IS BASED ON THE PREVIOUS MODEL.

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## UP TO **45% INCREASED** OPERATING EFFICIENCY

The Cat 317 offers the industry's highest level of standard factory-equipped technology, including Cat Grade with 2D and Payload.

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## UP TO **20% LOWER** MAINTENANCE COSTS

With extended and more synchronized maintenance intervals, you get more done at a lower cost.

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## INCREASED PERFORMANCE

A Cat C4.4 engine, powerful hydraulics, and increased machine stability give you the power to move material with speed and precision.



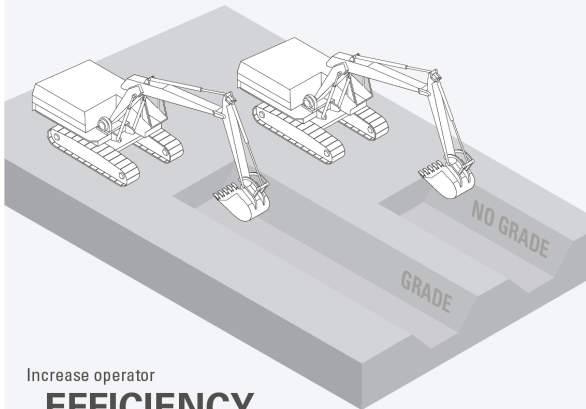
# STANDARD CAT TECHNOLOGY

GETS JOBS DONE FASTER WITH LESS REWORK

Onboard Cat technology gives you the edge. Operators of all experience levels will dig, load, and grade with more confidence, speed, and accuracy. The result? Better productivity and lower costs.

STANDARD CAT® GRADE

**MORE** WORK,  
**LESS** TIME,  
**MORE** MONEY



Increase operator  
**EFFICIENCY**  
by up to  
**45%**



# BOOST YOUR PRODUCTIVITY BY UP TO 45%

WITH CAT® TECHNOLOGY

## STANDARD, SIMPLE-TO-USE TECHNOLOGIES INCLUDE:



### CAT GRADE WITH 2D

Cat Grade with 2D helps operators reach grade faster. Operators cut and fill to exact specifications without overcutting. You can program up to four of your most commonly used target depth and slope offsets so you can get to grade with ease – a real time saver on the jobsite. Best of all, no grade checkers are needed so the work area is safer.



### CAT PAYLOAD

Cat Payload helps you achieve precise load targets to improve your operating efficiency. Pick up a load of material – with a bucket and thumb combination or grapple and clamshell attachments – and get real-time weight estimates without swinging. Automated tracking helps manage production and lower costs. You can even take payload data with you. The monitor's USB port lets you download your results from one shift all the way up to 30 days of work, so you can manage your progress without needing an internet connection or VisionLink® subscription.



### CAT GRADE WITH ASSIST

Automated boom, stick, and bucket movements deliver more accurate cuts with less effort. The operator simply sets the depth and slope into the monitor and activates single-lever digging.

## AVAILABLE OPTIONAL UPGRADES

Cat Grade with Advanced 2D and Cat Grade with 3D increase productivity and your profit potential. Cat Grade with Advanced 2D offers in-field design capability through an additional high-resolution touchscreen monitor. Cat Grade with 3D offers a choice of a single antenna global navigation satellite system (GNSS) for enhanced guidance or dual antenna GNSS for maximum grading efficiency. All Cat Grade systems are compatible with radios and base stations from Trimble, Topcon, and Leica. Already invested in grade infrastructure? You can install grade systems from Trimble, Topcon, and Leica onto the machine.

# CAT EQUIPMENT MANAGEMENT TECHNOLOGY TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

Cat equipment management telematics technology helps take the complexity out of managing your jobsites by gathering data generated by your equipment, materials, and people and serving it up to you in customizable formats.



## **PRODUCT LINK™**

Product Link™ collects data automatically and accurately from your 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.



## **VISIONLINK®**

Access information anytime, anywhere with VisionLink®. Use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business without paying for extras you don't want. Subscriptions are available with cellular or satellite reporting (or both).



**Remote Services** is a suite of technologies that improve your jobsite efficiency.

**Remote Troubleshoot** allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote Troubleshoot helps ensure the technician arrives with the correct parts and tools the first time, eliminating additional trips to save you time and money.

**Remote Flash** updates onboard software without a technician being present, potentially reducing update time by as much as 50%. You can initiate the update when convenient, increasing your overall operating efficiency.

The **Cat app** helps you manage your assets – at any time – right from your smartphone. You can see your fleet location, hours, and other information. You will get critical alerts for required maintenance, and you can even request service from your local Cat dealer.

## SEAT AND JOYSTICK CONSOLE HELP REDUCE FATIGUE

Comfort and movement efficiency help keep operators productive and alert all shift long. The standard seat is wide and adjustable for operators for personalized comfort. 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.



# NEW CAB DESIGN MAKES HARD WORK EASY

The new 317 cab helps protect the operator from the fatigue, stresses, sounds, and temperatures of the job.



## NEW SMART MODE

The new Smart mode, one of three power mode settings, automatically adjusts engine and hydraulic power for the highest fuel efficiency – less power for tasks such as swinging and more power for digging. Operators can set and store their power mode preference using operator ID. Owners can lock in the mode they want their operators to use to help manage fuel consumption.



## KEYLESS PUSH TO START

The 317 uses a keyless push-button engine start. This adds security for the machine by using operator ID codes to limit and track machine access. Codes can be entered manually or via an optional Bluetooth® key fob.



## CUSTOMIZABLE JOYSTICKS

Joystick function can be customized through the monitor. Joystick pattern as well as response can be set to match operator preference. All preferences are saved with the operator ID and restored at login. Make moving the excavator much easier with Cat Stick Steer. Simply push a button and use one hand to travel and turn instead of both hands or feet on levers or pedals. Adding an auxiliary relay allows you to power on or turn off a CB radio, beacon light, and even a dust suppression watering system without taking your hands off the joysticks.



## TOUCHSCREEN MONITOR

Machine settings can be controlled through the high-resolution touchscreen monitor. It offers 42 languages and is easy to reach from the seat. A second 254 mm (10 inch) touchscreen monitor is available.



A QUIET, SAFE WORKSPACE

# BUILDS OPERATOR CONFIDENCE



## CAB HELPS KEEP YOU SAFE

The ISO-certified rollover protective structure (ROPS) cab is sound suppressed and sealed. The large windows and lower front, right, and rear profile of the machine give outstanding visibility to the work area without the strain of constantly leaning forward.

## ALL-ROUND VISIBILITY

Enlarged windows and improved machine layout increase visibility from the seat of the cab. Standard rearview and right-side-view cameras help keep operators aware of their surroundings. An optional 360° visibility feature is also available. Powerful, long-lasting LED lights consume minimal power, keeping you safe while working in the dark.

## EASY ACCESS, CONNECTIVITY, AND STORAGE

Several built-in convenience features make work more comfortable for operators:

- + BLUETOOTH INTEGRATED RADIO
- + USB PORTS FOR CHARGING AND PHONE CONNECTIVITY
- + 12V DC OUTLETS AND AUX PORT
- + STORAGE IN REAR, OVERHEAD, AND CONSOLE COMPARTMENTS
- + CUP HOLDER, DOCUMENT HOLDER, AND COAT HOOK

# SAFETY FEATURES

## LOOK OUT FOR YOUR PEOPLE AND EQUIPMENT

Help keep your people and equipment safe with new technology features, ground-level daily maintenance, and new upper platform access.

### UPPER PLATFORM ACCESS

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New right-side service platform design provides easy, safe, and quick access to upper service platform. Serrated steps, anti-skid plating, and handrails help ensure you avoid slips and trips.

### GROUND-LEVEL DAILY MAINTENANCE

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All daily maintenance checks can be performed from ground level, making maintenance faster, easier, and safer. Checkpoints include the engine oil dipstick, fuel water separator, fuel tank water and sediment drains, and cooling system coolant level check.



### INSPECTION LIGHTING

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Make service work easier and safer with optional inspection lighting. With the flip of a switch, lights will illuminate the engine, pump, battery, and radiator compartments to enhance visibility.

# PROTECTION IN ALL DIRECTIONS



E-WALL SWING



E-WALL FORWARD



E-WALL CAB PROTECTION



E-WALL CEILING



E-WALL FLOOR

## E-FENCE TECHNOLOGY

Whether you are using a bucket and thumb combination or a hammer, grapple, or clamshell, E-Fence automatically stops excavator motion using boundaries you set through the monitor for the entire working envelope – above, below, sides, and front. E-Fence protects equipment from damage and reduces fines related to zoning or underground utility damage. Automatic boundaries even help prevent operator fatigue by reducing overswinging and overdigging.



LOWER MAINTENANCE COSTS  
**UP TO 20%**

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## DO MORE. PAY LESS.

With extended and more synchronized maintenance intervals, you get more done at a lower cost. Consolidated filter locations make service faster and easier. Your machine's filter life and maintenance intervals are also trackable on the in-cab touchscreen monitor.

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## SERVICE REMINDERS MADE EASY

Boost productivity with proactive service reminders. The new integrated vehicle health management system alerts the operator with step-by-step service guidance, along with parts needed, so you don't experience any unnecessary downtime.

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## NEW LONGER LASTING FILTERS

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% longer than previous filter designs.

# INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

You can easily expand the performance of your machine by utilizing any of the variety of Cat attachments. Each Cat attachment is designed to fit the weight and horsepower of Cat excavators for improved performance, safety, and stability.

## BUCKETS



## COUPLERS



## ATTACHMENT TRACKING MADE EASY

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 the Cat app on your phone will locate the device automatically.

Save more time and energy with the available work tool recognition feature. A simple shake of the attached tool confirms its identity; it also ensures all the attachment settings are correct, so you can get to work quickly and efficiently.

## GRAPPLES



## TILTROTATOR



## DO HARD-TO-REACH WORK

With 360° rotation and 40° side-to-side tilting action, a Cat tiltrotator will help you get complex work done faster. A new system upgrade from the factory allows the tool to work with Cat 2D Grade, Assist, Payload, and E-Fence. It includes factory-fit joysticks, but uses the standard cab monitor to display the tool and engage its SecureLock™ so you don't need to spend money on an extra monitor. It also works seamlessly with other brands with no additional hardware required. All you have to do is simply select "Third Party Tiltrotator System Installation" in the monitor, do the calibration, and get to work.

## SHEARS



## HYDRAULIC HAMMERS



## PREVENT HAMMER WEAR AND TEAR

Protect your hammer tool from overheating and rapid wear. Auto hammer stop warns you after 15 seconds of continuous firing and then automatically shuts it off after 30 seconds – all to extend the tool's service life.

# TECHNICAL SPECIFICATIONS

See [cat.com](http://cat.com) for complete specifications.

ENGINE		
Engine Model	Cat® C4.4	
Engine Power		
ISO 14396	97.9 kW	131 hp
ISO 14396 (DIN)	133 hp (metric)	
Net Power		
ISO 9249	96.9 kW	130 hp
ISO 9249 (DIN)	132 hp (metric)	
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in <sup>3</sup>

- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- 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	64.6 kN-m	47,647 lbf-ft

WEIGHTS		
Operating Weight	17 800 kg	39,300 lb
• Long undercarriage, Reach boom, R3.1 (10'2") stick, GD 1.0 m <sup>3</sup> (1.31 yd <sup>3</sup> ) bucket, 500 mm (20") triple grouser shoes, and 3.57 mt (7,870 lb) counterweight.		

SERVICE REFILL CAPACITIES		
Fuel Tank	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
Diesel Exhaust Fluid (DEF) Tank	22 L	5.9 gal

DIMENSIONS		
Boom	Reach 5.1 m (16'9")	
Stick	R3.1 m (10'2")	
Bucket	GD 1.0 m <sup>3</sup> (1.31 yd <sup>3</sup> )	
Shipping Height (top of cab)	2930 mm	9'7"
Handrail Height	2940 mm	9'8"
Shipping Length	8570 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"
Transport Width – 600 mm (24") shoes	2590 mm	8'6"
Transport Width – 700 mm (28") shoes	2690 mm	8'10"
Transport Width – 790 mm (31") shoes	2780 mm	9'1"

WORKING RANGES AND FORCES		
Boom	Reach 5.1 m (16'9")	
Stick	R3.1 m (10'2")	
Bucket	GD 1.0 m <sup>3</sup> (1.31 yd <sup>3</sup> )	
Maximum Digging Depth	6600 mm	21'8"
Maximum Reach at Ground Line	9200 mm	30'2"
Maximum Cutting Height	8990 mm	29'6"
Maximum Loading Height	6370 mm	20'11"
Minimum Loading Height	1790 mm	5'10"
Maximum Depth Cut for 2400 mm (8'0") Level Bottom	6380 mm	20'11"
Maximum Vertical Wall Digging Depth	5150 mm	16'11"
Minimum Working Equipment Radius	2930 mm	9'7"
Bucket Digging Force (ISO)	123 kN	27,650 lbf
Stick Digging Force (ISO)	71 kN	15,960 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.		

# STANDARD & OPTIONAL EQUIPMENT

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

BOOMS AND STICKS	STANDARD	OPTIONAL
Variable Angle boom (2.64 m [8'8"] Stub + 2.6 m [8'6"] Fore) <sup>1</sup>		•
5.1 m (16'9") Reach boom <sup>2</sup>		•
2.25 m (7'5") Reach stick <sup>1</sup>		•
2.6 m (8'6") Reach stick		•
3.1 m (10'2") Reach stick		•
CAB	STANDARD	OPTIONAL
Rollover protective structure (ROPS)	•	
Deluxe cab: air suspension heated seat, 254 mm (10") touchscreen monitor		•
Premium cab: air suspension heated and cooled seat, 254 mm (10") touchscreen monitor		•
Cat <sup>®</sup> Stick Steer		•
Auxiliary relay		•
CAT TECHNOLOGIES	STANDARD	OPTIONAL
Cat Product Link™	•	
Remote Flash	•	
Remote Troubleshoot	•	
Cat Grade with 2D	•	
Cat Grade with Advanced 2D		•
Cat Grade with 3D single GNSS		•
Cat Grade with 3D dual GNSS		•
Cat Assist	•	
Cat Payload	•	
2D E-Fence	•	
Auto hammer stop	•	
Work tool recognition	•	
Work tool tracking	•	
ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Maintenance-free battery	•	
LED chassis light, left-side/right-side boom lights, cab lights	•	
Programmable time-delay LED working lights	•	
360° lighting		•
ENGINE	STANDARD	OPTIONAL
Cat C4.4 single turbo diesel engine	•	
One-touch low idle with automatic engine speed control	•	
Automatic engine shutdown	•	
-18°C (-0°F) cold start capability <sup>3</sup>	•	
-25°C (-13°F) cold start capability <sup>1</sup>	•	
Electric fuel priming pump	•	

ENGINE (CONTINUED)	STANDARD	OPTIONAL
Two-stage fuel filtration system with water separator and indicator	•	
Sealed double element air filter with integrated precleaner	•	
Electric cooling fans	•	
HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Boom and stick regeneration circuits	•	
Automatic hydraulic warm up	•	
Automatic two-speed travel	•	
Electric main control valve	•	
Boom and stick drift reduction valve	•	
Boom and stick lowering check valves	•	
Element-type main hydraulic filter	•	
Single-type electronic main pump	•	
SAFETY AND SECURITY	STANDARD	OPTIONAL
Rear- and right-side-view cameras	•	
360° visibility		•
Ground-level engine shutoff switch	•	
Swing alarm		•
Service platform with anti-skid plate and countersunk bolts	•	
Signaling/warning horn	•	
Hydraulic lockout lever	•	
Inspection lighting		•
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Side entry to service platform	•	
Grouped engine oil and fuel filters	•	
Ground-level engine oil dipstick	•	
Scheduled Oil Sampling (S <sup>•</sup> O <sup>•</sup> S <sup>SM</sup> ) sampling ports	•	
Integrated vehicle health management system		•
UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
Grease lubricated track link	•	
Tie-down points (ISO 15818:2017 compliant)	•	
500 mm (20") triple grouser shoes		•
600 mm (24") triple grouser shoes		•
700 mm (28") triple grouser track shoes		•
790 mm (31") triple grouser track shoes <sup>1</sup>		•
3.57 mt (7,870 lb) counterweight	•	

<sup>1</sup> Europe only

<sup>2</sup> Standard in Australia and New Zealand

<sup>3</sup> Australia and New Zealand only

**Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.**  
For additional information, refer to the Technical Specifications brochures for the 317 available at [www.cat.com](http://www.cat.com) or your Cat dealer.

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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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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AEXQ3119-02  
Replaces AEXQ3119-01  
Build Number: 07C  
(Aus-NZ, Eur)

