



Cat[®] 333

Hydraulic Excavator

The new Cat[®] 333 Excavator gives you more digging force and increased bucket size, so you can tackle any job. A fuel-efficient hydraulic system and extended maintenance intervals help to keep your overall costs down. Reinforced structures and increased track width offer more stability and durability when working in tough applications. Not all features available in all regions. Consult your Cat dealer for specific configurations available in your region.

High Performance with Lower Fuel Consumption

- The high fuel efficiency keeps you focused on the job and budget.
- The Cat C7.1 engine gives you powerful hydraulic power to work with different types of material.
- Large bucket capacity means fewer passes to move material faster.
- Get up to 7 percent more productivity with increased bucket and stick forces and larger bucket compared to the 330.
- Match the excavator to the job with two power modes – Power and Smart. Smart mode automatically matches engine and hydraulic power to digging conditions, providing max power when needed and reducing power when it isn't to help save fuel.
- The high-efficiency hydraulic fan cools the engine on demand to help reduce fuel consumption; available reverse function makes it easy to keep cores clean.
- Self-sharpening Advansys™ bucket tips option increases production and lowers costs.
- Auxiliary hydraulic options give you the versatility to use a wide range of Cat attachments.
- Don't let the temperature stop you from working. The excavator has a high-ambient capability of 50°C (122°F) and cold start capability of -18°C (0°F).

Reliable in Tough Conditions

- Reinforced booms, sticks, and linkage keep you moving from job to job. The reinforced frame makes the machine more durable and built to last.
- The increased track width of +150 mm (6 in) gives you more critical stability to work with large buckets or on uneven surfaces while still being within transport width requirements.
- Automatic hydraulic oil warm up gets you to work faster in cold temperatures and helps prolong the life of components.
- Two levels of filtration protect the engine from diesel fuel.
- Grease sealed between track pins and bushings reduces travel noise and prevents debris from entering to increase undercarriage life.
- The sloped track frame prevents mud and debris accumulation, helping reduce risk of track damage.
- Work up to 4500 m (14,760 ft) above sea level with engine power derate above 3000 m (9,840 ft).

Simple to Operate

- Start the engine with the push-to-start button.
- Program each joystick button, including power mode, response, and pattern, using Operator ID; the machine will remember what you set each time you go to work.
- 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.
- Not sure how a function works or how to maintain the excavator? Always have the operator's manual at your fingertips in the touchscreen monitor.

Work in Comfort in the All-New Cab

- The new comfort cab offers a mechanically adjustable seat suspension and an automatic heating/air conditioning system.
- Navigate quickly with the high-resolution 203 mm (8 in) touchscreen monitor to view machine information.
- 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.
- Use the standard radio's USB ports and Bluetooth[®] technology to connect personal devices and make hands-free calls.



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Easy to Maintain

- Long life for fuel, oil, and air filters keeps you out of the shop and working on the job longer.
- Oil and fuel filters are grouped together and located on the right-hand side of the machine for easy maintenance.
- The air intake filter with precleaner has double the dust holding capacity of the previous air intake filter.
- Check the hydraulic system oil and easily drain fuel system water and fuel tank water from ground level.
- Track your excavator's filter life and maintenance intervals via the in-cab monitor. The new optional engine oil sensor tracks your oil levels, which helps to speed up your daily maintenance routine.
- The 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.
- The high-efficiency hydraulic fan has an optional automatic reverse function to keep cores free from debris, eliminating the need for any operator interaction.
- S-O-SSM ports simplify maintenance and allow for quick, easy extraction of fluid samples for analysis.

Safely Home Every Day

- The standard ROPS cab meets ISO 12117-2:2008 requirements.
- Enjoy great visibility into the trench, in each swing direction, and behind you with the help of smaller cab pillars, larger windows, and a flat engine hood design.
- A ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.
- Add optional rear- and right-hand-side cameras for added visibility to your surroundings.
- Serrated steps and anti-skid punch plate on the service platform help prevent slipping.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
BOOMS AND STICKS			HYDRAULIC SYSTEM		
6.15 m (20'2") HD Reach boom		✓	Boom and stick regeneration circuit	✓	
5.55 m (18'2") Mass Boom		✓	Electronic main control valve	✓	
10.2 m (33'6") Super Long Reach boom		✓	Automatic hydraulic oil warm up	✓	
2.8 m (9'6") HD Reach stick		✓	Automatic two-speed travel	✓	
3.2 m (10'6") HD Reach stick		✓	SAFETY AND SECURITY		
2.5 m (8'2") Mass stick		✓	Service platform with anti-skid plate and recessed bolts	✓	
7.85 m (25'9") Super Long Reach stick		✓	Rearview camera	✓	
CAB			Right- and side-view camera		✓
High-resolution 203 mm (8") LCD touchscreen monitor	✓		SERVICE AND MAINTENANCE		
Mechanically adjustable seat suspension	✓		Grouped location of engine oil and fuel filters	✓	
Product Link™	✓		Scheduled Oil Sampling (S-O-S SM) ports	✓	
Cat® Stick Steer		✓	UNDERCARRIAGE AND STRUCTURES		
ELECTRICAL SYSTEM			Grease lubricated track link	✓	
Maintenance-free 1,000 CCA batteries	✓		7700 kg (16,980 lb) counterweight	✓	
Centralized electrical disconnect switch	✓		600 mm (24") double grouser track shoes		✓
Programmable time-delay working lights	✓		700 mm (28") triple grouser track shoes		✓
Chassis, boom, and cab lights	✓		800 mm (31") triple grouser track shoes		✓
ENGINE					
Power and Smart mode	✓				
Automatic engine speed control	✓				
Up to 4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓				
50°C (122°F) high-ambient cooling	✓				
-18°C (0°F) cold start capability	✓				
Double element air filter with integrated precleaner	✓				
Electric cooling fans with auto reverse function	✓				

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Technical Specifications

Engine		
Engine Model	C7.1	
Net Power		
ISO 9249:2007	193.8 kW	260 hp
ISO 9249:2007 (DIN)	263 hp (metric)	
Engine Power		
ISO 14396:2002	195 kW	261 hp
ISO 14396:2002 (DIN)	265 hp (metric)	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in ³

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system, and alternator.
- Rating at 2000 rpm.

Hydraulic System		
Main System – Maximum Flow – Implement	560 L/min	148 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	29 800 kPa	4,321 psi

Swing Mechanism		
Swing Speed	11.5 rpm	
Maximum Swing Torque	111 kN•m	81,869 lbf-ft

Weights		
Operating Weight	32 600 kg	71,800 lb
* Long undercarriage, HD Reach boom, HD R3.2 (10'6") stick, HD 2.0 m ³ (2.62 yd ³) bucket, 600 mm (24") triple grouser shoes, and 7700 kg (16,980 lb) counterweight.		
Operating Weight	32 100 kg	70,800 lb
* Long undercarriage, Mass boom, M2.5 (8'2") stick, HD 2.36 m ³ (3.08 yd ³) bucket, 600 mm (24") triple grouser shoes, and 7700 kg (16,980 lb) counterweight.		

Service Refill Capacities		
Fuel Tank Capacity	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil (with filter)	25 L	6.6 gal
Swing Drive	11.5 L	3.0 gal
Final Drive (each)	4.5 L	1.2 gal
Hydraulic System (including tank)	310 L	81.9 gal
Hydraulic Tank	147 L	38.8 gal

Dimensions		
Boom	HD Reach 6.15 m (20'2")	
Stick	HD Reach 3.2 m (10'6")	
Bucket	HD 2.0 m³ (2.62 yd³)	
Shipping Height	3060 mm	10'0"
Machine Length	10 450 mm	34'3"
Tail Swing Radius	3130 mm	10'3"
Counterweight Clearance	1120 mm	3'8"
Ground Clearance	480 mm	1'7"
Track Length to Center of Rollers	3990 mm	13'1"
Track Gauge	2740 mm	9'0"
Undercarriage Width – 600 mm (24") shoes	3340 mm	10'11"
Undercarriage Width – 700 mm (28") shoes	3440 mm	11'3"
Undercarriage Width – 800 mm (31") shoes	3540 mm	11'7"

Working Ranges and Forces		
Boom	HD Reach 6.15 m (20'2")	
Stick	HD Reach 3.2 m (10'6")	
Bucket	HD 2.0 m³ (2.62 yd³)	
Maximum Digging Depth	7370 mm	24'2"
Maximum Reach at Ground Level	10 680 mm	35'0"
Maximum Cutting Height	9660 mm	31'8"
Maximum Loading Height	6510 mm	21'4"
Minimum Loading Height	2170 mm	7'1"
Maximum Depth Cut for 2440 mm (8') Level Bottom	7200 mm	23'7"
Maximum Vertical Wall Digging Depth	6240 mm	20'6"
Bucket Digging Force (ISO)	197 kN	44,290 lbf
Stick Digging Force (ISO)	147 kN	33,050 lbf

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

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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Build Number: 07D
(Afr-ME, Indonesia, S Am [excluding Brazil],
SE Asia, Taiwan)

