



Cat[®] 330

Hydraulic Excavator

The Cat[®] 330 Excavator has the speed, efficiency, and power for your heavy-duty applications requiring maximum productivity. You get built-in Cat GRADE with 2D, Grade Assist, Lift Assist, and Payload as standard equipment right from the factory – boosting your operator efficiency by up to 45 percent. Combine these features with a new cab, longer maintenance intervals and increased fuel efficiency, and you have a low-cost-per-unit-of-production excavator built for your heavy-duty applications.

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

High Performance Digging and Lifting

- Increase fuel efficiency up to 20 percent over the 330F Excavator.
- Lift more with up to nine percent improved lift capacity and increased bucket size over the 330F Excavator.
- Make working on slopes easier with five percent improved swing torque over the 330F Excavator.
- The C7.1 engine can run on biodiesel up to B20 and meets U.S. EPA Tier 4 Final, EU Stage V, Japan 2014 (Tier 4 Final) and Korea Tier 4 Final emission standards with an aftertreatment system that requires no maintenance or downtime.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Match the excavator to the job with power modes; let Smart mode automatically match engine and hydraulic power to digging conditions.
- Advansys™ bucket tips increase penetration and improve cycle times. Tip changes can be done quickly 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.
- Available SmartBoom™ lets the boom freely travel up and down without using any pump flow so operators can focus on stick and bucket work. The benefits are reduced operator stress and reduced fuel consumption.
- Don't let the temperature stop you from working. The excavator has a standard high-ambient temperature capability of 52° C (125° F) with de-rate and cold start capability of -18° C (0° F). An optional -32° C (-25° F) cold start package is available.

Boost Efficiency and Boost Productivity with Integrated Cat Technologies

- Boost productivity up to 45 percent versus traditional grading with standard Cat GRADE with 2D system – includes indicate-only and laser capability.
- Standard Grade Assist: Stay on grade – simply and effortlessly – with single-lever digging.
- Set your desired bucket angle and let Bucket Assist automatically maintain the angle in sloping, leveling, fine grading, and trenching applications.
- Keep the tracks on ground in lifting and hard digging with Boom Assist.
- Automatically stop excavator swing at operator-defined set points in truck loading and trenching applications with Swing Assist, which will help you use less effort and consume less fuel.
- Standard Cat PAYLOAD on-board weighing system: Achieve precise load targets and increase loading efficiency with on-the-go weighing and real-time estimates of your payload without swinging.
- 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 can manage your progress without needing an internet connection or VisionLink[®] subscription.
- Upgrade to optional Cat GRADE with Advanced 2D: Create and edit grade designs with ease on a second high resolution 254 mm (10 in) touchscreen monitor.
- Upgrade to optional Cat GRADE with 3D: 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.
- Use the excavator's onboard cell technology to quickly connect to 3D services like Virtual Reference Station, Internet Base Service Station, and Trimble Connected Community.
- 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.



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- Already invested in another brand's 3D system? No problem. Standard Cat technology like GRADE with 2D can readily integrate with that system to give you the precise results you need.
- The standard 2D E-Fence feature integrated right out of the factory prevents the excavator from moving outside operator-defined set points.
- Standard 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.

Work in Comfort in the All-New Cab

- Choose between Deluxe and Premium cabs – both with automatic climate control.
- The Deluxe seat is heated and air adjustable. 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 up to 50 percent over previous excavator models.
- 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, bottle 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 a push button; use a Bluetooth key fob, smartphone app, or the unique Operator ID function.
- Program your power mode and joystick preferences using Operator ID; the excavator will remember what you set each time you go to work.
- Protect your hammer from overworking. Auto hammer stop warns you after 15 seconds of continuous firing and then automatically shuts it off after 30 seconds – all to prevent wear and tear on the attachment and excavator.
- Navigate quickly on the standard high-resolution 203 mm (8 in) touchscreen monitor, or with the optional 254 mm (10 in) touchscreen monitor, or with the aid of the jog dial control.
- A second 254 mm (10 in) monitor is available for Cat GRADE with Advanced 2D.
- Save more time and energy with available work tool recognition. 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.
- 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.
- 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.

Maintenance

- Expect up to 20 percent less maintenance cost than the 330F. (Savings calculated over 12,000 machine hours.)
- Do all daily maintenance at ground level.
- Check engine oil level quickly and safely with the new ground-level engine oil dipstick; fill and check engine oil on top of the machine with a conveniently located second dipstick.
- Track your excavator's filter life and maintenance intervals via the in-cab monitor.
- No required maintenance on the Cat Clean Emissions Module.
- Change all fuel filters at a synchronized 1,000 hours – a 100 percent increase over the 330F fuel filters.
- Expect the new air intake filter with precleaner to last up to 1,000 hours – a 100 percent increase over the previous filter.
- 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.
- High-efficiency cooling fans run only when needed; you can program intervals so they automatically reverse to keep cores clean without interrupting your work.
- S-O-SSM ports are on ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

Safety

- Lift Assist helps you avoid tipping by letting you know if your load is within the excavator's safe working range limits.
- Access 100 percent of daily maintenance points from ground level – no need for you to climb on top of the excavator.
- 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.
- The standard hydraulic lockout lever isolates all hydraulic and travel functions in the lowered position.
- Ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.
- A rearview camera and a right-hand-sideview camera are standard. Upgrade to 360° visibility and you'll easily visualize objects and personnel around the excavator in a single view.
- New right service platform design provides easy, safe, and quick access to upper service platform; the service platform steps use anti-skid punch plate to prevent slipping.
- Available boom and stick lowering check valves prevent reverse flow, keeping your front linkage securely in place should the hydraulic system unexpectedly lose power.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAB			ENGINE		
ROPS, standard sound suppression (<i>Deluxe only</i>)	✓		Three selectable power modes	✓	
ROPS, advanced sound suppression (<i>Premium only</i>)	✓		Automatic engine speed control	✓	
Air-adjustable seat with heat (<i>Deluxe only</i>)	✓		Auto engine idle shutdown	✓	
Auto-adjustable seat with heat and air ventilation (<i>Premium only</i>)		✓	52° C (125° F) high-ambient cooling capacity with de-rate	✓	
High-resolution 203 mm (8 in) LCD touchscreen monitor	✓*		-32° C (-25° F) cold start capability		✓
High-resolution 254 mm (10 in) LCD touchscreen monitor	✓	✓*	Double element air filter with integrated precleaner	✓	
<i>*Korea only</i>			Reversing electric cooling fans	✓	
SERVICE AND MAINTENANCE			BOOMS AND STICKS		
Sampling ports for Scheduled Oil Sampling (S.O.S)	✓		6.15 m (20'2") reach boom, 3.2 m (10'6") reach stick		✓
Ground-level and platform-level engine oil dipsticks	✓		6.15 m (20'2") reach boom, 2.65 m (8'8") reach stick		✓
Electric refueling pump with auto shut off		✓	10.2 m (33'6") SLR boom, 7.85 m (25'9") SLR stick		✓
HYDRAULIC SYSTEM			CAT TECHNOLOGY		
Boom and stick regeneration circuits	✓		Cat Product Link	✓	
Auto hydraulic warm up	✓		Cat GRADE with 2D	✓	
Auto two-speed travel	✓		Cat GRADE with Advanced 2D		✓
Boom and stick drift reduction valve	✓		Cat GRADE with 3D		✓
Boom and stick lowering check valves		✓	Cat GRADE with Assist	✓	
Hammer return filter circuit		✓	Cat PAYLOAD	✓	
Advanced Tool Control (two pump, one/two way high-pressure flow)	✓*	✓	E-Fence	✓	
Medium-pressure circuit		✓	Lift Assist	✓	
Quick coupler circuit		✓	Remote Flash Capability	✓	
<i>*Europe only</i>			Remote Troubleshoot Capability	✓	
UNDERCARRIAGE AND STRUCTURES			ELECTRICAL SYSTEM		
600 mm (24") triple grouser shoes		✓	Two 1,000 CCA maintenance free batteries	✓	
700 mm (28") triple grouser shoes		✓	Programmable time-delay LED working lights	✓	
800 mm (31") triple grouser shoes		✓	LED chassis light, left-hand/right-hand boom lights, cab lights	✓	
Tie-down points on base frame	✓				
6700 kg (14,770 lb) counterweight	✓				
SAFETY AND SECURITY					
Rearview camera	✓				
Right-hand-sideview camera	✓				
360° visibility		✓			
Ground-level engine shutoff switch	✓				
Right-hand handrail and hand hold	✓				
Signaling/warning horn	✓				

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For additional information and additional regional offerings, refer to the Technical Specifications brochure available at www.cat.com or your Cat dealer.

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Technical Specifications

Engine

Engine Model	Cat C7.1	
Engine Power – ISO 9249	204 kW	273 hp
Engine Power – ISO 14396	205 kW	275 hp
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in ³

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 – Equipment – Heavy Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	29 800 kPa	4,320 psi

Swing Mechanism

Swing Speed	11.5 rpm	
Maximum Swing Torque	110 kN-m	81,130 lb-ft

Weights

Operating Weight	30 900 kg	68,125 lb
• Long undercarriage, Reach boom, R3.2 (10'6") stick, HD 1.76 m ³ (2.30 yd ³) bucket and 800 mm (31") triple grouser shoes.		
Operating Weight	29 900 kg	65,920 lb
• Long undercarriage, Reach boom, R3.2 (10'6") stick, HD 1.76 m ³ (2.30 yd ³) bucket and 600 mm (24") triple grouser shoes.		

Service Refill Capacities

Fuel Tank	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	10 L	2.6 gal
Final Drive (each)	5.5 L	1.5 gal
Hydraulic System (including tank)	310 L	81.9 gal
Hydraulic Tank	147 L	38.8 gal
DEF Tank	41 L	10.8 gal

Dimensions

Boom	Reach 6.15 m (20'2")	
Stick	Reach 3.2 m (10'6")	
Bucket	HD 1.76 m³ (2.30 yd³)	
Shipping Height (top of cab)	3060 mm	10'1"
Handrail Height	3060 mm	10'1"
Shipping Length	10 420 mm	34'2"
Tail Swing Radius	3130 mm	10'3"
Track Length to Center of Rollers	3990 mm	13'1"
Ground Clearance	490 mm	1'7"
Track Gauge	2590 mm	8'6"
Track Gauge – Narrow Undercarriage	2390 mm	7'10"
Transport Width – 600 mm (24") Shoes	3190 mm	10'6"
Transport Width – 600 mm (24") Shoes – Narrow Undercarriage	2990 mm	9'10"
Transport Width – 800 mm (31") Shoes	3390 mm	11'1"
Counterweight Clearance	1120 mm	3'8"

Working Ranges and Forces

Boom	Reach 6.15 m (20'2")	
Stick	Reach 3.2 m (10'6")	
Bucket	HD 1.76 m³ (2.30 yd³)	
Maximum Digging Depth	7240 mm	23'9"
Maximum Reach at Ground Level	10 680 mm	35'1"
Maximum Cutting Height	10 030 mm	32'11"
Maximum Loading Height	6950 mm	22'10"
Minimum Loading Height	2300 mm	7'7"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	7090 mm	23'3"
Maximum Vertical Wall Digging Depth	6010 mm	19'9"
Bucket Digging Force (ISO)	179 kN	40,200 lbf
Stick Digging Force (ISO)	126 kN	28,300 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 CO₂ equivalent of 1287 metric tonnes.

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