



Cat[®] 320 GC

Hydraulic Excavator

The Cat[®] 320 GC excavator balances productivity with easy-to-use technology features, a redesigned cab, reduced fuel consumption by up to 20 percent, and longer service intervals reducing maintenance costs by up to 20 percent to give you a durable, low-cost-per-hour excavator for light- to medium-duty 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 excavator uses up to 20 percent less fuel than the 320D2 GC in similar applications.
- Meets China Nonroad III and Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA emission standards.
- Match the excavator to the job with a choice of two modes: Power and Smart. Smart mode automatically matches engine and hydraulic power to your digging conditions.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise digging requirements.
- Valve priority puts hydraulic pressure and flow where you command it to go for fast light- to medium-load cycle times.
- 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.
- Add auxiliary hydraulics to do more work with a range of Cat attachments.
- Product Link™ comes standard so you can remotely monitor machine health, location, hours, and fuel consumption on demand through the VisionLink[®] online interface.

Reliable in Tough Conditions

- Work up to 3000 m (9,840 ft) above sea level without de-rating.
- Standard high-ambient temperature capability is 52° C (125° F) with cold start capability at -32° C (-25° F).
- Auto warm up speeds up hydraulic oil warming in cold temperatures and helps prolong the life of components.
- Two levels of fuel filtration protect the engine from dirty diesel fuel.
- Grease sealed between track pins and bushings reduces travel noise and prevents debris from entering to increase undercarriage life.
- The track guiding guard helps keep the excavator track aligned when traveling and working on slopes.
- The sloped track frame prevents mud and debris accumulation, helping reduce risk of track damage.

Work in Comfort

- The Comfort cab has a wide seat that adjusts for operators of all sizes.
- Control the excavator comfortably with easy-to-reach controls all located in front of you.
- Standard automatic climate control keeps you at the right temperature all shift long.
- Advanced viscous mounts reduce cab vibration by up to 50 percent over previous excavator models.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles.

Simple To Operate

- Start the engine with a push button; use a Bluetooth[®] key fob, smartphone app, or Operator ID passcode.
- 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.
- Navigate quickly on the standard high-resolution 203 mm (8 inch) 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 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.



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Maintenance

- Expect up to 20 percent less maintenance cost than the 320D2 GC due to enhanced filters and extended and synchronized service intervals. (Savings calculated over 12,000 machine hours.)
- Do all daily maintenance at ground level.
- Check engine oil level quickly and safely with the 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.
- Fuel filters are synchronized to be changed at 1,000 hours – double the interval from the previous filters.
- The new air intake filter with precleaner has double the dust holding capacity of the previous air intake 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

- Access 100 percent of daily maintenance points from ground level – no need for you to climb on top of the excavator.
- Keep your excavator secure with Operator ID. Use your PIN code on the monitor to enable the push button starting feature.
- 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 posts and larger windows.
- A rearview camera is standard, and a right-hand-sideview camera is optional.
- The new right-hand 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.
- The handrails comply with ISO 2867:2011 requirements.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAB			BOOM AND STICKS		
ROPS, standard sound suppression	✓		5.7 m (18'8") reach boom, 2.9 m (9'6") reach stick	✓	
High-resolution 203 mm (8 inch) LCD touchscreen monitor	✓		5.7 m (18'8") reach boom, 2.5 m (8'2") reach stick*		✓
Mechanically adjustable seat	✓		*Africa, Middle East only.		
CAT TECHNOLOGY			UNDERCARRIAGE AND STRUCTURES		
Cat Product Link	✓		600 mm (24") triple grouser shoes	✓	
Auto hammer stop	✓		790 mm (31") triple grouser shoes*		✓
ENGINE			Tie-down points on base frame	✓	
Two selectable power modes	✓		3700 kg (8,150 lb) counterweight	✓	
Auto engine speed control	✓		4200 kg (9,260 lb) counterweight**	✓	
Auto engine idle shutdown	✓		*South America and Southeast Asia only.		
52° C (125° F) high-ambient cooling capacity	✓		**Australia, New Zealand only.		
-32° C (-25° F) cold start capability	✓		ELECTRICAL SYSTEM		
Double element air filter with integrated precleaner	✓		Two 1,000 CCA maintenance-free batteries	✓	
Reversing electric cooling fans	✓		Programmable time-delay LED working lights	✓	
Biodiesel capability up to B20	✓		LED chassis light, left-hand boom lights	✓	
HYDRAULIC SYSTEM			LED chassis light, left-hand/right-hand boom lights, cab lights		✓
Boom and stick regeneration circuits	✓		SERVICE AND MAINTENANCE		
Auto hydraulic warm up		✓	Scheduled Oil Sampling (S-O-S) ports	✓	
Auto two-speed travel	✓		Ground- and platform-level engine oil dipsticks	✓	
Boom and stick drift reduction valve	✓		SAFETY AND SECURITY		
Hammer return filter circuit*		✓	Rearview camera	✓	
Three button joysticks	✓		Right-hand-sideview camera	✓*	✓
Slider joysticks*		✓	Right-hand mirror	✓	
Hammer return filter circuit*		✓	Ground-level engine shutoff switch	✓	
Tool Control (two pump, one/two way high-pressure flow)*		✓	Right-hand handrail and hand hold	✓	
Basic Tool Control (one pump, one way high-pressure flow)		✓	Signaling/warning horn	✓	
Quick coupler circuit for Cat Pin Grabber*		✓	*Australia, New Zealand, Pacific, and Turkey only.		

*Not available in China.

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Technical Specifications

Engine

Engine Model	Cat C4.4	
Engine Power – ISO 9249	107 kW	143 hp
Engine Power – ISO 14396	108 kW	145 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in ³

Hydraulic System

Main System – Maximum Flow – Implement	429 L/min	113 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	25 000 kPa	3,625 psi

Swing Mechanism

Swing Speed	11.3 rpm	
Maximum Swing Torque	74 kN-m	54,900 lbf-ft

Machine Weight

Operating Weight*	19 800 kg	43,700 lb
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• 3700 kg (8,200 lb) counterweight, 5.7 m (18'8") reach boom, 2.9 m (9'6") reach stick, 1.0 m³ (1.31 yd³) GD bucket, 600 mm (24") shoes, standard undercarriage.

*Operating weight increased by 1400 kg (3,000 lb) with 4200 kg (9,260 lb) counterweight and long undercarriage. (Australia, New Zealand only)

Service Refill Capacities

Fuel Tank	345 L	86.6 gal
Cooling System	25 L	6.6 gal
Engine Oil	15 L	4.0 gal
Swing Drive (each)	12 L	3.2 gal
Final Drive (each)	5 L	1.3 gal
Hydraulic System (including tank)	234 L	61.8 gal
Hydraulic Tank	115 L	30.4 gal

Dimensions

Boom	Reach 5.7 m (18'8")	
Stick	Reach 2.9 m (9'6")	
Bucket	1.0 m³ (1.31 yd³)	
Shipping Height – Top of Cab	2960 mm	9'9"
Handrail Height	2950 mm	9'8"
Shipping Length	9530 mm	31'3"
Tail Swing Radius	2830 mm	9'3"
Track Length – Standard Undercarriage	4070 mm	13'4"
Track Length – Long Undercarriage*	4450 mm	14'7"
Length to Center of Rollers – Standard Undercarriage	3270 mm	10'9"
Length to Center of Rollers – Long Undercarriage*	3650 mm	12'0"
Ground Clearance	470 mm	1'7"
Track Gauge – Standard Undercarriage	2200 mm	7'3"
Track Gauge – Long Undercarriage*	2380 mm	7'9"
Transport Width (600 mm [24"] Shoes) – Standard Undercarriage	2800 mm	9'2"
Transport Width (600 mm [24"] Shoes) – Long Undercarriage*	2980 mm	9'9"
Counterweight Clearance	1050 mm	3'5"

*Australia, New Zealand only.

Working Ranges and Forces

Boom	Reach 5.7 m (18'8")	
Stick	Reach 2.9 m (9'6")	
Bucket	1.0 m³ (1.31 yd³)	
Maximum Digging Depth	6710 mm	22'0"
Maximum Reach at Ground Level	9850 mm	32'4"
Maximum Cutting Height	9450 mm	31'0"
Maximum Loading Height	6500 mm	21'4"
Minimum Loading Height	2180 mm	7'2"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6540 mm	21'5"
Maximum Vertical Wall Digging Depth	5690 mm	18'8"
Bucket Digging Force (ISO)	129 kN	29,007 lbf
Stick Digging Force (ISO)	99 kN	22,301 lbf



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