

Cat® 320 GC Hydraulic Excavator

The Cat[®] 320 GC excavator balances productivity with easy-to-use controls, a new comfortable cab, reduced fuel consumption by up to 20 percent, and longer maintenance intervals that reduce maintenance costs up to 15 percent – all to give you a durable, low-cost-per-hour excavator to meet your light- to medium-duty application requirements.

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 320F in similar applications.
- Match the excavator to the job with power modes; let Smart mode automatically match engine and hydraulic power to 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.
- The engine meets U.S. EPA Tier 4 Final and EU Stage IV emission standards with an aftertreatment system that requires no operator input or downtime.
- 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, High and Low, Heat and Cold

- 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.
- Three 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 center 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 in the All-New Cab

- 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. 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 to personal devices.

Simple to Operate

- Start the engine with a push button; use a Bluetooth key fob, smartphone app, or the unique Operator ID function.
- Program each joystick button, including response and pattern, using Operator ID; it will also remember climate control fan and radio settings.
- Navigate quickly on the standard high-resolution 203 mm (8 in) touchscreen monitor or with the aid of the jog dial control.
- 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 15 percent less maintenance cost than the 320E. (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.
- Do no required maintenance on the Cat Clean Emissions Module.
- Change all fuel filters at a synchronized 500 hours.
- 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.
- The new high-efficiency electric cooling fans only run when needed and reverse to keep cores free from debris.
- S·O·S[™] ports simplify maintenance and allow for quick, easy extraction of samples for fluid 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 pushbutton 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-side-view 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.
- The lower frame meets ISO 15818:2017 lifting and tie-down requirements.

Standard and Optional Equipment

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

	Standard	Optional
CAB		
ROPS, standard sound suppression	\checkmark	
High-resolution 203 mm (8 in)	\checkmark	
LCD touchscreen monitor		
Mechanically adjustable seat	✓	
CAT CONNECT TECHNOLOGY		
Cat Product Link	\checkmark	
ENGINE		
Two selectable power modes	\checkmark	
One-touch low idle with auto engine speed control	\checkmark	
Auto engine idle shutdown	\checkmark	
52° C (125° F) high-ambient cooling capacity	\checkmark	
–32° C (–25° F) cold start capability	\checkmark	
Double element air filter with	\checkmark	
integrated precleaner		
Reversing electric cooling fans	\checkmark	
Biodiesel capability up to B20	\checkmark	
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	\checkmark	
Boom and stick lowering check valves		\checkmark
Auto hydraulic warm up	\checkmark	
Auto two-speed travel	\checkmark	
Boom and stick drift reduction valve	\checkmark	
Hammer return filter circuit		\checkmark
Slider joysticks		\checkmark
Combined flow/high-pressure auxiliary circuit		\checkmark
Medium-pressure circuit		\checkmark
Quick coupler circuit for Cat Pin Grabber		\checkmark

	Standard	Optional
BOOM AND STICKS		
5.7 m (18'8") reach boom, 2.9 m (9'6") stick	\checkmark	
UNDERCARRIAGE AND STRUCTURES		
600 mm (24") triple grouser shoes		\checkmark
700 mm (28") triple grouser shoes		\checkmark
790 mm (31") triple grouser shoes		\checkmark
Tie-down points on base frame	\checkmark	
4200 kg (9,300 lb) counterweight	\checkmark	
ELECTRICAL SYSTEM		
Two 1,000 CCA maintenance-free batteries	\checkmark	
Programmable time-delay LED working lights	\checkmark	
LED chassis light, left-hand/right-hand boom lights, cab lights	\checkmark	
SERVICE AND MAINTENANCE		
Sampling ports for Scheduled Oil Sampling (S·O·S)	\checkmark	
Ground- and platform-level engine oil dipsticks	\checkmark	
SAFETY AND SECURITY		
Rearview camera	\checkmark	
Right-hand-side camera	√*	√*
Right-hand mirror	\checkmark	
Ground-level engine shutoff switch	\checkmark	
Right-hand handrail and hand hold	\checkmark	
Signaling/warning horn	\checkmark	

*Europe standard; other regions optional.

Technical Specifications

Engine		
Engine Model	Cat C4.4 ACERT™	
Gross Power – ISO 14396/SAE J1995	91 kW	122 hp
Net Power – ISO 9249/SAE J1349	90 kW	121 hp
Engine RPM		
Operation	1,700 rpm	
Travel	2,000 rpm	
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in ³

Hydraulic System		
Main System – Maximum Flow (Implement)	442 L/min	116 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	26 800 kPa	3,886 psi

Machine Weight		
Operating Weight	21 900 kg	48,300 lb
• 5.7 m (18'8") reach boom, 2.9 m (9'6") reach stick, 1.0 m³ (1.31 yd³) HD bucket, 790 mm (31") shoes.		

Service Refill Capacities		
Fuel Tank	345 L	86.6 gal
Cooling System	35 L	9.2 gal
Engine Oil	15 L	4 gal
Swing Drive (each)	7 L	1.8 gal
Final Drive (each)	6 L	1.6 gal
Hydraulic System (including tank)	240 L	63.4 gal
Hydraulic Tank	128 L	33.8 gal
DEFTank	40 L	10.6 gal

Dimensions		
Boom	Reach 5.7 m	ı (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 to Center of Rollers	3270 mm	10'9"
Ground Clearance	470 mm	1'7"
Track Gauge	2380 mm	7'9"
Transport Width – 790 mm (31") Shoes	3170 mm	10'5"
Counterweight Clearance	1050 mm	3'5"

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	6720 mm	22'1"
Maximum Reach at Ground Level	9860 mm	32'4"
Maximum Cutting Height	9450 mm	31'0"
Maximum Loading Height	6490 mm	21'4"
Minimum Loading Height	2170 mm	7'1"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6550 mm	21'6"
Maximum Vertical Wall Digging Depth	5690 mm	18'8"
Bucket Digging Force (ISO)	129 kN	29,000 lbf
Stick Digging Force (ISO)	99 kN	22,256 lbf
Bucket Digging Force (SAE)	115 kN	25,853 lbf
Stick Digging Force (SAE)	96 kN	21,581 lbf

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

© 2017 Caterpillar All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

AEXQ2191 (07-2017) Build Number: 07A (North America, Europe, ANZ)

