



Cat[®] 320D3 GC

Hydraulic Excavator

The Cat[®] 320D3 GC Hydraulic Excavator delivers reduced fuel consumption that can go as low as 11 liters per hour, lowered maintenance costs by up to 20%, low owning costs, simpler routine maintenance, increased performance, and long-term durability.

Built to Last

- 6-cylinder mechanical engine for improved reliability
- Integrated component design for better durability and strength
- Consolidated pilot system for simpler hydraulics
- New modified X-frame structure for longer life and durability
- Reinforced boom and stick with internal baffle plates for increased durability
- Greased track link between pins and bushings provides increased undercarriage life and noise reduction

Lower Maintenance Costs

- Up to 20% lower maintenance costs compared to the 320D2
- Save time and money with extended service intervals for hydraulics and coolants
- New hydraulic oil filter with 50% more life
- 6,000-hour hydraulic oil service with 12% less oil required
- Quick and easy maintenance with most service locations accessible at ground level
- Filters grouped together to reduce maintenance time
- Pressure taps and S•O•SSM ports help maximize uptime

Reduced Fuel Consumption with High Performance

- With the increased fuel efficiency, typical fuel consumption in earthmoving applications is between 11 to 13 liters per hour, lower than most comparable machines in the market.
- Robust and easy-to-maintain fuel system filtration reduces risk of failure from contaminated fuel
- Caterpillar designed and built hydraulic pumps deliver superior performance
- Conserve power with new single-panel cooler
- Save energy with boom and stick regeneration valves
- Product Link[™] comes standard so you can remotely monitor machine health by tracking fault codes, location, and hours. It is tamper-proof and secures data only for customer view on demand through the VisionLink[®] online interface.



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Superior Operator Comfort

- Ergonomically designed cab with easy-to-operate controls
- Multiple seat and joystick adjustment options enhance comfort
- 25% increase in glass area for improved worksite visibility and enhanced productivity
- Reduced blind spots with convex profile glass for better safety
- Low-effort joystick controls reduce operator fatigue

Built-in Safety Features

- Hydraulic activation lever safely locks out all hydraulic functions
- Anti-skid plating and countersunk bolts reduce slipping in severe conditions and during routine checks
- A full-length firewall separates the pump compartment from the engine
- A ground-level fuel cutoff switch shuts down the engine in an emergency
- Large steps on track frame and storage box for easy and safe climb
- Emergency exit in cab for improved operator safety

Versatility

- Utility and finishing work are fast and flawless with Cat buckets
- Demolition work is quick and easy with Cat hammers and other work tools
- Cat couplers let you swap between attachments in seconds without leaving the cab
- See the entire attachment lineup at www.cat.com/attachments

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
ENGINE			ELECTRICAL SYSTEM		
Diesel engine, ALUW06DTI/8 – mechanical governor – emits equivalent to U.S. EPA Tier 2, noncertified	✓		2 × 1,000 CCA maintenance free batteries	✓	
Two selectable power modes: STD and ECO	✓		Centralized electrical disconnect switch	✓	
One-touch low idle with automatic engine speed control (AEC)	✓		90 seconds programmable time delay working lights (halogen); storage box mounted (one), cab mounted (two), boom mounted LH (one)	✓	
Two stage fuel filtration system with water separator and indicator	✓		SERVICE AND MAINTENANCE		
4000 m (13,120 ft) altitude capability with derate from 3000 m (9,840 ft)	✓		Engine oil, fuel, and hydraulic oil filters grouped for ease of maintenance	✓	
52°C (126°F) high-ambient cooling capacity without derate	✓		S•O•S sampling ports	✓	
-18°C (0°F) cold start capability	✓		Radiator screen for radiator/oil cooler to prevent plugging by debris	✓	
-32°C (-25°F) cold start capability (available with attachment kit)		✓	SAFETY AND SECURITY		
85 amp alternator	✓		Rearview mirrors; handrail mounted (one), cab handhold mounted (one)	✓	
Radial sealed double element air filter	✓		Bolt free service platform with anti-skid plate	✓	
Air precleaner		✓	Neutral lever (lock out) for all controls	✓	
Mechanical fuel priming pump	✓		Ground level accessible engine shutoff switch in cab	✓	
Biodiesel capability up to B20	✓		Signaling/warning horn	✓	
HYDRAULIC SYSTEM			Right-hand handrail and hand hold	✓	
Hydraulic boom and stick regeneration circuits	✓		OPERATOR ENVIRONMENT		
Automatic two-speed travel		✓	Sound suppressed cab with viscous mounts	✓	
Boom and stick drift reduction valve	✓		Openable skylight	✓	
High performance hydraulic return filter (capsule filter type)	✓		Openable tempered front upper windshield with assist device	✓	
Hammer return filter circuit		✓	Rear window emergency exit	✓	
Medium-pressure auxiliary circuit		✓	Removable tempered lower windshield with in cab storage bracket	✓	
UNDERCARRIAGE AND STRUCTURES			Fully adjustable mechanical suspension seat, console and armrest	✓	
Grease lubricated track link	✓		51 mm (2 in) seat belt	✓	
Tie down points on base frame	✓		Two gauge cluster (monitor)	✓	
Center track guiding guard	✓		Automatic air conditioner with positive pressurized cab	✓	
Segmented track guiding guard		✓	One 12V power supply with sockets (maximum 10 Amp)	✓	
3.7 mt (8,160 lb) counterweight	✓		Roll down sunscreen		✓
600 mm (24") triple grouser track shoes (8.5 mm/0.3" thick) – standard	✓		Washable floor mat	✓	
600 mm (24") triple grouser track shoes (10 mm/0.4" thick) – HD		✓	Interior utilities (Interior lighting, cigar lighter type socket, coat hook, beverage holder, literature holder, document holding space, rear storage compartment)	✓	
BOOMS, STICKS AND LINKAGES			Control pattern changer		✓
5.7 m (18'8") Reach boom	✓		TECHNOLOGY		
2.25 m (7'5") Reach stick	✓		Cat Product Link	✓	
2.5 m (8'2") HD Reach stick		✓			
Bucket linkage, B1 family without lifting eye	✓				

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Technical Specifications

Engine

Engine Model	ALUW06DTI	
Net Power – ISO 9249:2007	92 kW	123 hp
Engine Power – ISO 14396:2002	100 kW	134 hp
Bore	104 mm	4 in
Stroke	113 mm	4 in
Displacement	5.76 L	351 in ³

Net power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator with engine speed at 1,700 rpm.

Hydraulic System

Main System – Maximum Flow – Implement	400 L/min (200 × 2 pumps)	106 gal/min (53 × 2 pumps)
Maximum Pressure – Equipment – Implement	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	25 000 kPa	3,625 psi
Pilot System – Maximum Pressure	3900 kPa	566 psi
Boom Cylinder – Bore	125 mm	5 in
Boom Cylinder – Stroke	1260 mm	50 in
Stick Cylinder – Bore	130 mm	5 in
Stick Cylinder – Stroke	1504 mm	59 in
Bucket Cylinder – Bore	115 mm	5 in
Bucket Cylinder – Stroke	1104 mm	43 in

Swing Mechanism

Swing Speed	10.00 rpm	
Maximum Swing Torque	62 kN•m	45,581 lbf-ft

Machine Weights

Operating Weight*	19 800 kg	43,600 lb
Operating Weight**	20 000 kg	44,100 lb

*Standard undercarriage, Reach boom, R2.25 (7'5") stick, 0.92 m³ (1.20 yd³) GD bucket, 600 mm (24") HD triple grouser shoes and 3.7 mt (8,160 lb) counterweight.

**Standard undercarriage, Reach boom, HD R2.5 (8'2") stick, GD 1.0 m³ (1.31 yd³) bucket, 600 mm (24") HD triple grouser shoes and 3.7 mt (8,160 lb) counterweight.

Service Refill Capacities

Fuel Tank Capacity	350 L	92.5 gal
Cooling System	19 L	5 gal
Engine Oil (with filter)	18 L	4.8 gal
Swing Drive	6 L	1.6 gal
Final Drive (each)	5 L	1.3 gal
Hydraulic System (including tank)	230 L	60.8 gal
Hydraulic Tank	110 L	29.1 gal

Dimensions

Boom	Reach 5.7 m (18'8")	
Stick	R2.25 (7'5")	
Bucket	GD 1.0 m³ (1.31 yd³)	
Shipping Height (top of cab)	3100 mm	10'4"
Handrail Height	2915 mm	9'7"
Shipping Length	9520 mm	31'3"
Tail Swing Radius	2750 mm	9'0"
Counterweight Clearance	1020 mm	3'4"
Ground Clearance	450 mm	1'6"
Track Length	4080 mm	13'5"
Length to Center of Rollers	3270 mm	10'9"
Track Gauge – Standard Undercarriage	2200 mm	7'3"
Transport Width – 600 mm (24") Shoes	2800 mm	9'2"

Working Ranges and Forces

Boom	Reach 5.7 m (18'8")	
Stick	R2.25 (7'5")	
Bucket	GD 1.0 m³ (1.31 yd³)	
Maximum Digging Depth	5970 mm	19'7"
Maximum Reach at Ground Level	9140 mm	30'0"
Maximum Cutting Height	9110 mm	29'11"
Maximum Loading Height	6250 mm	20'6"
Minimum Loading Height	2920 mm	9'7"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5640 mm	18'6"
Maximum Vertical Wall Digging Depth	5350 mm	17'7"
Bucket Digging Force (ISO)	134 kN	30,120 lbf
Stick Digging Force (ISO)	112 kN	25,180 lbf

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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