

320D3

HYDRAULIC EXCAVATOR



Engine Power

ISO 14396

100 kW 134 hp

ISO 14396 (DIN)

136 hp (metric)

Operating Weight

21 000 kg (46,300 lb)

Cat® ALUW06DTI/8 Engine emits equivalent to U.S. EPA Tier 2.



NEXT GENERATION EXCAVATORS

Cat excavators are designed with an approach to equipment families that gives you:

- + MORE MODEL OPTIONS
- + MORE PRICE POINTS

Ready to help you make your business stronger, Cat excavators give you new ways to get the most work done at the lowest cost – so you put more money in your pocket.



CAT[®] 320D3

LOWER YOUR COST PER HOUR.

The **Cat 320D3** Excavator balances productivity, efficiency and reliability to deliver you a reliable, highly efficient, low-cost-per-hour excavator for your work.



UP TO 10% LOWER FUEL CONSUMPTION*

The latest Electro-Hydraulic (EH) system, Eco mode, and optional fuel consumption tracking in VisionLink® provide more control to optimize fuel consumption.

ROBUST CONSTRUCTION

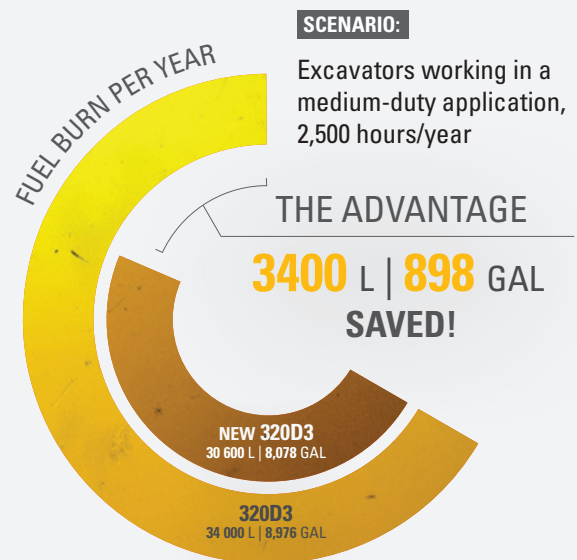
Heavy duty front parts and structures plus two robust undercarriage options provide built-in durability and reliability on the jobsite. A proven 6-cylinder mechanical engine without an Electronic Control Module (ECM) enables simpler hydraulics.

UP TO 15% REDUCED MAINTENANCE COSTS**

Maximized uptime and extended service intervals, thanks to advanced hydraulic oil filter design and no pilot and case drain filters. A two-stage fuel filter and anti-rust fuel tank help protect the engine against low-quality fuel.

* Compared to the 320D3 model with prefix FK. Fuel, CO₂ emissions vary by application. Estimate fuel consumption improvements are based on engineering calculations and test data.
 ** Compared to 320D3 model prior to Annual Product Update 2021.

FUEL EFFICIENCY SAVINGS ADD UP



CALCULATION:

320D3:
 $13.6 \text{ L/HR} \times 2,500 \text{ HR/YR} = 34\,000 \text{ L/YR}$
 $3.6 \text{ GAL/HR} \times 2,500 \text{ HR/YR} = 8,976 \text{ GAL/YR}$

NEW 320D3:
 $(13.6 \text{ L/HR} \times 90\%) \times 2,500 \text{ HR/YR} = 30\,600 \text{ L/YR}$
 $(3.6 \text{ GAL/HR} \times 90\%) \times 2,500 \text{ HR/YR} = 8,078 \text{ GAL/YR}$



UP TO 10%*

LOWER FUEL CONSUMPTION

REDUCE YOUR DAILY FUEL USAGE



ECONOMY MODE

See an incremental 10% fuel savings if using ECO mode with no loss of lifting or digging forces. Optional Fuel Flow meter aids in reporting the fuel consumption through VisionLink.



BOOM AND STICK REGENERATION

Boom and stick regeneration circuits reduce fuel consumption by up to 2% while improving cycle times.



AUTO ENGINE SPEED CONTROL

Use automatic engine speed control during no-load or light-load conditions to automatically reduce engine speed to minimize fuel consumption.



ONE-TOUCH LOW IDLE

Standard one-touch low idle saves fuel by instantly reducing engine speed to 1,000 rpm at the push of a button. Return the engine speed to the throttle position by hitting the button again or simply moving the joysticks.

* Compared to the 320D3 model with prefix FKC. Fuel, CO₂ emissions vary by application. Estimate fuel consumption improvements are based on engineering calculations and test data.

INCREASE EFFICIENCY WITH ELECTRO-HYDRAULIC SYSTEM



HYDRAULIC PUMP AND MAIN VALVE

The electro-hydraulic tandem pump and main valve work together to generate more power, a faster response, and more fuel efficiency than the previous 320D3 model.

EFFICIENT HYDRAULIC SYSTEM

Balance power and efficiency using the open-center, negative flow control hydraulic system. Hydraulic cross-sensing makes full engine power always available from hydraulic pumps regardless of which function is used.

SMART LAYOUT

Put hydraulic power where you need it. Hydraulic system components are positioned close together for optimum efficiency.

PROVEN RELIABILITY THAT DELIVERS PEACE OF MIND

The 320D3 excavator uses reinforced structures, a robust undercarriage, and a durable swing system that helps absorb stresses caused by swing torque – delivering a machine you can rely on.



GREASE LUBRICATED UNDERCARRIAGE

Undercarriage rollers are rebuildable and sealed to prevent dirt and debris from causing internal wear. Grease lubricated links minimize internal bushing wear, reducing noise and increasing life up to 25%. Two robust undercarriage options providing optimized stability based on bucket selection.

DURABLE FRONT STRUCTURES

We designed the heavy-duty stick and boom structures using high-tensile steel fabricated into a large box section using internal baffles to absorb torsional stress for longer life in quarry applications.

TIME-PROVEN CARBODY

The X-shaped, box-section carbody provides excellent resistance to torsional bending, dissipating stress throughout the base of the machine.

ROBUST FUEL SYSTEM

Expect reliable performance from the double-filtered low-pressure fuel system and anti-rust fuel tank that protects the engine from lower quality fuel. The two-stage filtering system with integrated water separator protects the engine from particles larger than 4 microns.



HYDRAULIC FILTER

Updated hydraulic filter design prevents oil contaminants from entering the system during a filter change. Hydraulic system does not require a pilot filter, eliminating a filter that has to be changed frequently.

GUARDS COME STANDARD

The standard, integrated idler guard helps maintain track alignment while traveling or working on the slopes.

Robust bottom guards protect machine components that might be damaged while swinging. A thicker bottom guard plate is used under the pump compartment to protect the suction hose.

DURABLE SWING SYSTEM

The swing system uses a ball bearing to help absorb stresses caused by swing torque.



Stop less and spend less when servicing the 320D3 with easy-to-do maintenance throughout the machine.

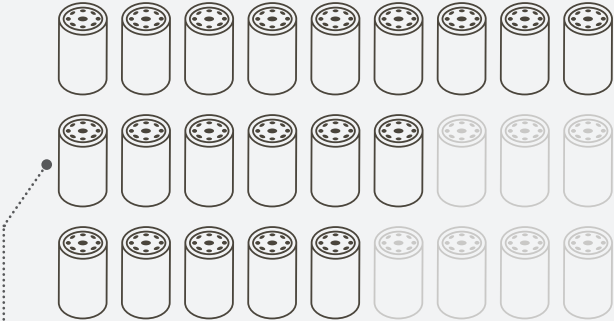
LOWER MAINTENANCE COSTS WITH:

- + An integrated pilot system eliminates the need for a dedicated pilot filter, and a redesigned drain system allows the elimination of the drain filter.
- + The latest hydraulic oil filter design provides improved filtration performance and needs replacing only every 3,000 hours.
- + Hydraulic oil change interval can go up to 6,000 hours.
- + Maintenance-free batteries.
- + Easily accessible maintenance locations to reduce service time.

*Compared to 320D3 model prior to Annual Product Update 2021.

**FEWER FILTERS
MEANS LESS
MAINTENANCE**

**THE 320D3
USES FEWER FILTERS
COMPARED TO THE PAST MODELS.**



Fewer filters over the machine's lifetime.

EASY TO MAINTAIN

SPEND LESS TIME SERVICING AND MORE TIME WORKING

Most service locations are easily accessible at ground level to allow service and maintenance to get completed quickly and efficiently. A service door on the right side of the upper structure allows ground-level access to the hydraulic pumps, hydraulic filters, and fuel filters. The direct-mount engine oil filter is also accessible from ground level.



ROBUST SERVICE DOORS

Robust service doors open wide for easy access to service points. Latches firmly hold the doors in the open position to prevent accidental closing. On the top of the machine, the large engine hood provides easy access to the engine and cooling compartments.

RADIAL SEAL ENGINE AIR FILTER

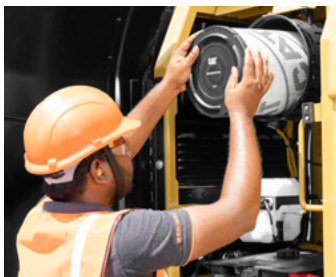
Easily access the proven, high-efficiency radial seal engine air filter behind the cab. The machine constantly monitors the engine air filter and will notify you, via the monitor, when service is required.

GREASING MADE EASY

A remote greasing block on the boom allows the greasing of hard-to-reach locations. A remote mounted greasing point on the swing bearing allows ease of service.

SINGLE PLANE DESIGN

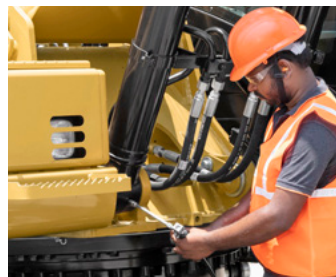
Routine cleaning is made easier with the single plane cooling package design.



**RADIAL SEAL
ENGINE AIR FILTER**



LARGE ENGINE HOOD



REMOTE GREASING



**SINGLE PLANE
COOLING PACKAGE**

WORK IN COMFORT ALL DAY

STAY PRODUCTIVE AND EFFICIENT FROM START TO FINISH

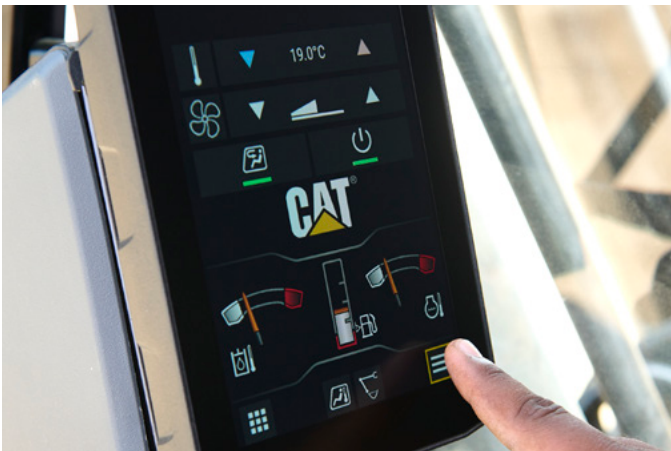
Sites where excavators typically work are rugged and challenging. That's why it's important that the 320D3 cab protects the operator as much as possible from fatigue, stresses, sounds, and temperatures of the job.



COMFORT AND CONVENIENCE

The spacious cab provides excellent visibility from the operator's seat to keep you aware of your surroundings – without bending or straining to see.

Easy-to-access radio controls, engine throttle, wiper controls and Bluetooth® phone pairing for operator convenience. Improved automatic climate control helps maintain consistent cab temperature. Five outlets ensure proper air circulation to keep you comfortable regardless of outside temperatures.



EASY TO CONTROL

Critical machine information is always visible in a high-resolution 203 mm (8 in) touchscreen display. Easy to use, intuitive, and user-friendly menus mean more time working and less time looking for information.



ADJUST TO SUIT YOUR NEEDS

Work a full day with less fatigue using the ergonomically-designed electro-hydraulic joysticks matched to operator's wrist and arm position. Wide, adjustable armrests and seatbelt are also included. Joystick consoles and seat can be adjusted, further improving operator comfort and productivity for a variety of operator sizes and weights.

FEEL SAFE AT WORK

EVERY DAY WITH CAT EXCAVATORS

Caterpillar builds safety into every machine, allowing operators and service technicians to work safely and get home safely every day.

EASY-TO-ISOLATE HYDRAULICS

The standard hydraulic lockout lever prevents operators from leaving the cab without first isolating all hydraulic functions. When necessary, you can activate the ground level shutoff switch to stop the fuel to the engine and shut down the machine.



SAFE WORK PLATFORM

The machine provides you a safe work platform for all routine service and maintenance needs. Anti-skid plating with countersunk bolts reduces the potential for slippage and trip hazards.

A battery disconnect switch enhances safety when servicing the machine by isolating the battery.



FULL-LENGTH FIREWALL

A full-length firewall separates the engine from the hydraulic pump and offers protection in the event of an incident.



INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

You can easily expand the performance of your machine by utilizing Cat attachments. Each Cat attachment is designed to fit the weight and horsepower of Cat excavators for improved performance, safety, and stability.



BUCKETS



HYDRAULIC HAMMERS



VISIONLINK®

TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT



VisionLink takes the guesswork out of managing your entire fleet – regardless of size or equipment manufacturer.* Review equipment data from your desktop or mobile device to maximize uptime and optimize assets. With interactive dashboards, VisionLink makes it easier for operations of all sizes to make informed decisions that lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription-level options, your Cat dealer can help you determine what you need to connect your fleet and manage your business.

*Data field availability can vary by equipment manufacturer.

TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

ENGINE		
Engine Model	ALUW06DTI	
Biodiesel Capability	Up to B10	
Emissions	Non-certified emission engine	
Net Power – ISO 9249	92 kW	123 hp
Net Power – ISO 9249 DIN	125 hp (metric)	
Engine Power – ISO 14396	100 kW	134 hp
Engine Power – ISO 14396 DIN	136 hp (metric)	
Bore	104 mm	4 in
Stroke	113 mm	4 in
Displacement	5.8 L	351 in ³

- Non-certified emission engine.
- Recommended for use up to 4000 m (13,120 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Engine speed at 1,700 rpm.

HYDRAULIC SYSTEM		
Main System – Maximum Flow	429 L/min	113 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	25 000 kPa	3,625 psi

SWING MECHANISM		
Swing Speed	11.88 r/min	
Maximum Swing Torque	62 kN*m	45,581 lbf-ft

MACHINE WEIGHTS		
Operating Weight	21 000 kg	46,300 lb

SERVICE REFILL CAPACITIES		
Fuel Tank Capacity	350 L	92.5 gal
Cooling System	19 L	5 gal
Engine Oil	18 L	4.8 gal
Swing Drive (each)	6 L	1.6 gal
Final Drive (each)	5 L	1.3 gal
Hydraulic System (including tank)	218 L	57.6 gal
Hydraulic Tank	115 L	30.4 gal

DIMENSIONS		
Boom	HD Reach 5.7 m (18'8")	
Stick	HD Reach 2.5 m (8'2")	
Bucket	GD 1.14 m ³ (1.49 yd ³)	
Shipping Height (top of cab)	3050 mm	10 ft
Handrail Height	3015 mm	9.11 ft
Shipping Length	9530 mm	31.3 ft
Tail Swing Radius	2750 mm	9 ft
Counterweight Clearance	1020 mm	3.4 ft
Ground Clearance	450 mm	1.6 ft
Track Length	4250 mm	13.11 ft
Length to Center of Rollers	3450 mm	11.3 ft
Track Gauge	2380 mm	7.1 ft
Transport Width	2980 mm	9.9 ft

WORKING RANGES AND FORCES		
Boom	HD Reach 5.7 m (18'8")	
Stick	HD Reach 2.5 m (8'2")	
Bucket	GD 1.14 m ³ (1.49 yd ³)	
Maximum Digging Depth	6300 mm	20.8 ft
Maximum Reach at Ground Level	9470 mm	31.1 ft
Maximum Cutting Height	9250 mm	30.4 ft
Maximum Loading Height	6290 mm	20.8 ft
Minimum Loading Height	2590 mm	8.6 ft
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5960 mm	19.7 ft
Maximum Vertical Wall Digging Depth	5720 mm	18.9 ft
Bucket Digging Force (ISO)	135 kN	30,350 lbf
Stick Digging Force (ISO)	118 kN	26,530 lbf

STANDARD & OPTIONAL EQUIPMENT

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

UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
600 mm (24 in) triple grouser shoes (10 mm/0.4 in thick)	•	
Grease lubricated track links	•	
Tie down points on base frame	•	
Center track guiding guard	•	
Segmented track guiding guard	•	
3650 kg (8,050 lb) counterweight	•	
4250 mm (13'11") long undercarriage		•
4080 mm (13'5") standard undercarriage		•
ELECTRICAL	STANDARD	OPTIONAL
LED right-side boom light		•
CAB	STANDARD	OPTIONAL
Sound suppressed cab with viscous mounts	•	
High-resolution 203 mm (8") LCD touchscreen monitor	•	
Mechanically adjustable seat with headrest	•	
Automatic bi-level air conditioner	•	
Keyless push-to-start engine control	•	
1-button joystick	•	
AM/FM radio with USB and auxiliary port	•	
24V DC outlet	•	
Cup holder and storage compartments	•	
70/30 tempered glass windshield	•	
Upper radial wiper with washer	•	
Openable steel hatch	•	
Dome light	•	
Washable floor mat	•	
ENGINE	STANDARD	OPTIONAL
Diesel engine, ALUW06DTI/8 – mechanical governor – emits equivalent to U.S. EPA Tier 2, not-certified	•	
Two selectable power modes: Standard, Eco	•	
One-touch low idle with auto engine speed control (AEC)	•	
Two stage fuel filtration system with water separator and indicator	•	
52° C (125° F) high-ambient cooling capacity	•	
4000 m (13,120 ft) altitude capability	•	
Radial seal air filter with double filter element	•	
-32° C (-25° F) cold start capability		•
Air pre-cleaner		•
Fuel flow meter		•
Biodiesel capability (up to B10)		•

BOOM AND STICK	STANDARD	OPTIONAL
5.7 m (18'8") HD Reach boom	•	
2.5 m (8'2") HD Reach stick	•	
ELECTRICAL SYSTEM	STANDARD	OPTIONAL
Two 750 CCA maintenance free batteries	•	
LED chassis and cab lights	•	
LED left-side boom light	•	
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Grouped engine oil, fuel, and hydraulic oil filters	•	
Scheduled Oil Sampling (S•O•S SM) ports	•	
Radiator screen for radiator/oil cooler	•	
HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Electronic main control valve, hammer ready	•	
Back-to-back electronic pump	•	
Boom and stick regeneration circuits	•	
Automatic hydraulic warm up	•	
Automatic two-speed travel	•	
High performance hydraulic return filter	•	
Hammer lines		•
Hammer return filter		•
TECHNOLOGY	STANDARD	OPTIONAL
VisionLink®	•	
SAFETY AND SECURITY	STANDARD	OPTIONAL
Anti-skid plating with countersunk bolts	•	
Handrail and handhold	•	
Lockable external tool/storage box	•	
Signaling/warning horn	•	
Hydraulic lockout lever	•	
ROPS		•
OPG with matching lights		•
Rearview camera		•
Travel alarm		•

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.
For additional information, refer to the Technical Specifications brochures for the 320D3 available at www.cat.com or your Cat dealer.

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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www.cat.com www.caterpillar.com

AEXQ2415-04
Replaces AEXQ2415-03
(India)

