



323D3

Hydraulic Excavator

Get more done. Lower your cost per ton. The Cat® 323D3 Excavator brings increased speed, efficiency, and high productivity to your heavy-duty, high-production applications.

RECOGNIZED HIGH PRODUCTION

- Powerful Cat C7.1 engine.
- New and reinforced bucket resulting in increased performance and longer life.
- Be productive with a large Cat 1.20 m³ (1.57 yd³) severe-duty abrasive resistance bucket.
- Dig and lift from a stable platform created by the heavy-duty counterweight and eight-roller undercarriage.
- Electrohydraulic control valve, pump and Electronic Control Module (ECM) introduced for better controllability and lower fuel consumption.
- The excavator has a high-ambient capability of 52° C (125° F) and cold start capability of -18° C (0° F). An optional -32° C (-25° F) cold start package is available.
- Add versatility by adding tool control to run a hammer or other tools requiring one-way flow. Order tool control with the machine or add it later with a dealer-installed kit.
- Balance power and efficiency using the open-center, positive flow control electro-hydraulic system.
- Hydraulic cross-sensing makes full engine power always available from hydraulic pumps regardless of which function is used.

LOWER FUEL CONSUMPTION

- Up to 10% less fuel consumption than the previous 323D3 model in similar applications. Economy mode further reduces fuel consumption with no loss in lifting or digging forces.
- Save even more by using the Economy mode. Speed will reduce, but with no loss in lifting or digging forces. See savings of up to 20%.
- Boom and Stick regeneration circuits contribute to reduce fuel consumption by up to 2%.
- Use automatic engine speed control (AEC) during no-load or light-load conditions to automatically reduce engine speed to minimize fuel consumption.
- 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.
- Electronic Tandem hydraulic pump is 7% more efficient with less internal friction losses and superior design.
- Optional Fuel Flow meter aids in reporting the fuel consumption through VisionLink.

MAXIMIZE DURABILITY

- Reinforced HD boom and stick designed for quarry application.
- 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.
- Traverse the job site on the Grease Lubricated Track (GLT) undercarriage. Undercarriage rollers are rebuildable and sealed to prevent dirt and debris causing internal wear. Grease lubricated links minimize internal bushing wear, reducing noise and increasing life up to 25%.
- Hydraulic snubbers in the boom and stick cylinders dampen end-of-stroke impact prolonging the life of your machine.
- Expect reliable performance from the double-filtered low-pressure fuel system and antirust fuel tank protects the engine from lower quality fuel.
- Optional full length/third track guard design provides greater machine ruggedness.
- Stick and Boom structures designed using high-tensile steel fabricated into a large box section using internal baffles to absorb torsional stress. The single plate X-shaped, box-section car body provides excellent resistance to torsional bending, dissipating stress throughout the base of the machine.
- Thick braiding protects the colored, numbered electrical wires. Non-abrasive connectors keep wiring harnesses in place to prevent failure.



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LOWER MAINTENANCE COSTS

- 15% lower maintenance costs than previous 323D3 models, with advanced hydraulic oil filter design and reduced number of filters.
- Hydraulic system does not require a pilot filter, eliminating a filter that had to be changed frequently.
- Updated hydraulic filter design. Preventing oil contaminants from entering the system during filter change no longer requires a capsule design.
- Drain filter is replaced with a cleanable screen and magnet.
- Extended first engine oil change interval (500 hours), and maintenance-free batteries.
- A two-stage fuel filtering system with integrated water separator protects the engine from particles larger than four microns when fuel quality is less than ideal.
- Easily maintain your machine. Most service locations are easily accessible at ground level for quick, efficient servicing 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, engine oil filter, and fuel filters.
- There is no need to manually prime the fuel system after fuel filter changes. The standard electric priming pump reduces the risk of contamination by preventing unfiltered fuel from entering the fuel system.
- 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.
- 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.
- VisionLink™ comes standard so you can remotely monitor machine health, location, hours, and absolute fuel level on demand through the online interface.

WORK IN COMFORT

- The updated spacious cab design provides excellent visibility from the operator's seat to keep you aware of your surroundings without bending or straining to see.
- In-cab high-resolution 203 mm (8 in) touch screen display are easy to use, intuitive and user-friendly.
- Work a full day with less fatigue using the ergonomically designed electro-hydraulic joysticks matched to operator's wrist and arm position. Joystick consoles can be adjusted, further improving operator comfort and productivity.
- 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.
- Ergonomically designed seat to improve operator's comfort. Wide adjustable armrests and retractable seatbelt are also included.
- Standard Cab Equipment. To enhance operator comfort and productivity, the cab includes a radio, lighter, drink holder, coat hook, service meter, literature holder, magazine rack and storage compartment.

- Keep your phone or other personal electronics charged using the 24V auxiliary power ports delivering up to 5A of power.
- There is plenty of room for you to store your gear. There are two storage locations at the rear of the right console and one space for your lunchbox behind the seat.

BUILT-IN SAFETY FEATURES

- We designed the cab to provide excellent visibility from the operator's seat. In addition, two standard mirrors help keep you aware of your surroundings.
- 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.
- Grips on the track frame, service platform, cab and battery compartment for an easy, safe climb up and down from the service platform and operator station.
- Handrails and hand hold are provided for easy access.
- Optional rearview cameras with additional mirror enhance visibility behind the machine.
- Optional Rollover Protective Structure (ROPS) compliant cab is now available.
- Ground level access to engine secondary shut-off feature.
- The hydraulic lockout lever prevents operators from leaving the cab without first isolating all hydraulic functions.
- A lockable disconnect switch isolates the battery and enhances safety by disconnecting the electrical energy when servicing the machine.
- A full-length firewall separates the engine from the hydraulic pump and offers protection in the event of an incident.
- The machine can be equipped with a Operator Protective Guard (OPG) guard that conforms to the ISO 10262:1998 standard. These guards are bolted directly to the cab shell.

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

	Standard	Optional
UNDERCARRIAGE AND STRUCTURES		
600 m (24") triple grouser shoes (12 mm/0.5" thick)	✓	
Grease lubricated track links	✓	
Tie down points on base frame	✓	
Center track guiding guard	✓	
Segmented HD track guiding guard	✓	
Heavy-duty track rollers	✓	
4000 kg (8,820 lb) counterweight	✓	
4460 mm (14'8") long undercarriage	✓	
600 mm (24") triple grouser shoes (10 mm/0.4" thick)		✓
Full length track guiding guard		✓
CAT TECHNOLOGY		
VisionLink	✓	
CAB		
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	✓	
3-button joystick		✓
ENGINE		
Diesel engine, C7.1 1106C – mechanical governor – meets UN R96 Stage II, equivalent to Tier 2 and Stage II	✓	
Two selectable power modes: Standard, Eco	✓	
One-touch low idle with auto engine speed control	✓	
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	✓	
Electric fuel priming pump	✓	
Biodiesel capability (up to B20)	✓	
-32° C (-25° F) cold start capability		✓
Air pre-cleaner		✓
Engine flow meter		✓

	Standard	Optional
BOOM AND STICK		
5.7 m (18'8") HD Reach boom	✓	
2.5 m (8'2") HD Reach stick	✓	
ELECTRICAL SYSTEM		
Two 750 CCA maintenance free batteries	✓	
Centralized electrical disconnect switch	✓	
LED chassis and cab lights	✓	
LED left-side boom light	✓	
LED right-side boom lights		✓
SERVICE AND MAINTENANCE		
Engine oil, fuel, and hydraulic oil filters grouped for ease of maintenance	✓	
Scheduled Oil Sampling (S-O-S) ports	✓	
Radiator screen for radiator/oil cooler	✓	
HYDRAULIC SYSTEM		
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		✓
SAFETY AND SECURITY		
Anti-skid plating with countersunk bolts	✓	
Handrail and handhold	✓	
Lockable external tool/storage box	✓	
Signaling/warning horn	✓	
Hydraulic lock out lever	✓	
ROPS		✓
OPG with matching lights		✓
Rearview camera		✓
Travel alarm		✓

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Technical Specifications

Engine

Engine Model	Cat C7.1	
Biodiesel Capability	Up to B20 ⁽¹⁾	
Net Power – ISO 9249	106 kW	142 hp
Net Power – ISO 9249 (DIN)	144 hp (metric)	
Engine Power – ISO 14396	113 kW	152 hp
Engine Power – ISO 14396 (DIN)	154 hp (metric)	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in ³

- The 323D3 meets UN R96 Stage II emission standards, equivalent to U.S. EPA Tier 2 and EU Stage II.
- 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 1,800 rpm.

⁽¹⁾ Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:

- ✓ 100% biodiesel FAME (fatty acid methyl ester)*
- ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

**Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

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 ft-lbf

Weights

Operating Weight	22 600 kg	49,800 lb
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Service Refill Capacities

Fuel Tank Capacity	390 L	103 gal
Cooling System	28 L	7.4 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	SD 1.20 m³ (1.57 yd³)	
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	4460 mm	14.8 ft
Length to Center of Rollers	3650 mm	12 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	SD 1.20 m³ (1.57 yd³)	
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 ft) Level Bottom	5960 mm	19.7 ft
Maximum Vertical Wall Digging Depth	5720 mm	18.9 ft
Bucket Digging Force – ISO	147 kN	33,050 lbf
Stick Digging Force – ISO	111 kN	24,950 lbf

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