



Cat[®] 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.

High Performance Digging

- Get more done with improved cycle times, productivity, and fuel efficiency over the Cat[®] 320D2.
- Move more, faster with a larger Cat 1.20 m³ (1.57 yd³) severe-duty bucket.
- Expect reliable performance from the powerful Cat C7.1 mechanically-controlled engine. The double-filtered low-pressure fuel system and antirust fuel tank protects the engine from lower quality fuel.
- 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.
- Dig and lift from a stable platform created by the standard 4.25 ton (9,370 lb) counterweight and heavy-duty, eight-roller undercarriage.
- 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.
- Product Link[™] comes standard so you can remotely monitor machine health, location, hours, and fuel consumption on demand through the Visionlink[®] online interface.
- 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.

Use Less Fuel

- Fuel efficiency (liters/ton) has improved over the previous 320D2 excavator.
- Use 15 percent less fuel in Economy mode with no loss in lifting or digging forces.
- Boom and stick regeneration circuits reduce fuel consumption by up to two percent while improving cycle times.
- 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 1,100 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.

- New tandem hydraulic pumps provide seven percent more hydraulic power with less internal friction to increase overall efficiency. Each pump can produce a maximum flow of 200 L/min (52.8 gal/min). Hydraulic system components are close together to minimize power loss from friction and pressure drops.

Reliability You Expect from a Cat Machine

- A two-stage filtering system with integrated water separator protects the engine from particles larger than four microns when fuel quality is less than ideal.
- We designed the stick and boom structures using high-tensile steel fabricated into a large box section using internal baffles to absorb torsional stress. The X-shaped, box-section carbody provides excellent resistance to torsional bending, dissipating stress throughout the base of the machine.
- 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 percent.
- 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.
- Hydraulic snubbers in the boom and stick cylinders dampen end-of-stroke impact prolonging the life of your machine.
- Safety fuses protect critical electrical components. Thick braiding protects the colored, numbered electrical wires. Non-abrasive connectors keep wiring harnesses in place to prevent failure.
- The capsule-type hydraulic return filter prevents contaminants from entering the system when hydraulic oil is changed. If the filter clogs, a warning is displayed on the monitor screen inside the cab.
- The swing system uses a ball bearing to help absorb stresses caused by swing torque.
- The standard, integrated idler guard helps maintain track alignment while traveling or working on the slopes.



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Work in Comfort

- The spacious cab provides excellent visibility from the operator's seat to keep you aware of your surroundings – without bending or straining to see.
- Critical machine information is always visible in the new high-resolution 178 mm (7 in) monitor. Intuitive menus mean more time working and less time looking for information.
- Work a full day with less fatigue using the ergonomically-designed pilot-operated joysticks matched to operator's wrist and arm position. Joystick consoles can be adjusted, further improving operator comfort and productivity.
- Automatic climate control helps maintain consistent cab temperature. Five outlets ensure proper air circulation to keep you comfortable regardless of outside temperatures.
- Keep your phone or other personal electronics charged using the two standard 12V auxiliary power ports delivering up to 10 A of power.
- Seat adjusts to accommodate a variety of operator size and weight. Wide adjustable armrests and retractable seatbelt are also included.
- Standard Cab Equipment. To enhance operator comfort and productivity, the cab includes a lighter, drink holder, coat hook, service meter, literature holder, magazine rack and storage compartment.
- 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.

Designed-In Safety

- 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 shut-off switch to stop the fuel to the engine and shut down the machine.
- 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 helps to deter theft by isolating the battery and enhances safety when servicing the machine.
- A full-length firewall separates the engine from the hydraulic pump and offers protection in the event of an incident.
- 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 can be equipped with a Falling Object Guarding System (FOGS) guard that conforms to the ISO 10262:1998 standard. These guards are bolted directly to the cab shell.

Easy to Maintain

- Lower your maintenance costs by up to five percent with 20 percent less refill oil volume than the 320D2 and maintenance free batteries.
- Easily maintain your machine. 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, engine oil filter, and fuel filters.
- 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.
- 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.
- Robust service doors open wide for easy access to service points. Latches firmly hold the doors in the open position to prevent accidental closing while servicing – even on windy days. On the top of the machine, the large engine hood provides easy access to the engine and cooling compartments.
- 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.
- Routine cleaning is made easier with the single plane cooling package design.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAB			BOOM AND STICK		
Sound suppressed cab with viscous mounts	✓		5.7 m (18'8") heavy duty reach boom	✓	
Full color 178 mm (7 in) LCD monitor	✓		2.5 m (8'2") heavy duty reach stick	✓	
Mechanically adjustable seat with seatbelt	✓		UNDERCARRIAGE AND STRUCTURES		
Openable skylight, openable upper windshield and removable bottom windshield	✓		600 mm (24") triple grouser shoes (10 mm/0.4" thick)		✓
Auto bi-level air conditioner	✓		600 mm (24") triple grouser shoes (12 mm/0.5" thick)	✓	
Roll down sun screen		✓	Grease lubricated track links	✓	
Control pattern changer		✓	Tie down points on base frame	✓	
CAT CONNECT TECHNOLOGY			Center track guiding guard	✓	
Cat Product Link	✓		Segmented track guiding guard		✓
ENGINE			Heavy duty track roller		✓
Two selectable power modes	✓		4250 kg (9,370 lb) counterweight	✓	
One-touch low idle with auto engine speed control	✓		ELECTRICAL SYSTEM		
Two stage fuel filtration system with water separator and indicator	✓		Two 1,000 CCA maintenance free batteries	✓	
52° C (125° F) high-ambient cooling capacity	✓		Halogen chassis light, left-hand boom light, cab lights	✓	
-32° C (-25° F) cold start capability		✓	SERVICE AND MAINTENANCE		
4000 m (13,120 ft) altitude capability	✓		Sampling ports for Scheduled Oil Sampling (S.O.S SM)	✓	
Radial seal air filter with double filter element	✓		Single plane cooling arrangement	✓	
Engine air pre-filter		✓	Radiator screen	✓	
Electric fuel priming pump	✓		SAFETY AND SECURITY		
Biodiesel capability up to B20	✓		Rear window emergency exit	✓	
HYDRAULIC SYSTEM			Two rearview mirrors	✓	
Boom and stick regeneration circuit	✓		Hydraulic lock out lever	✓	
Boom and stick drift reduction valve	✓		Ground level engine shutoff switch	✓	
Auto two-speed travel	✓		Right-hand handrail and hand hold	✓	
Reverse swing damping valve	✓		Signaling/warning horn	✓	
Fine swing control		✓			
Hammer return filter circuit		✓			
High performance hydraulic return filter	✓				
High-pressure auxiliary circuit		✓			
Quick coupler circuit for Cat Pin Grabber		✓			

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Technical Specifications

Engine		
Engine Model	Cat C7.1	
Gross Power – ISO 14396/SAE J1995	113 kW	151 hp
Net Power – ISO 9249/SAE J1349	106 kW	142 hp
Engine RPM		
Operation	1,700 rpm	
Travel	1,800 rpm	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in³

Hydraulic System		
Main System – Maximum Flow – Implement	400 L/min	106 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

Machine Weight		
Operating Weight	22 800 kg	50,300 lb
• Long undercarriage, 5.7 m (18'8") HD reach boom, 2.5 m (8'2") HD reach stick, 1.20 m³ (1.57 yd³) SD bucket, 600 mm (24") shoes.		

Service Refill Capacities		
Fuel Tank	410 L	108.3 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)	260 L	68.7 gal
Hydraulic Tank	138 L	36.5 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	10'0"
Shipping Length	9460 mm	31'0"
Tail Swing Radius	2750 mm	9'0"
Track Length to Center of Rollers	3650 mm	12'0"
Ground Clearance	450 mm	1'6"
Track Gauge	2380 mm	7'10"
Transport Width – 600 mm (24") Shoes	2980 mm	9'9"
Counterweight Clearance	1020 mm	3'4"

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"
Maximum Reach at Ground Level	9470 mm	31'1"
Maximum Cutting Height	9250 mm	30'4"
Maximum Loading Height	6290 mm	20'8"
Minimum Loading Height	2590 mm	8'6"
Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5960 mm	19'7"
Maximum Vertical Wall Digging Depth	5290 mm	17'4"
Bucket Digging Force (ISO)	140 kN	31,500 lbf
Stick Digging Force (ISO)	118 kN	26,600 lbf
Bucket Digging Force (SAE)	125 kN	28,100 lbf
Stick Digging Force (SAE)	114 kN	25,700 lbf

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