



Cat[®] 322

Hydraulic Excavator

When you need muscle, precision, and cost control in one machine, the Cat[®] 322 delivers. Purpose-built for high production, the 322 pairs fast cycle times with bucket options to move more material in fewer passes. Its responsive electrohydraulic controls and rugged design keep you productive on the tough jobs, while low fuel consumption and streamlined maintenance help you stay profitable every step of the way. Whether you're loading, trenching, or lifting, the Cat 322 is a heavy-duty workhorse that pays you back.

Designed for Uptime

- Caterpillar design and manufacturing techniques assure outstanding service life.
- Thorough component design and machine validation processes result in unmatched reliability and uptime.
- Reinforced front structures help extend machine life in demanding terrain.
- Robotically welded booms and sticks ensure structural integrity.
- Dig and lift from a stable platform created by the 4000 kg (8,820 lb) heavy-duty counterweight and eight-roller undercarriage.
- Hydraulic lines protected inside the frame reduce damage risk.
- Auto warm up speeds up hydraulic oil warming in cold temperatures and helps prolong the life of components.
- The latest single-plane cooling package has better air flow, helping to reduce fan speed and save fuel in cooler conditions and lighter applications.
- Sloped track frame helps prevent mud and debris from accumulating in the track area.
- Grease lubricated links minimize internal bushing wear, reducing noise and increasing life.
- Optimized Heavy-Duty (HD) Reach 2.5 m (8'2") stick for longer life in quarry application.
- The center track guiding guard helps keep the excavator track aligned when traveling and working on 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.
- Cooling system capability of up to 48° C (118° F) for good performance in harsh environments.
- The excavator has a high-ambient temperature capability of 52° C (126° F) and cold start capability of -10° C (14° F).

Low Fuel Consumption

- The Turbocharged Cat C3.6 engine and electrohydraulic system work in sync to help you move loads of material without burning excessive fuel.
- Eco mode reduces fuel consumption with no loss in lifting or digging forces.
- Equipped with electrohydraulic control valve, pump and Engine Control Module (ECM) for better controllability and high fuel efficiency.
- The ECM ensures smooth, precise operation in every pass.
- Balance power and fuel efficiency using the Positive Flow Control (PVC) electrohydraulic system.

- Use automatic engine speed control (AEC) during no-load or light-load conditions to automatically reduce engine speed to minimize fuel consumption.
- Electronic tandem hydraulic pumps deliver more efficiency with less internal friction losses and superior design.
- Boom and stick regeneration circuits reduce fuel consumption while improving cycle times.

High Productivity

- Choose from a 1.2 m³ (1.57 yd³) General Duty bucket or a 1.14 m³ (1.49 yd³) General Duty bucket for earthmoving tasks. For quarry applications, select the 1.1 m³ (1.44 yd³) Severe Duty bucket, engineered to handle rock, gravel, and abrasive materials with ease.
- Choose between two robust undercarriage options: Medium 4.25 m (13'11") or Long 4.45 m (14'7"), both built to withstand demanding conditions.
- Increased swing torque compared to the 320D3 delivers seamless operations while grading, truck loading and trenching.
- Faster swing acceleration is achievable due to the higher swing torque, providing optimal site performance.
- The single plane cooling package design reduces air resistance compared to the traditional two-plane design for better cooling performance and enhanced machine productivity.
- Traverse the jobsite on the Grease Lubricated Track (GLT) undercarriage. Undercarriage rollers are rebuildable and sealed to prevent dirt and debris from causing internal wear.
- Work up to 3000 m (9,840 ft) above sea level without de-rating.
- Reinforced structures and upgraded undercarriages improve stability and durability.
- The single plate X-shaped, box-section car body provides excellent resistance to torsional bending, dissipating stress throughout the base of the machine.
- The standard and heavy-duty base frames provide longer life and greater resilience in demanding work environments.
- Match your machine to the job with power modes. Let Smart mode automatically match engine and hydraulic power to working conditions. Power mode constantly provides maximum productivity, and Eco mode helps to minimize fuel consumption in less-demanding applications.
- The boom and stick structures are designed using high-tensile steel fabricated into a large box section using internal baffles to absorb torsional stress.



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Save on Service and Maintenance

- The 322 features a safe, convenient work platform for routine service and maintenance. Anti-skid plating with countersunk bolts reduces slip and trip hazards, while integrated grips on key areas ensure easy access to the platform and operator station.
- Shared components simplify maintenance and improve parts availability.
- Scheduled Oil Sampling (S-O-SSM) ports are on ground level, simplifying maintenance and allowing for quick, easy extraction of samples for fluid analysis.
- Extended and synchronized service intervals save on maintenance costs.
- Extended first engine oil change interval (500 hours), and maintenance-free batteries.
- Filters, such as fuel, engine air, and oil filters, are grouped together for easy access and preventative maintenance.
- 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.
- Maximize 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.
- Routine cleaning is made easier with the single plane cooling package design.
- 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.
- The latest air intake filter with pre-cleaner has double the dust holding capacity of the previous air intake filter.

Safely Home Every Day

- The latest cab provides excellent visibility from the operator's seat. In addition, two standard mirrors help keep you aware of your surroundings.
- Optional front windshield guard helps protect the windshield from potential damage caused by flying debris, and other road materials.
- Optional rearview camera enhances visibility behind the machine.
- Heavy-duty base frame and reinforced "X" car body conform to ISO 15818:2017 lifting and tie-down requirements.
- The optional Rollover Protective Structure (ROPS) cab conforms to ISO 12117-2:2008 requirements.
- Handrails and hand hold with a step on the undercarriage for easy access to the engine bay area. The handrails conform to ISO 2867:2011 requirements for added safety.
- Anti-skid plating with countersunk bolts reduces the potential for slippage and trip hazards.
- Ground-level access for daily checks improves safety and saves time.
- Serrated steps, anti-skid plating, and handrails help you avoid slips and trips – a major contributor to workplace injuries.
- A lockable disconnect switch isolates the battery and enhances safety by disconnecting the electrical energy when servicing the machine.

- The optional travel alarm provides a clear warning signal, alerting nearby individuals to the machine's movement and promoting a safe working environment.
- Bright seatbelts and a wide cab entry improve safety and usability.
- LED 1,200 lumen lights, a quiet muffler, and emergency cab exits support 24/7 operation.

Simple to Operate

- Start the engine with a push button.
- The in-cab high-resolution 203 mm (8 in) touchscreen monitor is easy to use, intuitive, and user-friendly.
- Continuously improved user interface allows for intuitive navigation, minimizing performance interruption with the easy-to-use touchscreen menu.
- The machine's electrohydraulic system allows accurate bucket control for maximum precision.
- Optimized low-effort joystick controls reduce operator fatigue.
- Customize joystick patterns and preferences; the machine remembers each operator's settings.
- Auto hammer stop protects tools from overheating and wear.

All Day Comfort

- Ergonomically designed seat to improve operator's comfort.
- Sound suppression, seals, and viscous cab mounts decrease noise and vibration for a quieter work environment.
- Standard automatic climate control helps keep you comfortable all shift long.
- Excellent work site visibility from the cab enhances productivity and safety.
- Adjustable seat with three suspension levels and ergonomic design.
- Climate control, Bluetooth® connectivity, USB ports, and an intuitive interface enhance comfort.
- Control the excavator comfortably with easy-to-reach controls all located in front of you.
- Easy to access radio controls, engine throttle, wiper controls and Bluetooth phone pairing for operator convenience.
- Automatic climate control helps maintain consistent cab temperature. Five outlets ensure proper air circulation to keep you comfortable regardless of outside temperatures.
- There is plenty of room for you to store your gear. The cup holder and storage space in front of the controls can hold large cups and wide cell phones; storage behind the seat can hold a large lunchbox and other items.
- Bright seatbelts and a wide cab entry improve safety and usability.

Smart Fleet Management

- VisionLink™ wirelessly connects you to your equipment, giving you access to essential information you need to know to run your business. Gain valuable insight into how your machine or fleet is performing. Access data anywhere—desktop, tablet, or mobile device.
- Available CVA (Customer Value Agreements) and EPP (Extended Protection Plans) help maximize uptime and reduce risk.
- Cat dealers are second to none. From machine selection and purchase to maintenance support, operator training and rebuilds, Cat dealers have the experience and capabilities to help keep you up and running at peak performance.

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

	Standard	Optional
ENGINE		
Cat C3.6 single turbo diesel engine	✓	
Three selectable modes: Power, Smart, Eco	✓	
One-touch low idle with automatic engine speed control (AEC)	✓	
Two stage fuel filtration system with water separator and indicator	✓	
4000 m (13,120 ft) altitude capability with derate from 3000 m (9,840 ft)	✓	
52° C (126° F) high-ambient cooling capacity with derate above 48° C (118° F)	✓	
-10° C (14° F) cold start capability	✓	
100 Amp alternator	✓	
Radial sealed double element air filter	✓	
Electric fuel priming pump	✓	
HYDRAULIC SYSTEM		
Electronic main control valve, hammer ready	✓	
Boom and stick regeneration circuits	✓	
Automatic hydraulic warm-up	✓	
Automatic two speed travel	✓	
High performance hydraulic return filter	✓	
Hydraulic auxiliary lines (hammer)		✓
CAB		
Sound suppressed cab with viscous mounts	✓	
Rollover Protective Structure (ROPS)		✓
Operator Protective Guards (OPG)		✓
Front windshield guard (wire mesh)		✓
Mechanical-suspension seat with headrest and armrest angle adjustment	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓	
Keyless push to start engine control	✓	
AM/FM Bluetooth® radio with USB/Auxiliary ports	✓	
Cup holder and storage compartments	✓	
Upper radial wiper with washer	✓	
Openable steel hatch	✓	
Washable floor mat	✓	
51 mm (2") orange seat belt	✓	

	Standard	Optional
UNDERCARRIAGE AND STRUCTURES		
4.25 m (13'11") Medium undercarriage		✓
4.45 m (14'7") Long undercarriage		✓
Grease lubricated track link	✓	
Segmented track guiding guard		✓
Center track guiding guard		✓
Bottom guard	✓	
4000 kg (8,820 lb) counterweight	✓	
600 mm (24") triple grouser track shoes(10 mm/0.39" thick)	✓	
BOOM, STICKS AND LINKAGE		
5.7 m (18'8") Reach boom	✓	
2.5 m (8'2") Reach stick	✓	
Bucket linkage, B1 family with lifting eye	✓	
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 light		✓
CAT TECHNOLOGY		
VisionLink™	✓ ¹	
SERVICE AND MAINTENANCE		
Grouped engine oil, fuel, and hydraulic oil filters	✓	
Scheduled Oil Sampling (S-O-S SM) ports	✓	
Radiator screen for radiator/oil cooler to prevent plugging by debris	✓	
SAFETY AND SECURITY		
Rearview mirrors; handrail mounted (one), cab handhold mounted (one)	✓	
Bolt free service platform with anti-skid plate	✓	
Neutral lever (lock out) for all controls	✓	
Ground level accessible secondary engine shutoff switch in cab	✓	
Handrail and handhold	✓	
Signaling/warning horn	✓	
Rearview camera		✓
Travel alarm		✓

¹Provides core telematics data to manage health, maintenance insights, and condition monitoring. Other plans available for more comprehensive data reporting. Consult your Cat dealer for details.

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Technical Specifications

Engine		
Engine Model	Cat® C3.6	
Net Power – ISO 9249	96 kW	129 hp
Net Power – ISO 9249 (DIN)	131 hp (metric)	
Engine Power – ISO 14396	100 kW	134 hp
Engine Power – ISO 14396 (DIN)	136 hp (metric)	
Bore	98 mm	4 in
Stroke	120 mm	5 in
Displacement	3.6 L	220 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	

- Noncertified 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 2,000 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 (hydrogenated 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 – Implement	442 L/min	117 gal/min
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

Swing Mechanism		
Swing Speed	11.5 rpm	
Maximum Swing Torque	69 kN·m	50,560 lbf·ft

Weights		
Operating Weight	20 700 kg	45,700 lb
4.25 m (13'11") Medium undercarriage, 5.7 m (18'8") Reach boom, Heavy Duty (HD) R2.5 (8'2") stick, 1.10 m ³ (1.44 yd ³) SD bucket, 600 mm (24") triple grouser track shoes and 4000 kg (8,820 lb) counterweight.		

Service Refill Capacities		
Fuel Tank Capacity	370 L	97.7 gal
Cooling System	22 L	5.8 gal
Engine Oil (with filter)	11 L	2.9 gal
Swing Drive	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	Reach 5.7 m (18'8")	
Stick	HD Reach 2.5 m (8'2")	
Bucket	SD 1.10 m³ (1.44 yd³)	
Undercarriage	Medium 4.25 m (13'11")	
Shipping Height	3360 mm	10.7 ft
Handrail Height	3030 mm	9.9 ft
Machine Length (with boom, stick, bucket installed)	9520 mm	31.4 ft
Tail Swing Radius	2830 mm	9.3 ft
Counterweight Clearance (without shoe lug height)	1030 mm	3.3 ft
Ground Clearance (without shoe lug height)	440 mm	1.4 ft
Track Length	4250 mm	13.4 ft
Track Length – Length to Center of Rollers	3450 mm	10.7 ft
Track Gauge – Undercarriage	2380 mm	7.2 ft
Transport Width – 600 mm (24") Shoes	2980 mm	9.2 ft

Working Ranges and Forces		
Boom	Reach 5.7 m (18'8")	
Stick	HD Reach 2.5 m (8'2")	
Bucket	SD 1.10 m³ (1.44 yd³)	
Undercarriage	Medium 4.25 m (13'11")	
Maximum Digging Depth	6310 mm	20.7 ft
Maximum Reach at Ground Level	9470 mm	31.1 ft
Maximum Cutting Height	9330 mm	30.6 ft
Maximum Loading Height	6280 mm	20.6 ft
Minimum Loading Height	2580 mm	8.5 ft
Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	6120 mm	20 ft
Maximum Vertical Wall Digging Depth	5630 mm	18.5 ft
Bucket Digging Force – ISO	128 kN	28,710 lbf
Stick Digging Force – ISO	109 kN	24,500 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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