



Cat[®] M322

Wheeled Excavator

Working hard has never been easier than with the Cat[®] M322 Wheeled Excavator. This machine is designed to help you take on a wide variety of challenges at a lower cost. The Cat M322 plays its part in optimizing the operator's efficiency to increase cash flow. Enjoy the versatility, precision, and efficiency offered by integrated solutions like Cat Grade and Payload technologies. Combined with simplified maintenance, the M322 keeps you working quickly and easily.

Not all features are available in all regions. Consult your Cat dealer for specific configurations available in your region.

Job Matched Performance

- The Cat C7.1 engine matches your performance and production needs.
- Up to 5 percent lower fuel consumption compared to M322F.
- Built-in fuel savers like Auto Engine Speed Control and Engine Idle Shutdown eliminate waste.
- Dedicated swing pump allows faster, smoother combined movements.
- Save time with Excavator Tilt Rotator Systems that help you maneuver around obstacles without repositioning the machine.

Experience the Freedom of Versatility

- Travel easily between jobsites with travel speeds up to 30 km/h (19 mph).
- Joystick buttons/sliders can be set up as desired by the operator.
- Enhanced swing lock makes it possible to lock swing and front linkage independently.
- Don't let the temperature stop you from working. The excavator has a standard high-ambient temperature capability of 52°C (125°F) and cold start capability of -18°C (0°F).

Work in Complete Comfort

- Tilt-up left console makes it easier to get in and out of the cab.
- Feel more comfortable in the cab while you work with reduced cab vibrations from advanced viscous mounts.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles. A cup holder, bottle holder, and coat hook are also provided.
- Bluetooth[®] integrated radio allows for seamless mobile phone connection to listen to music, podcasts, and hands-free calling.
- Easily adjust the climate control system using the touchscreen monitor or jog dial.

Enjoy Easy Operation

- Start the engine with the push-to-start button, a Bluetooth key fob, or the unique Operator ID function.
- Everything can be adjusted in the cab from the steering column height to the electrically adjustable mirrors.
- Large split-screen monitor to allow quick view of multiple cameras on the same display.
- Program your power mode and joystick preferences using Operator ID; the excavator remembers your settings each time you go to work.
- Navigate quickly on the standard high-resolution 254 mm (10 inch) touchscreen monitor or with the aid of the jog dial control.
- The auto axle lock presses the pedal for you to reduce your overall number of actions. It also detects when the service brake and axle need to be locked or unlocked.



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Come Home Safely

- The service platform design provides easy, safe, and quick access to the cab; the steps use an anti-skid punch plate to prevent slipping.
- Operator works in clean air thanks to the cabin filtration system that includes precleaner, a recirculation filter, and a cabin pressure monitor.
- Keep your excavator secure with Operator ID. Use your PIN code on the monitor to enable the pushbutton starting feature.
- For a clearer view of the jobsite, whether during the day or in the dark, the M322 has large glass areas, rear/side cameras, and LED lamps for all working lights.

Simplified Machine Maintenance

- Quickly check and service your machine with all daily maintenance points accessible from ground level.
- Up to 5 percent lower maintenance costs vs. previous model with the same productivity.
- Track your machine's filter life and maintenance intervals on the in-cab monitor.
- The new hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3,000-hour replacement interval – 50 percent longer than previous filter designs.
- Two levels of fuel filtration protect the engine from fuel contamination.
- Scheduled Oil Sampling (S•O•SSM) ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.

Elevate Business with Cat Technology

- Product Link™ connects owners to their equipment, providing access to machine data such as location, hours, fuel consumption, idle time, events, and diagnostic codes.
- Remote Troubleshoot connects you to a dealer service pro to help solve your problem and quickly get you to work.
- Remote Flash works around your schedule to ensure your machine's software is up to date for optimal performance.
- Improve your operation's efficiency and productivity with integrated technologies like Grade, e-Fence, and Payload.
- Select your target depth and slope, then watch the Grade with 2D system use onboard processors and sensors to provide real-time guidance on the distance to grade.
- Cat Grade with Advanced 2D delivers real-time bucket tip elevation guidance. It also allows you to input and edit grade designs easily from the operator's seat.
- Standard 2D e-Fence prevents your machine from moving outside operator-defined parameters.
- Cat Grade with 3D works with GPS and GLONASS systems to know your machine's exact location and ensure you dig to plan.
- All Cat Grade systems are compatible with radios and base stations from Trimble, Topcon, and Leica.
- Already invested in a grade infrastructure? You can install grade systems from Trimble, Topcon, and Leica onto the machine.
- Cat Payload shares what got loaded where, how much went on each truck or in the hopper, and where it went from there. It also keeps track of this over time to help operators get the right load on board, the first time, every time.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAB			HYDRAULIC SYSTEM (Continued)		
ROPS, advanced sound suppression	✓		Cat tiltrotator support		✓
Premium cab with auto-adjustable seat and air ventilation	✓		Joystick steering		✓
High-resolution 254 mm (10 in) LCD touchscreen monitor	✓		Separate dedicated swing pump	✓	
CAT TECHNOLOGY			Boom, stick, and bucket drift reduction valves	✓	
Cat Product Link	✓		Boom/stick lowering check valves		✓
Cat Grade with 2D		✓	BOOM AND STICKS		
Cat Grade with Advanced 2D		✓	5.4 m (17'10") variable adjustable boom		✓
Cat Grade with 3D		✓	2.5 m (8'2") stick		✓ ¹
Laser catcher		✓	2.9 m (9'6") stick		✓
Cat Payload includes payload information, static weigh, and auto calibration		✓	UNDERCARRIAGE AND STRUCTURES		
2D e-Fence		✓	11.00-20 16 PR, dual tires	✓	
Remote Flash/Troubleshoot capability	✓		3500 kg (7,716 lb) counterweight		✓ ¹
ENGINE			4700 kg (10,362 lb) counterweight		✓
Power mode selector	✓		Automatic brake/axle lock	✓	
One-touch low idle with auto engine speed control	✓		Creeper speed	✓	
Auto engine idle shutdown	✓		All wheel drive	✓	
52°C (125°F) high-ambient cooling capacity	✓		ELECTRICAL SYSTEM		
-18°C (0°F) cold start capability	✓		LED lights on chassis (left-hand, right-hand) and counterweight	✓	
Double element air filter with integrated precleaner	✓		Programmable time-delay LED working lights	✓	
Electric fuel priming pump	✓		Rooding and indicator lights, front and rear	✓	
On-demand electric cooling fans	✓		Maintenance-free batteries	✓	
Biodiesel capability up to B20	✓		Centralized electrical disconnect switch	✓	
HYDRAULIC SYSTEM			Electrical refueling pump		✓
Automatic swing brake	✓		SERVICE AND MAINTENANCE		
Auto hydraulic oil warm up	✓		Sampling ports for Scheduled Oil Sampling (S-O-S)	✓	
Electronic main control valve	✓		Automatic lubrication system for implement and swing system		✓
Boom, stick, and bucket drift reduction valves	✓		SAFETY AND SECURITY		
1-slider joystick	✓		Rear- and right-side-view cameras	✓	
2-slider joystick		✓	360° visibility		✓
Second high-pressure auxiliary circuit (one-/two-way high-pressure flow)		✓	Cat asset tracker		✓
Medium pressure auxiliary circuit (one-/two-way medium-pressure flow)		✓	Wide angle mirrors		✓
Heavy lift mode	✓		Ground-level engine shutoff switch	✓	
Quick coupler circuit		✓	Anti-skid plate and countersunk bolts on service platform	✓	
SmartBoom™		✓	Signaling/warning horn		✓
Ride control		✓			

¹ Europe only

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 and additional regional offerings, refer to the Technical Specifications brochure available at www.cat.com or your Cat dealer.

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Technical Specifications

Engine		
Engine Model	C7.1	
Engine Power (ISO 14396:2002)	129 kW	174 hp
Net Power (ISO 9249:2014)	128 kW	171 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7 L	427.8 in ³

- Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, CEM exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed.
- Recommended for use up to 3000 m (9,840 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Rated speed 2,200 rpm.

Hydraulic System		
Main System – Maximum Flow – Implement	360 L/min	95 gal/min
Maximum Pressure – Heavy Lift	37 000 kPa	5,366 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Normal	35 000 kPa	5,076 psi

Swing Mechanism		
Swing Speed	8.6 rpm	
Standard Swing Torque	60 kN-m	44,250 lb-ft
Optional Swing Torque	69 kN-m	50,890 lb-ft

Machine Weight		
Operating Weight Minimum	20 300 kg	44,750 lb
Operating Weight Maximum	24 000 kg	52,911 lb

- * Operating weight includes full fuel tank, operator, GD bucket, and dual pneumatic tires. Weight varies depending on configuration.
- ** Typical configurations include 2.5 m (8'2") stick and 3500 kg (7,716 lb) counterweight.

Service Refill Capacities		
Fuel Tank	470 L	124.2 gal
Diesel Exhaust Fluid (DEF)	30 L	7.9 gal
Cooling System	40 L	10.6 gal
Engine Oil	13 L	3.4 gal
Hydraulic Tank	200 L	52.8 gal
Hydraulic System (including tank)	270 L	71.3 gal

Transmission			
Forward/Reverse			
1st Gear	9 km/h	5.6 mph	
2nd Gear	30 km/h	18.6 mph	
Creeper Speed			
1st Gear	5.5 km/h	3.4 mph	
2nd Gear	15 km/h	9.3 mph	
Drawbar Pull		127 kN	28,551 lbf
Maximum Gradeability at (24 000 kg/52,911 lb)			70%

Dimensions		
Boom	VA 5.4 m (17'10")	
Stick	2.9 m (9'2")	
Shipping Height with Falling Object Guard (highest point between boom and cab)	3390 mm	11'1"
Support Point	3430 mm	11'3"
Shipping Length	9485 mm	31'1"
Tail Swing Radius	2800 mm	9'2"
Counterweight Clearance	1330 mm	4'4"
Ground Clearance	320 mm	1'3"
Wheel Base	2750 mm	9'0"

Working Ranges and Force		
Boom Type	VA 5.4 m (17'10")	
Stick	2.9 m (9'6")	
Bucket Capacity	GD 1.3 m ³ (1.7 yd ³)	
Maximum Loading Height	7520 mm	24'8"
Maximum Cutting Height	10900 mm	35'9"
Maximum Digging Depth	6650 mm	21'10"
Maximum Reach at Ground Level	10190 mm	33'5"
Maximum Vertical Wall Digging Depth	5290 mm	17'4"
Bucket Digging Forces (ISO)	151 kN	33,946 lbf
Stick Forces (ISO)	105 kN	23,605 lbf
Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	6560 mm	21'6"

Air Conditioning System
• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.0 kg of refrigerant which has a CO ₂ equivalent of 1.43 metric tonnes.

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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