



M319

Wheeled Excavator

The Cat® M319 Wheeled Excavator provides top performance to get the job done faster. Save time and money with low maintenance costs, longer service intervals, and 100 percent daily ground level maintenance. The M319 gives you the power to work longer while putting money in your pocket.

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

High Performance with Lower Fuel Consumption

- The Cat® engine matches to your performance and production needs. The engine meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Use up to 5% less fuel consumption over the M317F.
- Work confidently in space-restricted areas. Dig, swing, and dump within a tight working space.
- Travel between sites easier with travel speeds up to 35 kph (21.7 mph).
- From dirt to asphalt, the excavator matches your needs to get the job done in a timely, efficient manner.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need for precise working requirements.
- With up to 15 percent more swing torque, you can get the job done faster to move on to the next one. The dedicated swing pump provides consistent power for better multitasking capabilities.
- Auxiliary hydraulic options give you the versatility to use a wide range of Cat attachments.
- 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 Comfort

- Choose between Deluxe and Premium cab options.
- The Deluxe seat is heated and air adjustable while the Premium seat is heated, ventilated, and adjusts automatically.
- Get in and out of the cab easier using the tip-up left console.
- Feel more comfortable in the cab while you work with reduced cab vibrations from advanced viscous mounts.
- Control the excavator comfortably with easy-to-reach controls, all located in front of you.
- 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 to your ideal temperature with the touchscreen monitor or jog dial.

Lower Maintenance Costs

- Quickly check and service your machine with daily maintenance points accessible from ground level.
- Check the engine oil level quickly and safely from the ground.
- Save up to 10 percent in maintenance parts with the new, longer lasting filters.
- Track your machine's filter life and maintenance intervals on the in-cab monitor.
- Two levels of fuel filtration protect the engine from dirty diesel.
- 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.
- S-O-SSM ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.



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Simple to Operate

- Start the engine with the push-to-start button, a Bluetooth key fob, or the unique Operator ID function.
- 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. The machine automatically detects when the service brake and axle need to be locked or unlocked. It releases automatically when you press the travel pedal.

Safety

- Access daily maintenance points from ground level.
- Keep your excavator secure with Operator ID. Use your PIN code on the monitor to enable the pushbutton starting feature.
- The standard ROPS cab meets ISO 12117-2:2008 requirements.
- Enjoy better visibility into trenches, in each swing direction, and behind you with the help of smaller cab pillars, larger windows, and a flat engine hood design. Rearview and side-view cameras are standard.
- The service platform design provides easy, safe, and quick access to the upper service platform; the service platform steps use anti-skid punch plate to prevent slipping.
- The standard hydraulic lockout lever isolates all hydraulic and travel functions in the lowered position.
- Swing lock prevents front linkage from moving as you travel.
- Ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAB			BOOM AND STICKS		
ROPS, sound suppression	✓		5.2 m (17'1") variable adjustable boom		✓
Deluxe cab		✓	2.2 m (7'3") stick		✓ ¹
Premium cab		✓	2.5 m (8'2") stick		✓
High-resolution 254 mm (10 in) LCD touchscreen monitor	✓		2.9 m (9'6") stick		✓
CAT TECHNOLOGY			UNDERCARRIAGE AND STRUCTURES		
Cat Product Link™	✓		10.00-20 16 PR, dual tires		✓
Remote Flash/Troubleshoot capability	✓		11.00-20 16 PR, dual tires		✓
ENGINE			315/70R22.5, no gap dual tires		✓
Power mode selector	✓		445/70R 19.5, single tires		✓
One-touch low idle with auto engine speed control	✓		Automatic brake/axle lock	✓	
Auto engine idle shutdown	✓		5000 kg (11,020 lb) counterweight	✓	
52°C (125°F) high-ambient cooling capacity	✓		All wheel drive	✓	
-18°C (0°F) cold start capability	✓		ELECTRICAL SYSTEM		
Double element air filter with integrated precleaner	✓		LED lights on chassis (left-hand, right-hand) and counterweight	✓	
Electric fuel priming pump	✓		Programmable time-delay LED working lights	✓	
On-demand electric cooling fans	✓		Rooding and indicator lights, front and rear	✓	
Biodiesel capability up to B20	✓		Maintenance-free batteries	✓	
HYDRAULIC SYSTEM			Centralized electrical disconnect switch	✓	
Automatic swing brake	✓		Electrical refueling pump		✓
Auto hydraulic oil warm up	✓		SERVICE AND MAINTENANCE		
Electronic main control valve	✓		Sampling ports for Scheduled Oil Sampling (S•O•S)	✓	
Boom and stick drift reduction valves	✓		Automatic lubrication system for implement and swing system		✓
1-slider joysticks	✓		SAFETY AND SECURITY		
2-slider joysticks		✓	Rear- and right-side-view cameras	✓	
Second high-pressure auxiliary circuit (one/two-way high-pressure flow)		✓	360° visibility		✓
Medium pressure auxiliary circuit (one/two-way medium-pressure flow)		✓	Cat asset tracker		✓
Heavy lift mode	✓		Wide angle mirrors	✓	
Quick coupler circuit	✓		Ground-level engine shutoff switch	✓	
SmartBoom™		✓	Anti-skid plate and countersunk bolts on service platform	✓	
Ride control		✓	Signaling/warning horn		✓
Cat tiltrotator support		✓			
Joystick steering		✓			
Separate dedicated swing pump	✓				

¹Europe only

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Technical Specifications

Engine

Engine Model	C4.4	
Engine Power (ISO 14396:2002)	129.4 kW	174 hp
Net Power (ISO 9249:2014)	128 kW	171 hp
Bore	105 mm	4.1 in
Stroke	127 mm	5 in
Displacement	4.4 L	268.5 in ³

- Meets Tier 4 Final and 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 (9,843 ft) altitude with engine power derate above 3000 m (9,843 ft).
- Rated speed 2,200 rpm.

Hydraulic System

Main System – Maximum Flow – Implement	254 L/min	67 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	9.4 rpm	
Maximum Swing Torque	44 kN-m	32,560 lb-ft

Machine Weight

Operating Weight Minimum	19 000 kg	41,888 lb
Operating Weight Maximum	21 050 kg	46,407 lb

- Operating weight includes full fuel tank, operator, bucket 700 kg (1,543 lb) and dual pneumatic tires. Weight varies depending on configuration.
- Typical configurations include 2500 mm (8'2") stick, bucket and 220 kg (485 lb) quick coupler.

Service Refill Capacities

Fuel Tank	290 L	76.6 gal
Diesel Exhaust Fluid (DEF)	20 L	5.3 gal
Cooling System	35 L	9.2 gal
Engine Oil	13 L	3.4 gal
Hydraulic Tank	120 L	31.7 gal
Hydraulic System (including tank)	280 L	74.0 gal

Transmission

Forward/Reverse			
1 st Gear	10 km/h	6.2 mph	
2 nd Gear	35 km/h	21.7 mph	
Creep Speed			
1 st Gear	5.5 km/h	3.4 mph	
2 nd Gear	15 km/h	9.3 mph	
Drawbar Pull	104 kN	23,380 lbf	
Maximum Gradeability at (19 000 kg/41,850 lb)	65%		

Dimensions

Boom	VA 5.2 m (17'1")	
Stick	2.5 m (8'2")	
Bucket	GD 0.91 m³ (1.19 yd³)	
Shipping Height (top of cab)	3260 mm	10'8"
Support Point	3520 mm	11'7"
Shipping Length	8110 mm	26'7"
Tail Swing Radius	1900 mm	6'3"
Counterweight Clearance	1300 mm	4'3"
Ground Clearance	420 mm	1'5"
Overall Undercarriage Length	5050 mm	16'7"
Wheel Base	2700 mm	8'10"

Working Ranges and Force

Boom Type	VA 5.2 m (17'1")	
Stick	2.5 m (8'2")	
Bucket	GD 0.91 m³ (1.19 yd³)	
Maximum Loading Height	7790 mm	25'7"
Maximum Cutting Height	10 740 mm	35'3"
Maximum Digging Depth	5750 mm	18'10"
Maximum Reach at Ground Level	9210 mm	30'3"
Maximum Vertical Wall Digging Depth	4450 mm	14'7"

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 CO₂ 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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