

# **Cat® M320**

Wheeled Excavator

The Cat® M320 Excavator maximizes performance with up to 16 percent more swing torque to get the job done faster. Save time and money with up to 10 percent overall savings in maintenance costs, longer service intervals, and 100 percent daily ground level maintenance. Combined with a comfortable working environment, the M320 keeps you working quickly and efficiently.

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, EU Stage V, and Korea Tier 4 Final emission standards.
- 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 16 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, to podcasts, and for 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•0•S<sup>SM</sup> ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.



#### Cat® M320 Wheeled Excavator

#### 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 in) touchscreen monitor or with the aid of the jog dial control.
- Not sure how a function works or how to maintain the excavator?
   Simply access the operator's manual on the touchscreen monitor.
- 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 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 shut-off 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
CAB		
ROPS, sound suppression	✓	
Deluxe cab		✓
Premium cab		✓
High-resolution 254 mm (10 in) LCD touchscreen monitor	✓	
CAT TECHNOLOGY		
Cat Product Link™	✓	
Remote Flash/Troubleshoot Capability	✓	
ENGINE		
Power Mode Selector	✓	
One-touch low idle with auto engine speed control	<b>√</b>	
Auto engine idle shutdown	✓	
52° C (125° F) high-ambient cooling capacity	✓	
-18° C (0° F) cold start capability	✓	
Double element air filter with integrated precleaner	<b>√</b>	
Electric fuel priming pump	✓	
On-demand electric cooling fans with auto- reverse function	✓	
Biodiesel capability up to B20	✓	
HYDRAULIC SYSTEM		
Automatic swing brake	✓	
Auto hydraulic oil warm up	✓	
Electronic main control valve	✓	
Boom and stick drift reduction valves	✓	
Boom/stick lowering check valves		✓
One-slider joysticks	<b>√</b>	
Two-slider joysticks		✓
Combined flow/high-pressure auxiliary circuit		✓
Heavy lift mode	✓	
Quick coupler circuit	✓	
SmartBoom™		✓
Ride control		✓
Cat TRS support		✓
Joystick steering		✓
Separate dedicated swing pump	✓	
BOOM AND STICKS		
5650 mm (18'6") one-piece boom		✓
5260 mm (17'3") variable adjustable boom		✓
2500 mm (8'2") stick		✓
2900 mm (9'6") stick		$\checkmark$

	Standard	Optional
UNDERCARRIAGE AND STRUCTURES		
10.00-20 16 PR, dual tires		✓
11.00-20-16 PR, dual tires		✓
315/70R22.5, no gap dual tires <sup>1</sup>		✓
445/70R 19.5, single tires		✓
Automatic brake/axle lock	✓	
3600 kg (7,937 lb) counterweight <sup>1</sup>		✓
4200 kg (9,259 lb) counterweight		✓
All wheel drive	✓	
Fenders, front and rear, synthetic	✓	
ELECTRICAL SYSTEM		
LED lights on boom and cab	✓	
LED lights on chassis (left-hand, right-hand) and counterweight	<b>√</b>	
Programmable time-delay LED working lights	✓	
Roading and indicator lights, front and rear	✓	
Maintenance free batteries	✓	
Centralized electrical disconnect switch	✓	
Electrical refueling pump		✓
SERVICE AND MAINTENANCE		
Sampling ports for Scheduled Oil Sampling (S•0•S)	✓	
Automatic lubrication system for implement and swing system		✓
SAFETY AND SECURITY		
Rear- and side-view cameras	✓	
360° visibility		✓
Wide angle mirrors	✓	
Ground-level engine shutoff switch	$\checkmark$	
Anti-skid plate and countersunk bolts on service platform	✓	
Signaling/warning horn	✓	

<sup>1</sup>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.

## Cat® M320 Wheeled Excavator

## **Technical Specifications**

Engine			
Engine Model	C4.4		
Engine Power (ISO 14396:2002)	129.4 kW	174 hp	
Bore	105 mm	4 in	
Stroke	135 mm	5.3 in	
Displacement	4.4 L	268.5 in <sup>3</sup>	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Korea Tier 4 Final 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.
- running at intermediate speed.

  Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,843 ft).
- Rated speed 2,200 rpm.

Hydraulic System		
Main System – Maximum Flow – Implement	306 L/min	81 gal/min
Maximum Pressure – Equipment	37 000 kPa	5,366 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	39 500 kPa	5,729 psi

Swing Mechanism		
Swing Speed	9.2	rpm
Maximum Swing Torque	50 kN-m	37,000 lb-ft

Machine Weight			
Operating Weight Minimum	18 800 kg	41,450 lb	
Operating Weight Maximum	21 200 kg	46,740 lb	

Service Refill Capacities			
Fuel Tank	470 L	124.2 gal	
Diesel Exhaust Fluid (DEF)	30 L	7.9 gal	
Cooling System	31.7 L	8.4 gal	
Engine Oil	13 L	3.4 gal	
Hydraulic Tank	155 L	40.9 gal	
Hydraulic System (including tank)	270 L	71.3 gal	
Final Drive	2.5 L	0.7 gal	

Dimensions			
Boom	VA 5260 mm	(17' 3")	
Stick	Reach 2.5 m (8' 2")		
Bucket	GD .98 m³ (1.28 yd³)		
Shipping Height (top of cab)	3370 mm	11' 1"	
Support Point	3580 mm	11' 9"	
Shipping Length	8925 mm	29' 3"	
Tail Swing Radius	2600 mm	8' 6"	
Counterweight Clearance	1306 mm	4' 3"	
Ground Clearance	420 mm	1' 5"	
Undercarriage Length (with blade and outrigger)	5050 mm	16' 7"	
Wheel Base	2700 mm	8' 10"	

Working Ranges and Force			
Boom Type	VA 5260 m	VA 5260 mm (17' 3")	
Stick	Reach 2.	Reach 2.5 m (8' 2")	
Bucket	GD .98 m <sup>3</sup>	GD .98 m³ (1.28 yd³)	
Loading Height	6960 mm	22' 10"	
Cutting Height	9950 mm	32' 8"	
Digging Depth	6030 mm	19' 9"	
Reach at Ground Level	9290 mm	30'6"	
Vertical Wall Digging Depth	4230 mm	13' 11"	
Bucket Forces (ISO)	137 kN	30,799 lbf	
Stick Forces (ISO)	92 kN	20,682 lbf	

- Range values are with dual pneumatic tires (10.00-20).
- Range values are calculated with a GD bucket (CW) and CW-30 quick coupler with a tip radius of 1535 mm (5'0").

#### **Air Conditioning System**

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg of refrigerant which has a  ${\rm CO_2}$  equivalent of 1.216 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.

