

# **Cat<sup>®</sup> M314** Wheeled Excavator

The Cat<sup>®</sup> M314 Wheeled Excavator offers easy-to-use controls, tilt rotator integration, a comfortable cab, and increased fuel economy. Save up to 10 percent in maintenance parts along with longer service intervals and 100 percent daily ground level maintenance to save you time and money. 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**

- Get the same productivity and results using up to 10 percent less fuel and work longer with a larger fuel tank over the M314F.
- The Cat<sup>®</sup> engine matches 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 is easier with travel speeds up to 37 km/h (22 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 multi-tasking 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).
- Standard Product Link<sup>™</sup> provides location, machine hours, fuel usage, productivity, idle time, diagnostic codes, and other machine data on demand through the VisionLink<sup>®</sup> online interface, helping you improve job site efficiency and lowering operating costs.

#### Work in Comfort

- Choose between Deluxe and Premium cab options.
- The Deluxe seat is heated and air adjustable while the Premium seat is heated, cooled 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.
- Bluetooth<sup>®</sup> 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.
- Control the excavator comfortably with easy-to-reach controls.
- 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.



### **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, and longer life with a 3,000 hour replacement interval – 50 percent longer than previous filter designs.
- S·O·S<sup>SM</sup> ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.
- Keep costs down by sharing attachments with the 313 excavator.

#### Simple to Operate

- Start the engine with push-to-start button, a Bluetooth® key fob, smartphone app, 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 push button 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 sideview cameras are standard along with optional 360 degree visibility system.
- 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.
- 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	$\checkmark$	
Deluxe Cab		$\checkmark$
Premium Cab		$\checkmark$
Keyless Push-to-Start engine control	$\checkmark$	
Openable two-piece front window	✓	
Height-adjustable console, infinite with no tool	$\checkmark$	
High-Resolution 254 mm (10 in) LCD touchscreen monitor	$\checkmark$	
CAT TECHNOLOGIES		
Cat Product Link	$\checkmark$	
Remote Flash/Troubleshoot Capability	$\checkmark$	
ENGINE		
Power Mode Selector	$\checkmark$	
One-touch low idle with auto engine speed control	$\checkmark$	
Auto engine idle shutdown	$\checkmark$	
52° C (125° F) high-ambient cooling capacity	$\checkmark$	
–18° C (0° F) cold start capability	$\checkmark$	
Double element air filter with integrated precleaner	$\checkmark$	
Biodiesel capability up to B20	$\checkmark$	
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	$\checkmark$	
Auto hydraulic warm up	$\checkmark$	
Boom and stick drift reduction valve	$\checkmark$	
Slider joysticks (2 types)		$\checkmark$
Combined flow/high-pressure auxiliary circuit		$\checkmark$
Quick coupler circuit		$\checkmark$

	Standard	Optional
BOOM AND STICKS		-
4650 mm (15'3") One-Piece Boom <sup>1</sup>		$\checkmark$
4400 mm (14'5") One-Piece Boom <sup>2</sup>		$\checkmark$
5028 mm (16'6") Variable Adjustable Boom		$\checkmark$
2200 mm (7'3") stick		$\checkmark$
2500 mm (8'2") stick		$\checkmark$
2900 mm (9'6) Drop Nose stick without bucket linkage <sup>3</sup>		$\checkmark$
UNDERCARRIAGE AND STRUCTURES		
Tires, 10.00-20 16 PR, dual	$\checkmark$	
Tires, 10.00-20, dual, solid rubber		$\checkmark$
Tires, 9.00-20 16 PR, dual <sup>2</sup>		$\checkmark$
Automatic brake/axle lock	$\checkmark$	
3300 kg (7,275 lb) counterweight	$\checkmark$	
Fenders		$\checkmark$
ELECTRICAL SYSTEM		
Two 900 CCA maintenance-free batteries	$\checkmark$	
Roading and indicator lights, front and rear	$\checkmark$	
Programmable time-delay LED working lights	$\checkmark$	
LED chassis light, left-hand/right-hand boom lights, cab lights	$\checkmark$	
Electrical refueling pump		$\checkmark$
SERVICE AND MAINTENANCE		
Sampling ports for Scheduled Oil Sampling (S·O·S)	$\checkmark$	
Ground-level and platform-level engine oil dipsticks	$\checkmark$	
SAFETY AND SECURITY		
Rear and right-side-view cameras		$\checkmark$
Wide angle mirrors	$\checkmark$	
Ground-level engine shutoff switch	$\checkmark$	
Handrail and hand holds on service platform	$\checkmark$	
Signaling/warning horn	$\checkmark$	
360° Visibility		$\checkmark$

 $^{\rm 1}\mbox{Available}$  in Europe, Australia and New Zealand only

<sup>2</sup>Available in South Korea only

<sup>3</sup>Available in Europe only

#### **Technical Specifications**

Engine			
Engine Model	Cat C3.6		
Engine Power (ISO 14396:2002)	100 kW	134 hp/ 136 hp (PS)	
Bore	98 mm	3.9 in	
Stoke	120 mm	5 in	
Displacement	3.6 L	221 in <sup>3</sup>	
• The C3.6 meets Tier 4 Final, Stage V, and Korea Tier 4 Final emission			

standards.
Engine power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, exhaust gas aftertreatment, and alternator.

• Rating at 2,000 rpm

Hydraulic System		
Main System – Maximum Flow Implement	270 L/min	71 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	35 500 kPa	5,149 psi

Swing Mechanism			
Swing Speed	9.1 rpm		
Maximum Swing Torque	39 kN∙m	28,860 lb-ft	

Machine Weight		
Operating Weight Minimum	14 600 kg	32,190 lb
Operating Weight Maximum	18 000 kg	39,680 lb

• Operating weight includes full fuel tank, operator, 500 kg (1,102 lb) bucket and dual pneumatic tires. Weight varies depending on configuration.

Service Refill Capacities			
Fuel Tank	295 L	77.9 gal	
Cooling System	20 L	5.3 gal	
Engine Oil	9 L	2.4 gal	
Diesel Exhaust Fluid (DEF)	20 L	5.3 gal	
Final Drive	2.4 L	0.6 gal	
Hydraulic System (including tank)	220 L	58.1 gal	
Hydraulic Tank	90 L	23.8 gal	

Transmission			
Forward/Reverse			
1st Gear	9 km/h	5.6 mph	
2nd Gear	37 km/h	23 mph	
Creeper Speed			
1st Gear	5 km/h	3.1 mph	
2nd Gear	15 km/h	9.3 mph	
Drawbar Pull	73 kN	16,411 lbf	
Maximum Gradeability at 15 000 kg/33,070 lb	52.5%		

Dimensions			
Boom	VA 5028 mm (16'6")		
Stick	2200 mm (7'3")		
Bucket	0.76 m³ (0.99 yd³) GD		
Shipping Height (top of cab)	3315 mm	10'11"	
Shipping Length	8210 mm	26'11"	
Tail Swing Radius	2150 mm	7'1"	
Counterweight Clearance	1260 mm	4'2"	
Ground Clearance	335 mm	1'1"	
Undercarriage Length	4920 mm	16'2"	
Wheel Base	2500 mm	8'2"	

Working Ranges and Forces			
Boom Type VA 5028 mm (16'6")			
Stick 2200 mm (7'3")			
Bucket	0.76 m³ (0.99 yd³) GD		
Dump Height	7010 mm	23'	
Digging Height	5290 mm	17'4"	
Reach at Ground Level	8650 mm	28'5"	
Vertical Wall Digging Depth	4250 mm	13'11"	
• Range values are calculated with a tip radius of 1387 mm (4'6"). CW-type			

bucket (358-8665, GD, 1000 mm/3'3", 0.6 m³/0.73 yd³, with Advansys™ 70 tips) and CW-20S-D.4.N quick coupler. Breakout force values are calculated with a tip radius of 1224 mm (4'0") and heavy lift on. Pin-On Bucket (358-8619, GD, 1100 mm/3'7", 0.68 m³/0.89 yd³ with Advansys 70 tips) with no quick coupler.

#### **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 CO<sub>2</sub> equivalent of 1.216 metric tonnes.

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AEXQ3134 (04-2021) Build Number: 07A (Aus-NZ, Eur, Korea, N Am)

