

# **Cat<sup>®</sup> M316** Wheeled Excavator

The Cat<sup>®</sup> M316 Excavator provides top performance with up to 14 percent more swing torque and technology options 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. The M316 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, 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 14 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).

## Boost Efficiency and Boost Productivity with Cat Technologies

- Boost productivity up to 45 percent versus traditional grading with the optional Cat GRADE with 2D or 3D system.
- Dig with real-time guidance on depth, slope, and horizontal distance to grade.
- The 2D system is upgradable to Cat GRADE with Advanced 2D or GRADE with 3D.
- Achieve precise load targets and increase loading efficiency with Cat Payload option, which provides on-the-go weighing and real-time estimates of your payload without swinging.
- Combine Payload with VisionLink® and remotely manage your production targets.
- Upgrade to optional Cat GRADE with Advanced 2D upgrade to create and edit grade designs with ease on a second high-resolution 254 mm (10 in) touchscreen monitor.
- Upgrade to optional Cat GRADE with 3D upgrade to create and edit grade designs with ease and see the front linkage's full range of motion on a second high-resolution 254 mm (10 in) touchscreen monitor.
- 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 online interface, helping you improve jobsite 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.
- Control the excavator comfortably with easy-to-reach controls.

#### **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•S<sup>SM</sup> ports are located at ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.
- 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<sup>®</sup> integrated radio allows for seamless mobile phone connection to listen to music and podcasts and for hands-free calling.
- Easily adjust to your ideal temperature with the touchscreen monitor or jog dial.

#### 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 Optional** 

### **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	$\checkmark$	
monitor		
CAT TECHNOLOGY		
Cat Product Link	✓	
Cat GRADE with 2D		✓
Cat GRADE with Advanced 2D		✓
Cat GRADE with 3D		$\checkmark$
Cat Payload		$\checkmark$
2D E-Fence		$\checkmark$
Remote flash/troubleshoot capability	$\checkmark$	
ENGINE		
Power mode selector	✓	
One-touch low idle with auto engine speed	√	
control		
Auto engine idle shutdown	$\checkmark$	
52°C (125°F) high-ambient cooling capacity	~	
-18°C (0°F) cold start capability	~	
Double element air filter with integrated	~	
precleaner		
Biodiesel capability up to B20	$\checkmark$	
HYDRAULIC SYSTEM		
Automatic swing brake	$\checkmark$	
Auto hydraulic oil warm up	$\checkmark$	
Electronic main control valve	$\checkmark$	
Boom and stick drift reduction valves	$\checkmark$	
Slider joysticks (2 types)		$\checkmark$
Combined flow/high-pressure auxiliary circuit		$\checkmark$
Quick coupler circuit	$\checkmark$	
Boom and stick lowering check valves	$\checkmark$	
SmartBoom™		$\checkmark$
Ride control		$\checkmark$
Joystick steering		$\checkmark$
Separate dedicated swing pump	~	

		-
BOOM AND STICKS		
5205 mm (17'1'') Variable Adjustable boom		$\checkmark$
2500 mm (8'2'') stick		$\checkmark$
2200 mm (7'3") stick		✓
UNDERCARRIAGE AND STRUCTURES		
10.00-20 16 PR, dual tires		✓
315/70R22.5, no gap dual tires		✓
445/70R 19.5, single tires		✓
Automatic brake/axle lock	$\checkmark$	
3300 kg (7,275 lb) counterweight		✓
All wheel drive	~	_
ELECTRICAL SYSTEM		
LED lights on boom and cab	$\checkmark$	
LED lights on chassis (left-hand, right-hand) and counterweight		~
Programmable time-delay LED working lights	$\checkmark$	
Roading and indicator lights, front and rear	$\checkmark$	
Maintenance free batteries	$\checkmark$	
Centralized electrical disconnect switch	$\checkmark$	
Electrical refueling pump		$\checkmark$
SERVICE AND MAINTENANCE		
Sampling ports for Scheduled Oil Sampling (S•O•S)	✓	
Ground-level and platform-level engine oil dipsticks	~	
Automatic lubrication system for implement and swing system		$\checkmark$
SAFETY AND SECURITY		
Rear and side-view cameras	✓	
360° visibility		√
Wide angle mirrors	~	
Ground-level engine shutoff switch	~	
Anti-skid plate	· ·	
Signaling/warning horn	•	
Signalliy/warning norn	~	

Separate dedicated swing pump

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.

#### **Technical Specifications**

Engine			
Engine Model	C4.4		
Engine Power (ISO 14396:2002)	110 kW	148 hp	
Bore	105 mm	4 in	
Stroke	127 mm	5 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.
Recommended for use up to 3000 m (9,843 ft) altitude with engine power derate above

3000 m (9,843 ft).

• Rated speed 2,000 rpm.

Hydraulic System		
Main System – Maximum Flow – Implement	275 L/min	73 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	35 000 kPa	5,076 psi

Swing Mecl	hanism	
Swing Speed	10.2	2 rpm
Maximum Swing Torque	44 kN-m	32,560 lb-ft

Machine Weigh	t	
Operating Weight Minimum	17 000 kg	37,480 lb
Operating Weight Maximum	18 400 kg	40,560 lb

Service Refill Capacities		
Fuel Tank	350 L	92.5 gal
Cooling System	24 L	6.3 gal
Engine Oil	13 L	3.4 gal
Diesel Exhaust Fluid (DEF)	30 L	7.9 gal
Final Drive	2.5 L	0.7 gal
Hydraulic System (including tank)	260 L	68.7 gal
Hydraulic Tank	120 L	31.7 gal

Dimensions		
Boom	5205 mm (17' 1")	
Stick	2.2 m (7' 3")	
Bucket	GD 0.8 m³ (1.05 yd³)	
Shipping Height (top of cab)	3194 mm	10' 6"
Support Point	3870 mm	12' 8"
Shipping Length	8630 mm	28' 4"
Tail Swing Radius	2350 mm	7' 9"
Counterweight Clearance	1301 mm	4' 3"
Ground Clearance	395 mm	1' 4"
Undercarriage Length	4970 mm	16' 4"
Wheel Base	2550 mm	8' 4"

Working Ranges and Force		
Boom Type	VA Boom	
Stick	R2.2 (7' 3")	
Bucket	GD 0.8 m <sup>3</sup> (1.05 yd <sup>3</sup> )	
Loading Height	7140 mm	23' 5"
Cutting Height	10 110 mm	33' 2"
Digging Depth	5630 mm	18' 6"
Reach at Ground Level	8970 mm	29' 5"
Vertical Wall Digging Depth	4410 mm	14' 6"

• 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 1484 mm (4'10").

#### **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.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

#### © 2020 Caterpillar All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, Product Link, SmartBoom, S+O+S, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

AEXQ3004-00 (7-2020) **Build Number: 07A** (Aus-NZ, Eur)

