



Cat[®] M314F

Wheeled Excavator

2017

Working hard has never been easier with Cat[®] F Series Wheeled Excavators. Enjoy the versatility offered by integrated solutions and technologies that do repetitive tasks for you. These machines are designed to help you take on the wide variety of challenges you face every day, and at a lower cost.

Performance

- Cat C4.4 ACERT[™] engine meets EU Stage IV emission standards. Emissions technology is transparent – no action required from the operator and no stopping for regeneration.
- Dedicated swing pump, allowing faster, smoother combined movements.
- Built-in fuel savers, eliminating waste with features like Auto Engine Speed Control, Engine Idle Shutdown and efficient Eco Mode.
- “On-Demand” Strategies, to consume just the right amount of fuel, with on-demand fan or new optimized demand-driven driveline.
- Highly mobile, the M314F can travel up to 37 km/h (23 mph).

Versatility

- Flexible configurations to meet all your needs with various booms/sticks, tires, undercarriages and counterweights.
- “Plug and Play” design, with complete integration of the whole portfolio of Cat attachments.
 - Auxiliary hydraulics, including high pressure, and quick coupler lines/circuits.
 - Readiness for all couplers, either Pin Grabber, Dedicated or hydraulic Auto Connect coupler.
 - The monitor can allow ten hydraulic pump flow and pressure settings at the same time.
 - Tiltrotator option including all required changes to accommodate the Cat Tiltrotator.
 - Trailer-ready package option. Just add your hitch and go.
- Joystick buttons/sliders can be set up per tool as desired by the operator.

Ease of Operation

- A complete package of smart technologies with features like Cruise Control or automatic brake and axle lock. Optional boosters like Ride Control, SmartBoom[™], joystick steering are available.
- Everything can be adjusted in the cab from the steering column height to the electrically adjustable mirrors.
- Ergonomic cab with controls kept to a minimum and conveniently located.
- Split-screen monitor to allow quick view of both cameras on the same display.

Safety

- Integrated devices to help enforce safe behavior, like seat belt indicator, or the speed limit setting when roading in reverse with the upper frame rotated.
- Visibility: large glass areas, rear/side cameras. LED lamps for all working lights and cameras.
- For added protection, the optional impact resistant windshield meets the EN356 P5A standard.
- Integrated pin code adds anti-theft security to your equipment.

Maintenance

- Ground level access to all routine maintenance (like fuel and engine oil filters).
- Easy access: clean, simple design. Radiators are all gathered together.
- Reduced maintenance: automatic features (like lubrication system) along with long greasing intervals. No Diesel Particulate Filter.

Cat Connect 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.



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Engine		
Engine Model	Cat C4.4 ACERT	
Ratings	2,000 rpm	
Engine Power		
Maximum Gross (ISO 14396)	110 kW	148 hp (150 hp/PS)*
Maximum Net (ISO 9249/SAE J1349)	105 kW	141 hp (143 hp/PS)*
Bore	105 mm	4.1 in
Stroke	127 mm	5.0 in
Displacement	4.4 L	268.5 in ³
Maximum Torque at 1,400 rpm	560 N·m	413 lbf·ft
Number of Cylinders – In Line	4	
• Meets Stage IV emission standards.		
*Metric values.		

Transmission		
Maximum Forward/Reverse – 2nd Gear	37 km/h	23 mph
Drawbar Pull	73 kN	16,411 lbf
Maximum Gradeability at 15 000 kg (33,070 lb)	52.50%	

Swing Mechanism		
Swing Speed	9.8 rpm	
Swing Torque	33 kN·m	24,420 lbf·ft

Undercarriage		
Ground Clearance	370 mm	14.6 in

Service Refill Capacities		
Fuel Tank (total capacity)	280 L	74 gal
Diesel Exhaust Fluid Tank	19 L	5 gal

Working Ranges																		
Boom Type	VA Boom								One-Piece Boom						Offset Boom			
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in		
Stick Length	2000	6'7"	2300	7'7"	2600	8'6"	2900*	9'6"*	2000	6'7"	2300	7'7"	2600	8'6"	2900*	9'6"*	2300	7'7"
Digging Height	9720	31'11"	9870	32'5"	10 110	33'2"	8500	27'11"	8690	28'6"	8700	28'7"	8870	29'1"	7140	23'5"	9850	32'4"
Dump Height	6850	22'6"	7000	23'0"	7240	23'9"	—	—	5860	19'3"	5920	19'5"	6090	20'0"	—	—	6980	22'11"
Digging Depth	5200	17'1"	5490	18'0"	5790	19'0"	4670	15'4"	5030	16'6"	5330	17'6"	5630	18'6"	4500	14'9"	5490	18'0"
Reach at Ground Level	8530	28'0"	8780	28'10"	9080	29'9"	7705	25'3"	8280	27'2"	8520	27'11"	8810	28'11"	7400	24'3"	8780	28'10"
• Range values are calculated with GD bucket 900 mm (35.5"), 0.53 m ³ (0.7 yd ³) with tips J250 and CW-20-H.4.N quick coupler with a tip radius of 1437 mm (56.6").																		
*Industrial stick (no bucket linkage).																		

Weights		
Operating Weights*	14 360 to 15 950 kg	31,658 to 35,164 lb
VA Boom		
Rear Dozer Only	14 710 kg	32,430 lb
Rear Dozer, Front Outriggers	15 670 kg	34,546 lb
Front and Rear Outriggers	15 950 kg	35,164 lb
One-Piece Boom		
Front Dozer, Rear Outriggers	15 320 kg	33,775 lb
Front and Rear Outriggers	15 600 kg	34,392 lb
Offset Boom		
Rear Dozer, Front Outriggers	16 230 kg	35,781 lb
Front and Rear Outriggers	16 510 kg	36,398 lb
Counterweights	2800/3300 kg	6,173/7,275 lb

*Includes medium stick, 2800 kg (6,173 lb) counterweight, full fuel tank, operator, quick coupler (225 kg/496 lb), bucket (490 kg/1,080 lb), dual pneumatic tires. Weight varies depending on configuration.

Hydraulic System		
System	220 L	58.1 gal
Maximum Pressure – Implement Circuit		
Normal and Travel Circuits	350 bar	5,076 psi
Heavy Lift	375 bar	5,439 psi
Maximum Pressure – Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	185 bar	2,683 psi
Swing Mechanism	350 bar	5,076 psi
Maximum Flow – Implement/Travel Circuits		
High Pressure	180 L/min	47.6 gal/min
Maximum Flow – Auxiliary Circuit		
High Pressure	180 L/min	47.6 gal/min
Medium Pressure	50 L/min	13.2 gal/min
Maximum Flow – Swing Mechanism		
High Pressure	80 L/min	21.1 gal/min

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