



Cat[®] M314F

Wheeled Excavator

Cat[®] Wheeled Excavators excel in every job, from truck loading applications to fine grading, and everywhere in between. The new F Series generation is made to help you take on the variety of the challenges you face every day, more easily, with more pleasure and at a lower cost. Using a Cat quick coupler allows attachment changes from the cab and increases versatility of your machine and fleet.

Performance

- Cat C4.4 ACERT™ engine meets U.S. EPA Tier 4 Final/EU Stage IV emission standards.
- Cat Tier 4 Final/Stage IV technologies are transparent to your operator, and do not require any work interruption or intervention.
- Powerful and efficient engine, which delivers superior durability.
- Constant Power Strategy, providing a quick response to changing loads, while delivering the same amount of power.
- Dedicated Swing Pump allows faster, smoother combined movements.

Versatility

- Multiple configurations meet all your applications needs, with a variety of booms (Variable Adjustable, One-Piece and Offset) and sticks (including industrial stick).
- Choice between new radial blade or outriggers. Various tire options, standard or heavy counterweight.
- Highly mobile, the M314F can travel up to 37 km/h (23 mph).
- Standard auxiliary hydraulics, including high pressure, and quick coupler lines and circuits allow easy tool changes without the need to add other lines to your machine.
- Ten hydraulic pump flow and pressure settings can be preset within the monitor allowing the use of the large variety of Cat attachments from buckets to the full portfolio of hydro mechanical attachments.

Serviceability

- Ground level routine maintenance, like for radiators, engine oil and fuel filters. No Diesel Particulate Filter (DPF).
- New cooling compartment, gathering the axial fan and all coolers. Easy-to-clean radiator cores, with no tool needed to unlock/tilt.
- Standard autolube* greasing for the whole uppercarriage to the stick nose. Other critical points are centralized and kept to a minimum.
- Add in the electric lift pump removing the need to prime the system manually, the standard fuel/water separator and you get a machine that does the fastidious maintenance work for you.

Ease of Operation/Comfort

- Seat options, armrests, steering column, joystick controls, buttons and thumb wheels, hydraulic sensitivity and automatic air conditioning offer various possible adjustments.
- Ergonomically designed cab with controls kept to a minimum, conveniently located and easy to use.
- Smart technologies for ease of operation. Features like Ride Control, SmartBoom™, Cruise Control, joystick steering, automatic brake and axle lock or the automatic swing lock will be precious to boost your productivity.

Safety

- Improved cab ingress: new handrails and additional longer steps.
- Improved visibility: enlarged glass areas, enhanced wide angle mirrors, larger skylight, rear and sideview camera and LED working lights.
- Smart devices help enforce safe behavior, like seat belt warning, automatic swing lock, automatic brake and axle lock, or the new safety lever. They all come standard and electronic features work transparently.
- Standard new integrated Pin Code adds anti-theft security to your equipment. Machine Security System (MSS) still available for further protection of your equipment.
- Among others ...

Technology/Lower O&O Costs

- Cat Connect technology solutions increase production and minimize operating costs. Link technologies wirelessly connect you to your job site, providing machine location, hours, fuel usage, idle time and event codes.
- Built-in fuel savers such as the engine idle shutdown, which turns the engine off when it's been idling for more than a pre-set amount of time, Auto Engine Speed Control, and "on-demand only" strategies throughout the machine to reduce fuel consumption.
- Enhanced Eco Mode: reduces engine speed while delivering the same power.

*Not compatible with the Industrial stick.



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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 Tier 4 Final/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	52.5%	

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

Weights		
Operating Weights*	14 360 to 15 950 kg	31,658 to 35,164 lb
Weights – 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
Weights – One-Piece Boom		
Front Dozer, Rear Outriggers	15 320 kg	33,775 lb
Front and Rear Outriggers	15 600 kg	34,392 lb
Weights – Offset Boom		
Rear Dozer, Front Outriggers	16 230 kg	35,781 lb
Front and Rear Outriggers	16 510 kg	36,398 lb
Weights – Standard Counterweight	2800 kg	6,173 lb
Weights – Optional Counterweight	3300 kg	7,275 lb
*Operating weight includes medium stick, 2800 kg (6,173 lb) counterweight, full fuel tank, operator, quick coupler (210 kg/463 lb) bucket (490 kg/1,080 lb) and dual pneumatic tires. Weight varies depending on configuration.		

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

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"

• Industrial stick has no bucket linkage and working range dimensions refer to stick nose pin with pneumatic tires.

• Range values are calculated with GD Bucket 900 mm/35.5", 0.53 m³/0.7 yd³ with tips J250 and CW-20-H.4.N quick coupler with a tip radius of 1437 mm/56.6".

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