



Cat[®] M316F

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 or parallel blade and/or outriggers. Various tire options and choice between standard or heavy counterweight.
- Highly mobile, the M316F can travel up to 35 km/h (22 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	35 km/h	22 mph
Drawbar Pull	104 kN	23,380 lbf
Maximum Gradeability at 16 500 kg/36,380 lb	78%	

Swing Mechanism		
Swing Speed	9 rpm	
Swing Torque	38 kN·m	28,120 lbf·ft

Undercarriage		
Ground Clearance	370 mm	14.6 in

Service Refill Capacities		
Fuel Tank (total capacity)	330 L	87.2 gal
Diesel Exhaust Fluid Tank	19 L	5 gal

Weights		
Operating Weights*	15 910 to 17 850 kg	35,076 to 39,352 lb
Weights – VA Boom		
Rear Dozer Only	16 390 kg	36,134 lb
Rear Dozer, Front Outriggers	17 360 kg	38,272 lb
Front and Rear Outriggers	17 850 kg	39,352 lb
Weights – One-Piece Boom		
Front Dozer, Rear Outriggers	16 880 kg	37,214 lb
Front and Rear Outriggers	17 370 kg	38,294 lb
Weights – Offset Boom		
Rear Dozer, Front Outriggers	17 910 kg	39,485 lb
Front and Rear Outriggers	18 400 kg	40,565 lb
Weights – Standard Counterweight	3200 kg	7,055 lb
Weights – Optional Counterweight	3700 kg	8,157 lb
*Operating weight includes medium stick, 3200 kg (7,055 lb) counterweight, full fuel tank, operator, quick coupler (210 kg/463 lb) bucket (600 kg/1,323 lb) and dual pneumatic tires. Weight varies depending on configuration.		

Hydraulic System		
System	240 L	63.4 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	370 bar	5,366 psi
Maximum Flow		
Implement/Travel Circuit	240 L/min	63 gal/min
Auxiliary Circuit – High Pressure	240 L/min	63 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	mm	ft/in
Stick Length	2100	6'11"	2400	7'10"	2600	8'6"	3100	10'2"	2100	6'11"	2400	7'10"	2600	8'6"	3100	10'2"	2400	7'10"
Digging Height	10 070	33'0"	10 250	33'8"	10 410	34'2"	8950	29'4"	9020	29'7"	9120	29'11"	9230	30'3"	7700	25'3"	10 300	33'10"
Dump Height	6920	22'8"	7110	23'4"	7270	23'10"	—	—	5980	19'7"	6080	19'11"	6200	20'4"	—	—	7150	23'5"
Digging Depth	5610	18'5"	5900	19'4"	6100	20'0"	5050	16'7"	5410	17'9"	5710	18'9"	5910	19'5"	4840	15'11"	5910	19'5"
Reach at Ground Level	8940	29'4"	9210	30'3"	9400	30'10"	8170	26'10"	8730	28'8"	8990	29'6"	9190	30'2"	7920	26'0"	9230	30'3"

• 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 1100 mm (3'7"), 0.80 m³ (1.05 yd³) with tips K080 and CW-20-H.4.N quick coupler with a tip radius of 1574 mm (5'2").

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