

# M316F

## Wheeled Excavator



### Engine

Engine Model	Cat® C4.4 ACERT™	
Emissions	U.S. EPA Tier 4 Final	
Net Power (maximum)		
ISO 9249/SAE J1349 at 2,000 rpm	105 kW	141 hp
ISO 9249/SAE J1349 at 2,000 rpm (metric)		143 hp (PS)
ISO 14396 at 2,000 rpm	110 kW	148 hp
ISO 14396 at 2,000 rpm (metric)		150 hp (PS)

### Weights

Operating Weight with Attachment	15 410 kg-	33,973 lb-
	17 490 kg	38,559 lb

### Bucket Specifications

Bucket Capacities	0.35 m <sup>3</sup> -	0.46 yd <sup>3</sup> -
	1.09 m <sup>3</sup>	1.43 yd <sup>3</sup>

### Working Ranges

Maximum Reach at Ground Level	9400 mm	30'10"
Maximum Digging Depth	6100 mm	20'0"

### Drive

Maximum Travel Speed	35 km/h	22 mph
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## M316F Features

### Made to keep your costs down.

*Not only does the machine give you all the versatility you need, but it does so while providing a great deal of precision and speed with an optimized fuel consumption – and zero impact on your efficiency.*

### Made to make operation easy and pleasant.

*Have a seat, you will be impressed by the quietness and comfort of the cab. Feel relaxed, we help you make sure you're safe.*

*Enjoy integrated technologies; they act transparently.*

*When you add the ground level grouped service points that make your maintenance quick and easy, and multiple Cat attachments that help you do all kinds of jobs, you simply won't find a better machine.*

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The new F Series generation is here to help you take on the wide variety of challenges you face every day, more easily and with more pleasure.

***F Series – Easier Than Ever.***

# Sustainability

Generations Ahead in Every Way



## Fuel Efficiency and Reduced Exhaust Emissions

The engine meets Tier 4 Final emission standards, is powerful and efficient, with an optimized fuel consumption and no impact on your productivity. This means less resource consumption and fewer CO<sub>2</sub> emissions.

## Transparent Technologies and Longer Service Intervals

- The new Eco Mode, Auto Engine Speed Control and Engine Idle Shutdown help further reduce your overall fuel consumption.
- Product Link™ allows remote monitoring of the machine and helps improve overall efficiency.
- Your Cat dealer can help extend service intervals, meaning fewer fluids and disposals, all adding up to lower costs.

## Biodiesel and Biodegradable Hydraulic Oil

- The M316F has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or up to B20 biodiesel fuel blended with ULSD.
- Cat BIO HYDO™ Advanced HEES™ reduces the impact on the environment.

## Cat Certified Used

This program is a key element in the range of solutions offered by Caterpillar and Cat dealers to help customers achieve growth at the lowest cost while eliminating waste. Used equipment is inspected, guaranteed and ready for work and customers will benefit from a Caterpillar warranty.

# Engine

Power, Reliability, and Fuel Economy

## *The Power and Performance You Need*

### **Constant Power Strategy**

Provides a quick response to changing loads, while delivering the same amount of power regardless of operating conditions.

### **A Transparent Emission Solution That Works**

The Cat C4.4 ACERT engine meets today's Tier 4 Final emission standards, and it does so without interrupting your job process. It is designed to be:

- **Transparent:** no operator intervention
- **Efficient:** no work interruption, even in case of extended idling time
- **Simple:** minimum maintenance. Longitudinal engine installation, which further simplifies maintenance.

### **Biodiesel Not a Problem**

The engine can run on up to B20 biodiesel fuel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.

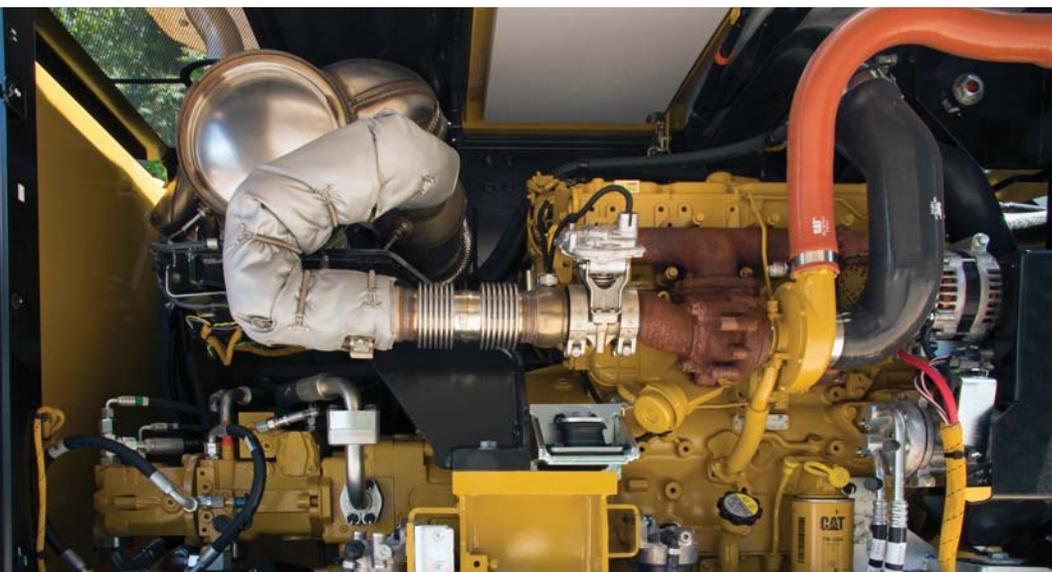
### **Proven Technology**

To assure that our technology will meet your expectations for reliable trouble-free service, we subjected these engines and technologies to extensive operating hours of test and validation.



## **Built-in Fuel Savers That Add Up**

- **Automatic Engine Speed Control:** lowers engine speed when it is not needed.
- **NEW Engine Idle Shutdown** (when activated): turns the engine off when it's been idling for more than a pre-set amount of time.
- **NEW Cooling System:** variable speed and on-demand fan optimizing consumption.
- **NEW enhanced Eco Mode:** reduces engine speed while delivering the same power.
- **Automatic shift to Travel Mode** when you start riding: optimizes driveline performance while preserving fuel.



# Premium Comfort

Keeps Operators Productive All Shift Long



## Legacy from the Renowned Cat Wheeled Excavators

Designed for the operator, our cabs are unique.

## Ergonomic Layout

- Frequently used switches are centralized, kept to the minimum and ideally located close to the joysticks.
- Storage compartments are useful... when well designed. The lunch box provides sufficient room to store a hard hat. Several other areas include drink, phone, or key holders.

## Comfortable Seat Options

Our seats provide all the comfort needed for a long day of work, including FULL adjustment. All seats are heated and air suspended. Automatic weight adjustment and air cooled seats are available.

## Safety Is Not Optional

ROPS/FOGS compatible cabs, seat belt alarm, safety bar, sideview camera ... among others.

## Details That Make the Difference

Have a look at the cab; you will see it is through details that we improve pleasure of operating.

## Smart Controls to Reduce Fatigue

- Features like ride control, SmartBoom or Joystick Steering will be precious to increase your productivity.
- New technologies that work transparently like the swing and auto travel lock or the automatic brake and axle lock, reduce the number of tasks you need to do.

## Plug, Charge and Play Your Devices

- The 12V 10A power supply socket is conveniently located for charging your laptop, or a tablet.
- A CD/MP3 Radio with speakers and USB port is available.





# Simplicity and Functionality

## For Ease of Operation

### **A Cab Just for You – Fully Adjustable**

- Seat armrests, in height and angle
- Steering column adjustment, not only tilting fore/aft but also in height
- Hydraulic sensitivity of the machine to make it more or less aggressive
- Joystick controls, buttons and thumb wheels
- Automatic air conditioning

### **Low Sound Levels, Less Fatigue**

Increased cab pressure, preventing from dust entry, combined with the new cab design contributes to reducing sound. Add in new hydro mounts to fix the cab on the frame and you have a cab that's as quiet as any of today's pickup trucks.

### **Outstanding Visibility: See the Difference!**

- Standard LED working lights and halogen front roading lights
- LED dome light
- All glass areas have been drastically increased
- Choice of 70/30 front windshield or one-piece laminated windshield
- New wide angle mirrors including a lower mirror for better visibility to the ground
- Parallel intermittent (four speeds) wipers covering the whole windshield

### **Standard Rear and Side Wide Angle Cameras**

Cameras let you see what's going on around. The image from the side camera is displayed on an additional wide color screen, offering the full view from the front to the rear of the machine. The rear camera is integrated into the counterweight for enhanced protection.

### **Large Color Monitor**

Easy to read and in local language, the high resolution LCD monitor will keep you aware of any important information. "Quick Access" buttons allow a quick selection of favorite functions. The tool select function lets you preset up to ten different hydraulic attachments for quick tool changes.

# The Next Generation

Easier Than Ever



## Make the Move to the Next Generation

Refinements. From the whole design to the smallest details. Convenient features, new advanced and transparent technologies, not only to reduce emissions but to further improve your daily experience when working with our products.

## Easier Than Ever

Work like no other with our wheeled excavators. The F Series generation is made to help you take on the wide variety of the challenges you face every day, more easily and with more pleasure, to keep you on the road to your success.

# Cruise Control

Focus on the Road, Not on Your Foot



## Cruise Control

No need to press the pedal all the time.

- Choose the very speed you wish
- Press the quick access button on the monitor
- Enjoy the ride

*It's as Easy as That.*



# Smart Technologies

Press Go and Relax

## Swing and Auto Travel Lock: As Fast, As Safe

No need for the operator to bend to engage the swing lock pin.

- Just press a button,
- Align the upper to the lower frame,
- Enjoy the ride: a green indicator confirms the swing and the implements have been automatically locked.

*It's as Easy as That.*

## Integrated Pin Code – Switch Off and Relax

No need to buy an optional security system to protect your equipment against theft.

- The pin code is integrated into the monitor (standard)
- Entering the right code allows the engine to start

The Machine Security System (MSS – optional) adds even more protection when needed.

*It's as Easy as That.*



## Dig and Go Auto Axle Lock

Presses the pedal for you, reducing the number of actions you need to do

The machine automatically detects when the service brake and axle need to be locked (like when digging), or unlocked (roading), hence removing the need for the operator to systematically press the pedal.

Brake and axle are released automatically by pressing the travel pedal again.



# Hydraulics

Fast, Precise, Flexible

*When it comes to moving material quickly, you need efficient hydraulics – the type the F Series can deliver.*

## Efficient Design, Smart and Fast

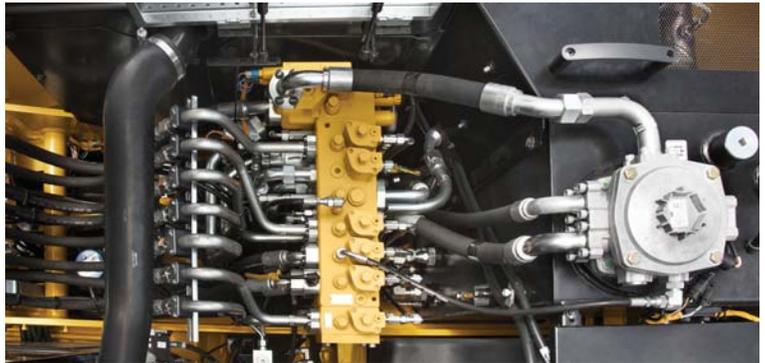
- **Simple Design:** The new hydraulic valve compartment and routings offer a simple and clean design to help ensure durability. Everything is reachable from ground level.
- **Smart Main Hydraulics:** The system allows reducing the load on the engine when not needed, which translates into lower fuel consumption.
- **Dedicated Swing Pump:** A closed hydraulic circuit is dedicated to the swing only. Having two separate pumps, one for the swing and the other for the other functions allows faster and smoother combined movements.

## Control Like No Other

- **Load Sensing Hydraulics** – Controllability is one of the main attributes of Cat excavators, and one of the key contributors to this is the load sensing hydraulic system that's designed to provide fast cycle times, great lift capacity and high bucket and stick forces to maximize your efficiency in any job.
- **Adjustable Hydraulic Sensitivity** – Allows you to adjust the aggressiveness of the machine according to the application.
- **Stick Regeneration Circuit** – Increases efficiency and helps enhance controllability for higher productivity.

## Proportional Auxiliary Hydraulics, Tremendous Versatility

Medium pressure function (for tilting buckets or rotating tools), high pressure lines (for tilting/rotating attachments requiring a third auxiliary hydraulic function), hydraulic quick coupler circuit: they all come standard, which allows you to switch from one attachment to another, without the need to add lines and hydraulic circuits.



# Undercarriage

## Strength and Versatility at 35 km/h (22 mph)



### Heavy Duty Axles

Long life with effective heavy duty axles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance. The front axle offers wide oscillating and steering angles.

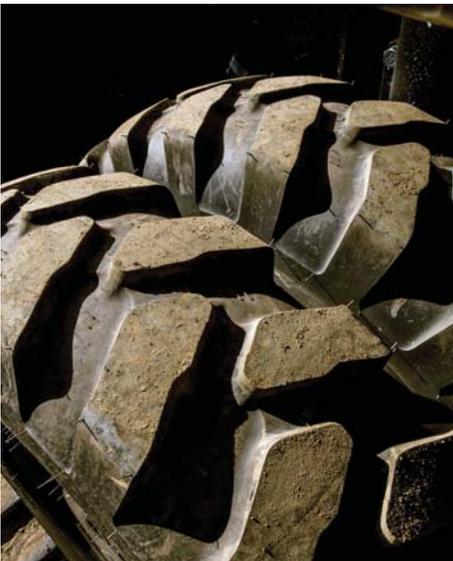
### Advanced Disc Brake System

Minimizes the rocking effect when working free on wheels. The disc brake system acts directly on the hub instead of the drive shaft to avoid planetary gear backlash.



### Fenders (optional)

Fenders provide excellent coverage of all tires, protecting the machine and surroundings from mud and stones being thrown up.



### Joystick Steering

Keep both hands on the joysticks even when simultaneously moving the implements and repositioning the machine, by the use of the slider switch on the right joystick.

### New Blade Design

- Optimized design to provide rigidity, stability and ease of maintenance.
- A profile that allows material to roll better and minimizes material packing.
- Choice of radial or parallel kinematic to keep the blade parallel to the ground, in every height position.

# Booms and Sticks

## Options To Take on Your Far-reaching or Up-close Tasks

### Rugged Performance

Booms and sticks are welded, box section structures with thick, multi-plate fabrications in high stress areas for the tough work you do.

### Flexibility

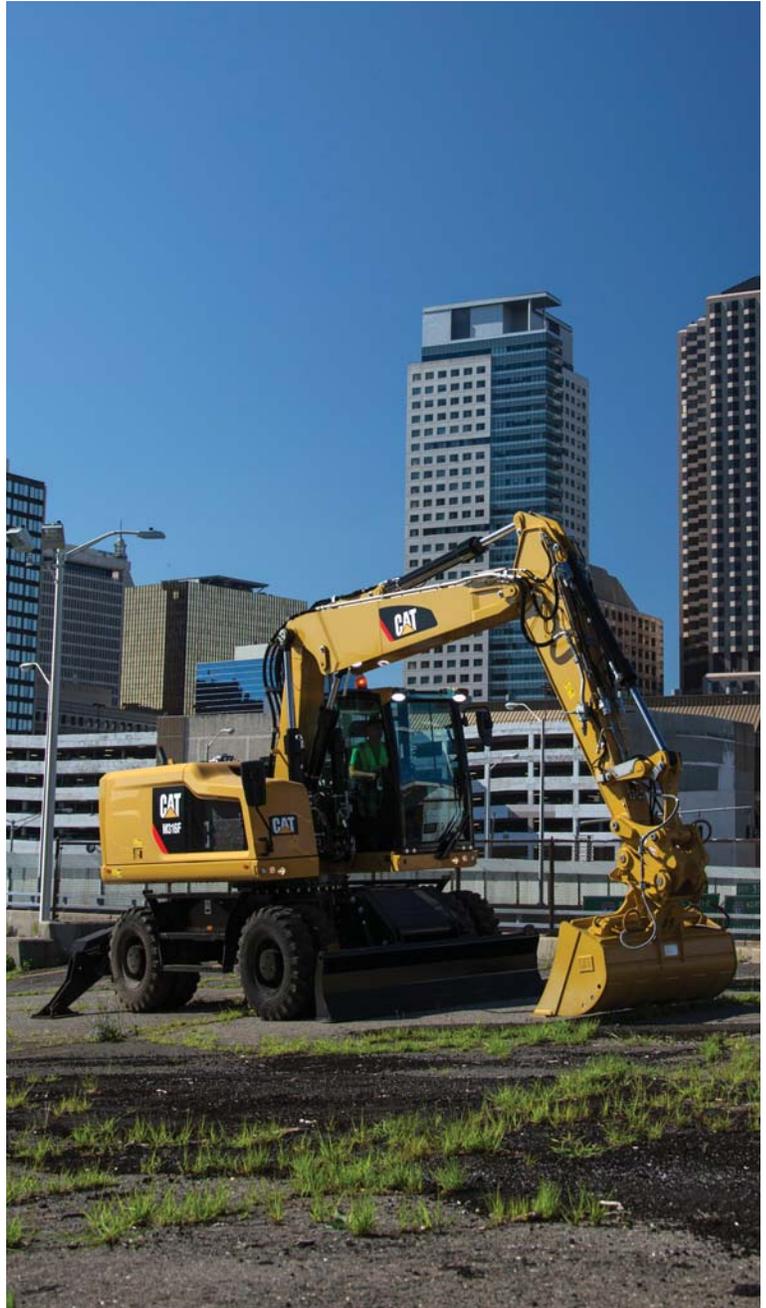
The choice of various booms and sticks provides the right balance of reach and digging forces for all applications.

### Sticks

- **Short stick – 2100 mm (6'11")** for maximum breakout force and lifting capability
- **Medium stick – 2400 mm (7'10")** for greater crowd force and lift capacity
- **Long stick – 2600 mm (8'6")** for greater depth and reach
- **Industrial stick – 3100 mm (10'2")**: A drop nose stick for industrial applications.

### Booms

- **Variable Adjustable (VA)** – improved right side visibility and roading balance. When working in tight quarters or lifting heavy loads, the VA boom offers the best flexibility.
- **One-Piece Boom** – Fits best for all standard applications such as truck loading and digging. A unique straight section in the curve of the side plate reduces stress flow and helps increase boom life.
- **Offset Boom** – The large offset dimensions allow you to dig along walls, over obstacles, to grade while driving, and to dig under laid tubes without damaging them. The combination with a tiltable ditch cleaning bucket lets you operate a highly versatile system.



# SmartBoom

## Reduces Stress and Vibration

### Rock Scraping

Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows more focus on stick and bucket, while the boom freely goes up and down without using pump flow.

### Hammer Work

The front parts automatically follow the hammer while penetrating the rock. Blank shots or excessive force on the hammer are avoided resulting in longer life for the hammer and the machine. Similar advantages with vibratory plate compactors.

### Truck Loading

Loading trucks from a bench is more productive and fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.



## Ride Control

### Fast Travel Speed with More Comfort

The ride control system lets you travel faster over rough terrain with improved ride quality for the operator. Accumulators are acting as shock absorbers to dampen the front part motion. It can be activated through a button located on the soft switch panel in the cab.





# Work Tool Attachments

Get the Most Out of Your Equipment



### Save Time with Tool Changes

**Job Site Confidence** ... From the operator's seat, visual and audible indicators help assure that the attachment is coupled. Your Cat excavator hydraulics, mechanisms inside the coupler, and digging forces all work together to assure the attachment stays engaged. The Cat Pin Grabber coupler is the secure way to decrease downtime by allowing quick attachment change, and increase job site flexibility.



### **Power Match**

Match your Cat hydraulic work tools attachment to your Cat machine, and get the most out of the standard, built-in software. Attachment changes have never been easier!



### **Get the Most from Your Machine**

If you have multiple tasks to get done, the M316F can help. And you can easily expand all the possibilities it offers by utilizing any of the variety of Cat attachments.



### **Dig, Load, Finish and Compact**

A wide range of buckets offers solutions for digging, trenching, loading and finishing works. The addition of a Cat Compactor will introduce your machine to utility work, site prep, road repair and pipeline work.

### **Move and Handle Material**

Choose from one of three different thumb styles to work with your bucket and you have the instant ability to move and handle brush, rocks and debris.

### **Demolish and Break**

Our hammer includes a buffer to improve your comfort and protect your machine from vibration. Fully enclosed, it is ideal when working in noise regulated areas.

### **Sort and Load**

Demolition and Sorting Grapples bring your machine into demolition and waste handling opportunities. Jaws open wide to move volumes, yet are nimble enough to pull a single copper wire out of a pile.

Their 360° rotation capability allows you to place the grapple where you want it without moving the machine.

### **Scrap and Recycle**

Shears also have the ability to rotate 360°. A pulverizer allows you to crush and reduce concrete.



# Serviceability

## When Uptime Counts

### Convenient Access Built In

You can reach routine maintenance items like fuel and engine oil filters and fluid taps at ground level while fuel and DEF tanks with engine air filter are accessible from the safety of the slip-resistant new service platform. Compartments feature wide composite service doors, designed to be more resistant to shocks, which all include gas struts to facilitate the opening. Components are now gathered in specific dedicated compartments, like the special electrical compartments.

### A Smart Design for Any Temperature

The side-by-side coolers and axial fan design allows greater cooling performance. The system is completely separated from the engine compartment to reduce noise and heat and all radiators are gathered in the same compartment while featuring easy-to-clean cores with a tilting device that requires no tool to unlock.

### A Fresh Idea

Ventilation inside the cab allows outside air to enter through a fresh air filter. The filter is located on the side of the cab to make it easy to reach, and it is protected by a lockable door that can be opened with the ignition key.

### Lube and Fuel Options

An electric lubricator system is an available time-saving standard feature for greasing the whole upper carriage. Greasing points for the undercarriage are kept to a minimum and grouped. The new drive shaft extends greasing intervals from 500 hours to 1,000 hours and allows simultaneous greasing with the lower axle bearing. An electric refueling pump is also standard. The hose is stored in a dedicated tray, for more cleanliness. Add in the new electric lift pump removing the need to prime the system manually, the standard fuel and water separator and you get a machine that does the fastidious maintenance works for you.

***Keep It Simple.***



# Integrated Technologies

It Pays to Know



Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:



EQUIPMENT  
MANAGEMENT

**Equipment Management** – increase uptime and reduce operating costs.



PRODUCTIVITY

**Productivity** – monitor production and manage job site efficiency.



SAFETY

**Safety** – enhance job site awareness to keep your people and equipment safe.

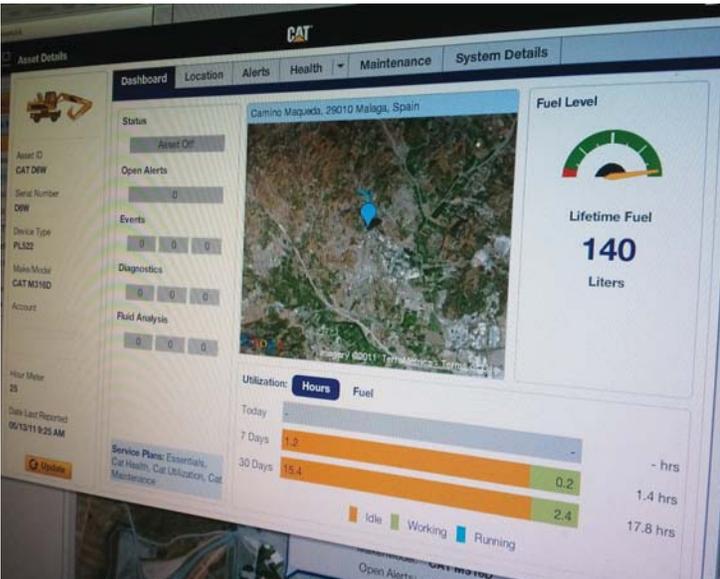
Featured Cat Connect technologies include the following:

## Link

Link technologies provide wireless capability to machines to enable two-way transfer of information collected by on-board sensors, control modules, and other Cat Connect technologies.

## Manage Your Machine Remotely

Cat Product Link is a system that is deeply integrated into the machine monitoring system to take the guesswork out of managing your equipment. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes and shares it with you through VisionLink® to help you maximize efficiency, improve productivity, and lower operating costs.



# CAT® CONNECT



EQUIPMENT  
MANAGEMENT



PRODUCTIVITY



SAFETY



SUSTAINABILITY

# Safety

Your Safety Is NOT Optional

## Embedded Features

Smart devices are embedded to offer as much safety as possible for your operators and help enforce safe behavior:

- Safety seat belt and warning indicators (monitor)
- Automatic swing lock
- Automatic brake and axle lock
- Safety lever, preventing exit when the implements are not locked out
- Emergency shut off switch and battery disconnect switch
- Travel alarm
- Lowering check valves

## Safe and Quiet Cab

The all-new cab provides you with a safe environment. It also contributes to your comfort with limited vibrations and low sound levels.



**Access into the cab** of a wheeled excavator has always been a challenge. We bring a solution to allow you to safely climb into the cab:

- Three longer access steps, aligned with the cab entry
- Anti-skid plates on all walkways and steps reducing slipping hazards
- New, convenient door handrail
- Safety lever built into the tiltable console to make sure the way in and out is free of obstacle



- 1) Laminated windshield and skylight window
- 2) Lowering check valves
- 3) Safety seat belt indicator
- 4) Safety lever
- 5) Emergency shut-off switch
- 6) Automatic brake and axle lock
- 7) Punched, anti-slippery walking surfaces
- 8) Battery disconnect switch
- 9) Swing and implement electronic lock
- 10) Travel alarm
- 11) All doors equipped with gas struts cylinders
- 12) Emergency hammer and exit
- 13) ROPS compliant and front/top guards compatible cab
- 14) Sound proofing
- 15) Beacon available

### Smart Lighting

- LED lights for all working lights for enhanced night-time visibility
- Halogen lights for front roading lights
- LED dome light for better illumination inside the cab

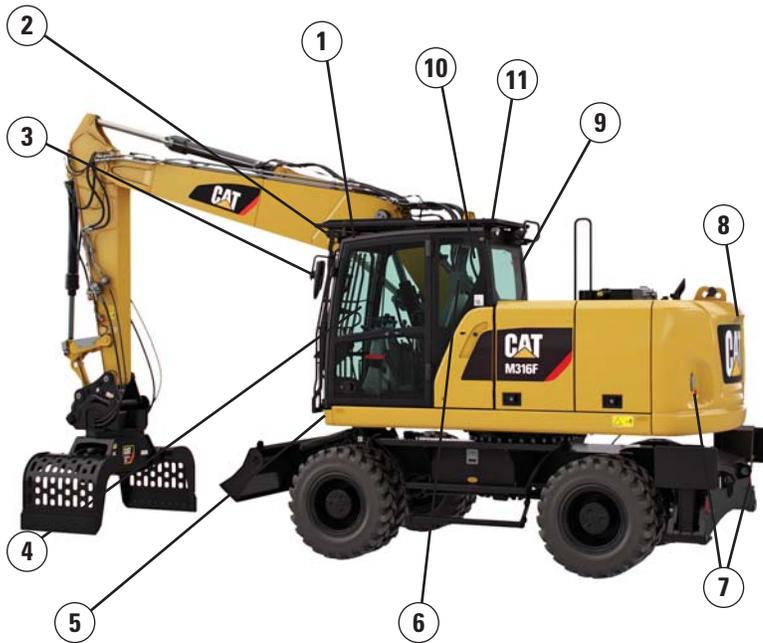


### Great Views

- Enlarged glass gives you excellent visibility to the front, top, rear, and sides, even to the right
- Standard rearview camera gives you a clear field of view behind the machine through the monitor. Camera is integrated into the counterweight.
- Standard sideview camera, to check nothing is hidden to you from the front right hand side to the rear of the machine
- Lenses of all the cameras are wide angle and heated
- All mirrors are wide angle and allow view not only around the machine but also to the ground

# Unmatched Visibility

Make Sure Nothing Is Hidden to You



**Visibility all around is critical**, especially for machines which go on public roads.

- 1) Increased skylight and windshield glass area
- 2) Improved lighting with standard LED lights for all working lights
- 3) Optional heated mirrors
- 4) Great left hand side visibility with the new all glass door
- 5) Halogen front roading lights
- 6) Wide rear window
- 7) Reflecting red lights on rear and blade/outriggers
- 8) Standard wide rearview camera
- 9) Standard side camera and dedicated monitor
- 10) Large right hand side window
- 11) Mirrors, wide angle, with additional lower mirror for ground visibility

## Complete Customer Care

Your Cat Dealer Will Support You Like No Other

### Support You Can Count On

From helping you to choose the right machine to knowledgeable on-going support, Cat dealers provide the best-in-sales and services.

- **Best long-term investment** with financing options and services
- **Productive operation** with training programs
- **Preventive maintenance** and guaranteed maintenance contracts
- **Uptime**, with best-in-class parts availability
- **Repair, rebuild, or replace?** Your dealer can help evaluate the best option.



# M316F Wheeled Excavator Specifications

## Engine

Engine Model	Cat C4.4 ACERT <sup>(1)</sup>	
Ratings	2,000 rpm	
Engine Gross Power (maximum)		
ISO 14396	110 kW	148 hp
ISO 14396 (metric)	150 hp (PS)	
Net Power (Rated) <sup>(2)</sup>		
ISO 9249/SAE J1349	105 kW	141 hp
ISO 9249/SAE J1349 (metric)	143 hp (PS)	
80/1269/EEC	105 kW	141 hp
Net Power (maximum)		
ISO 9249/SAE J1349	105 kW	141 hp
ISO 9249/SAE J1349 (metric)	143 hp (PS)	
80/1269/EEC	105 kW	141 hp
Bore	105 mm	4.1 in
Stroke	127 mm	5 in
Displacement	4.4 L	268.5 in <sup>3</sup>
Maximum Torque at 1,400 rpm	560 N·m	413 lbf-ft
Number of Cylinders	4	

<sup>(1)</sup> Meets Tier 4 Final emission standards.

<sup>(2)</sup> Rated speed 2,000 rpm.

- Net power advertised is the power available at the flywheel when engine is equipped with air cleaner, CEM exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed.
- No deratings required up to 3000 m (9,842 ft) altitude. Automatic derating occurs after 3000 m (9,842 ft).

## Transmission

Forward/Reverse		
1st Gear	10 km/h	6.2 mph
2nd Gear	35 km/h	22 mph
Creeper Speed		
1st Gear	3 km/h	1.9 mph
2nd Gear	10 km/h	6.2 mph
Drawbar Pull	104 kN	23,380.1 lbf
Maximum Gradeability (16 500 kg/36,380 lb)	78%	

## Service Refill Capacities

Fuel Tank (total capacity)	330 L	87.2 gal
Diesel Exhaust Fluid Tank	19 L	5 gal
Cooling System	38 L	10 gal
Engine Crankcase	8 L	2.1 gal
Rear Axle Housing (differential)	14 L	3.7 gal
Front Steering Axle (differential)	10.5 L	2.8 gal
Final Drive	2.5 L	0.7 gal
Powershift Transmission	2.5 L	0.7 gal

## Swing Mechanism

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

## Undercarriage

Ground Clearance	370 mm	14.6 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	±8.5°	
Minimum Turning Radius		
Outside of Tire	6300 mm	20.7 ft
End of One-Piece Boom	8400 mm	27.6 ft
End of VA Boom	7100 mm	23.3 ft
End of Offset Boom	7100 mm	23.3 ft

## Weights

Operating Weights*	15 410 kg-	33,973 lb-
	17 490 kg	38,559 lb
Weights		
VA Boom		
Rear Dozer Only	15 390 kg	33,929 lb
Rear Dozer, Front Outriggers	16 360 kg	36,068 lb
Front and Rear Outriggers	16 630 kg	36,663 lb
One-Piece Boom		
Front Dozer, Rear Outriggers	15 880 kg	35,009 lb
Front and Rear Outriggers	16 150 kg	35,605 lb
Offset Boom		
Rear Dozer, Front Outriggers	16 890 kg	37,236 lb
Front and Rear Outriggers	17 160 kg	37,831 lb
Sticks**		
Short, 2100 mm (6'11")	705 kg	1,554 lb
Medium, 2400 mm (7'10")	735 kg	1,620 lb
Long, 2600 mm (8'6")	755 kg	1,664 lb
Industrial-Drop Nose, 3100 mm (10'2")	420 kg	926 lb
Counterweights		
Standard	3200 kg	7,055 lb
Optional	3700 kg	8,160 lb

\*Operating weight includes medium stick, 3200 kg (7,054.784 lb) counterweight, full fuel tank, operator, and dual pneumatic tires. Weight varies depending on configuration.

\*\*Includes cylinder, bucket linkage, pins and standard hydraulic lines.

# M316F Wheeled Excavator Specifications

## Hydraulic System

Tank Capacity	122 L	32.2 gal
System	240 L	63.4 gal
Maximum Pressure		
Implement Circuit		
Normal	350 bar	5,076 psi
Heavy Lift	375 bar	5,439 psi
Travel Circuit	350 bar	5,076 psi
Auxiliary Circuit		
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	63.4 gal/min
Medium Pressure	50 L/min	13.2 gal/min
Swing Mechanism	80 L/min	21.1 gal/min

## Tires

Standard	10.00-20 (Dual Pneumatic)
Optional	10.00-20 (Dual Solid Rubber) 11.00-20 (Dual Pneumatic) 445/70/R19.5 TL XF (Single Pneumatic)

## Dozer Blade

Blade Type	Radial	Parallel
Width	2540 mm 8'4"	2550 mm 8'4"
Blade Roll-Over Height	540 mm 1'9"	576 mm 1'11"
Blade Total Height	580 mm 1'11"	680 mm 2'3"
Maximum Lowering Depth From Ground	120 mm 5"	131 mm 5"
Maximum Raising Height Above Ground	475 mm 1'7"	496 mm 1'8"

## Emissions and Safety

Engine Emissions	Tier 4 Final	
Fluids (Optional)		
Cat Bio HYDO Advanced	Readily biodegradable EU Flower eco-label certified	
Biodiesel up to B20	Meets EN 14214 or ASTM D6751 with EN590 or ASTM D975 Standard Mineral diesel fuels	
Diesel Exhaust Fluid	Must meet ISO 22241	
Vibration Levels		
Maximum Hand/Arm		
ISO 5349:2001	<2.5 m/s <sup>2</sup>	<8.2 ft/s <sup>2</sup>
Maximum Whole Body		
ISO/TR 25398:2006	<0.5 m/s <sup>2</sup>	<1.6 ft/s <sup>2</sup>
Seat Transmissibility Factor		
ISO 7096:2000-spectral class EM5	<0.7	

## Standards

ROPS	ROPS (Rollover Protective Structure) offered by Caterpillar meets ROPS criteria ISO 12117-2:2008
Operator Protective Structure: top/front guards	FOPS (Falling Object Protective Structure) meets FOPS criteria ISO 10262:1998 and SAE J1356:2008
Cab/Sound Levels	Meets appropriate standards as listed below

## Sound Performance

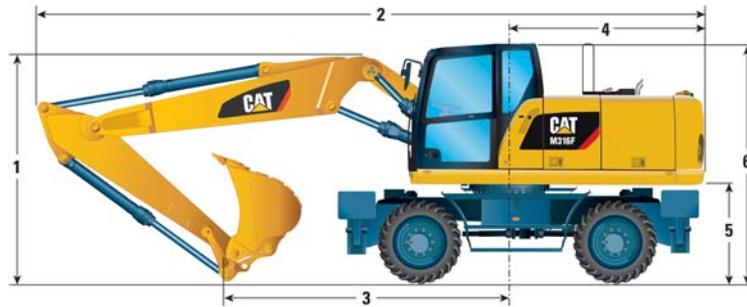
Operator Sound	
2000/14/EC	71 dB(A)
Spectator Sound	
2000/14/EC	101 dB(A)

- Operator Sound – The operator sound level is measured according to the procedures specified in 2000/14/EC, for a cab offered by Caterpillar, when properly installed and maintained and tested with the door and windows closed.
- Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2000/14/EC.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/windows open) for extended periods or in noisy environment(s).

# M316F Wheeled Excavator Specifications

## Dimensions

All dimensions are approximate. Values are with 10.00-20 pneumatic tires and standard undercarriage.

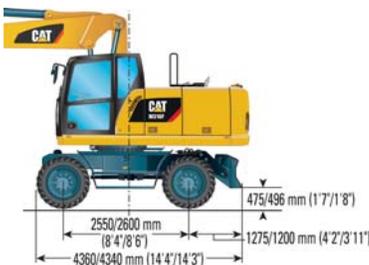


Stick Length	mm (ft/in)	VA Boom				One-Piece Boom				Offset Boom	
		2100 (6'11")	2400 (7'10")	2600 (8'6")	3100 (10'2")	2100 (6'11")	2400 (7'10")	2600 (8'6")	3100 (10'2")	2100 (6'11")	2400 (7'10")
1 Shipping Height with Falling Object Guard and Handrails Lowered (highest point between boom and cab)	mm (ft/in)	3300 (10'10")	3300 (10'10")	3300 (10'10")	3300 (10'10")	3300 (10'10")	3300 (10'10")	3300 (10'10")	3300 (10'10")	3300 (10'10")	3300 (10'10")
2 Shipping Length	mm (ft/in)	8645 (28'4")	8640 (28'4")	8635 (28'4")	8610 (28'3")	8485 (27'10")	8490 (27'10")	8495 (27'10")	8505 (27'11")	8640 (28'4")	8630 (28'4")
3 Support Point	mm (ft/in)	3915 (12'10")	3655 (12'0")	3550 (11'8")	3650 (12'0")	3570 (11'9")	3285 (10'9")	3165 (10'5")	3230 (10'7")	4020 (13'2")	3775 (12'5")
4 Tail Swing Radius	mm (ft/in)	2220 (7'3")				2220 (7'3")				2220 (7'3")	
5 Counterweight Clearance	mm (ft/in)	1260 (4'2")				1260 (4'2")				1260 (4'2")	
6 Cab Height – No Falling Object Guard, Handrails Lowered	mm (ft/in)	3170 (10'5")				3170 (10'5")				3170 (10'5")	
With Handrails not Lowered	mm (ft/in)	3240 (10'8")				3240 (10'8")				3240 (10'8")	
With Falling Object Guard	mm (ft/in)	3300 (10'10")				3300 (10'10")				3300 (10'10")	
7 Overall Machine Width		<b>Standard/Heavy Duty Undercarriage</b>									
Width with Outriggers on Ground	mm (ft/in)	3645/3680 (12'0"/12'1")				3645/3680 (12'0"/12'1")				3645/3680 (12'0"/12'1")	
Width with Outriggers Up	mm (ft/in)	2545/2550 (8'4"/8'4")				2545/2550 (8'4"/8'4")				2545/2550 (8'4"/8'4")	
Width with Blade	mm (ft/in)	2540/2550 (8'4"/8'4")				2540/2550 (8'4"/8'4")				2540/2550 (8'4"/8'4")	
8 Maximum Outriggers Depth	mm (in)	110/120 (4.3"/4.7")				110/120 (4.3"/4.7")				110/120 (4.3"/4.7")	



\*Maximum tire clearance with outrigger fully down

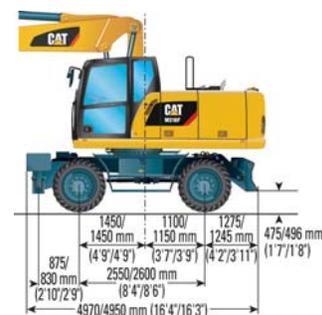
### Undercarriage with dozer only



### Undercarriage with 2 sets of outriggers

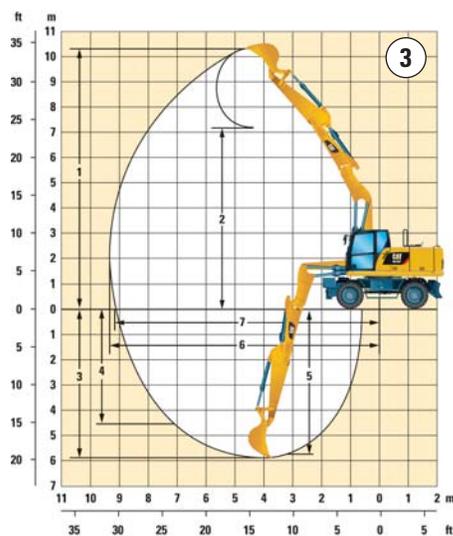
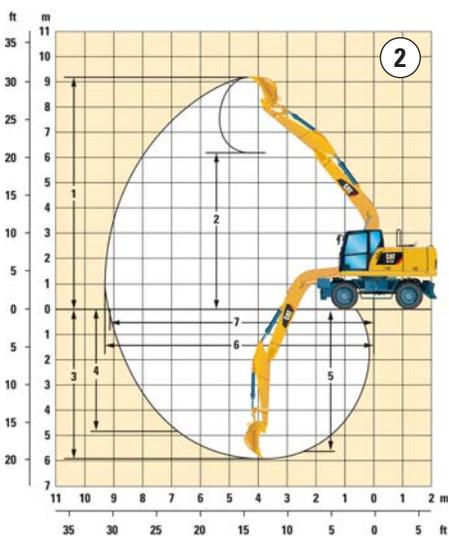
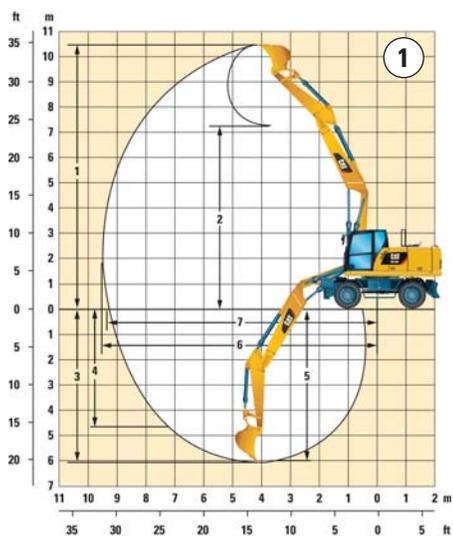


### Undercarriage with 1 set of outriggers and dozer



# M316F Wheeled Excavator Specifications

## Working Ranges



		① VA Boom				② One-Piece Boom				③ Offset Boom	
<b>Stick Length</b>	mm (ft/in)	<b>2100</b> <b>(6'11")</b>	<b>2400</b> <b>(7'10")</b>	<b>2600</b> <b>(8'6")</b>	<b>3100</b> <b>(10'2")</b>	<b>2100</b> <b>(6'11")</b>	<b>2400</b> <b>(7'10")</b>	<b>2600</b> <b>(8'6")</b>	<b>3100</b> <b>(10'2")</b>	<b>2100</b> <b>(6'11")</b>	<b>2400</b> <b>(7'10")</b>
<b>1 Digging Height</b>	mm (ft/in)	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")	10 100 (33'2")	10 300 (33'10")
<b>2 Dump Height</b>	mm (ft/in)	6920 (22'8")	7110 (23'4")	7270 (23'10")		5980 (19'7")	6080 (19'11")	6200 (20'4")		6960 (22'10")	7150 (23'5")
<b>3 Digging Depth</b>	mm (ft/in)	5610 (18'5")	5900 (19'4")	6100 (20'0")	5050 (16'7")	5410 (17'9")	5710 (18'9")	5910 (19'5")	4840 (15'11")	5610 (18'5")	5910 (19'5")
<b>4 Vertical Wall Digging Depth</b>	mm (ft/in)	4380 (14'4")	4610 (15'1")	4790 (15'9")		4500 (14'9")	4680 (15'4")	4860 (15'11")		4420 (14'6")	4660 (15'3")
<b>5 Depth 2.5 m (8'2") in Straight Clean-Up</b>	mm (ft/in)	5500 (18'1")	5800 (19'0")	6000 (19'8")		5180 (17'0")	5500 (18'1")	5710 (18'9")		5500 (18'1")	5800 (19'0")
<b>6 Reach</b>	mm (ft/in)	9110 (29'11")	9380 (30'9")	9570 (31'5")	8370 (27'6")	8910 (29'3")	9170 (30'1")	9360 (30'9")	8130 (26'8")	9130 (29'11")	9400 (30'10")
<b>7 Reach at Ground Level</b>	mm (ft/in)	8940 (29'4")	9210 (30'3")	9400 (30'10")	8170 (26'10")	8730 (28'8")	8990 (29'6")	9190 (30'2")	7920 (26'0")	8950 (29'4")	9230 (30'3")
<b>Bucket Forces (ISO 6015)</b>	kN (lbf)	114 (25,628)	114 (25,628)	114 (25,628)		114 (25,628)	114 (25,628)	114 (25,628)		114 (25,628)	114 (25,628)
<b>Stick Forces (ISO 6015)</b>	kN (lbf)	84 (18,884)	77 (17,310)	73 (16,411)		84 (18,884)	77 (17,310)	73 (16,411)		84 (18,884)	77 (17,310)

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 (43 in), 0.80 m<sup>3</sup> (1.03 yd<sup>3</sup>) with tips K080 and CW-20-H.4.N quick coupler with a tip radius of 1574 mm (5'2").

Breakout force values are calculated with heavy lift on (no quick coupler) and a cutting edge radius of 1237 mm (4'0").

# M316F Wheeled Excavator Specifications

## Bucket Specifications and Compatibility

Contact your Cat dealer for special bucket requirements.

Stick Length							Variable Adjustable Boom			One-Piece Boom			Offset Boom										
							2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")					
	Width		Weight*		Capacity (ISO)		Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized	Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized	Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized	Free on wheels	Front dozer lowered	Front dozer and rear outriggers	Fully stabilized	
	mm	in	kg	lb	m <sup>3</sup>	yd <sup>3</sup>																	
<b>Pin-on Buckets</b>							With 3.2 mt (7,055 lb) Counterweight																
General Duty (GD)	750	30	464	1,022	0.49	0.64																	
	1100	43	583	1,285	0.79	1.03																	
	1200	48	651	1,435	0.91	1.19																	
	1300	51	663	1,462	1.00	1.31																	
	1400	55	712	1,570	1.09	1.43																	
Heavy Duty (HD)	1300	51	699	1,541	1.00	1.31																	
							With 3.7 mt (8,160 lb) Counterweight																
General Duty (GD)	750	30	464	1,022	0.49	0.64																	
	1100	43	583	1,285	0.79	1.03																	
	1200	48	651	1,435	0.91	1.19																	
	1300	51	663	1,462	1.00	1.31																	
	1400	55	712	1,570	1.09	1.43																	
Heavy Duty (HD)	1300	51	699	1,541	1.00	1.31																	
<b>Pin Grabber Coupler</b>							With 3.2 mt (7,055 lb) Counterweight																
General Duty (GD)	750	30	464	1,022	0.49	0.64																	
	1100	43	583	1,285	0.79	1.03																	
	1200	48	651	1,435	0.91	1.19																	
	1300	51	663	1,462	1.00	1.31																	
	1400	55	712	1,570	1.09	1.43																	
Heavy Duty (HD)	1300	51	699	1,541	1.00	1.31																	
							With 3.7 mt (8,160 lb) Counterweight																
General Duty (GD)	750	30	464	1,022	0.49	0.64																	
	1100	43	583	1,285	0.79	1.03																	
	1200	48	651	1,435	0.91	1.19																	
	1300	51	663	1,462	1.00	1.31																	
	1400	55	712	1,570	1.09	1.43																	
Heavy Duty (HD)	1300	51	699	1,541	1.00	1.31																	

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.  
Capacity based on ISO 7451.  
Bucket weight with Long tips.

- Maximum material density 2100 kg/m<sup>3</sup> (3,540 lb/yd<sup>3</sup>)
- Maximum material density 1800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>)
- Maximum material density 1500 kg/m<sup>3</sup> (2,500 lb/yd<sup>3</sup>)
- Maximum material density 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)
- Not recommended

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.



# M316F Wheeled Excavator Specifications

## M316F Work Tool Offering Guide

When choosing between various work tool models that can be installed onto the same machine configuration, consider work tool application, productivity requirements, and durability. Refer to work tool specifications for application recommendations and productivity information.

Undercarriage		Counterweight		3.2 mt (7,055 lb)									3.7 mt (8,160 lb)											
		(1)			(2)			(3)			(1)			(2)			(3)							
		Stick Length		2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	2100 mm (6'11")	2400 mm (7'10")	2600 mm (8'6")	3100 mm (10'2")	
<b>Work Tools</b>																								
Hydraulic Hammer	H110Es																							
	H115Es																							
	H120Es																							
Multi-Processor	MP318 CC Jaw																							
	MP318 D Jaw																							
	MP318 P Jaw																							
	MP318 U Jaw																							
	MP318 S Jaw																							
Crusher	P315																							
Pulverizer	P215																							
Demolition and Sorting Grapple  (D-Demolition shells, R-Recycling shells, WH-Waste Handling shells)	G310B-D/R																							
	G310B-D/R fixed CAN																							
	G313 GC																							
	G313 GC fixed CAN																							
	G315 GC																							
	G315 GC fixed CAN																							
	G315B-D/R																							
	G315B-D/R fixed CAN																							
	G315B-WH																							
Scrap and Demolition Shear	S320B																							
	S325B																							
Compactor Plate	CVP75																							
<b>Boom Type – Variable Adjustable Boom</b>																								
<b>Work Tools</b>																								
Hydraulic Hammer	H110Es																							
	H115Es																							
	H120Es																							
Demolition and Sorting Grapple  (D-Demolition shells, R-Recycling shells, WH-Waste Handling shells)	G310B-D/R																							
	G310B-D/R fixed CAN																							
	G313 GC																							
	G313 GC fixed CAN																							
	G315 GC																							
Scrap and Demolition Shear	S320B																							
	S325B																							
	CVP75																							

- (1) Dozer lowered
- (2) 2 sets outriggers lowered
- (3) Dozer and outrigger lowered

	Work Tool is a match		Boom Mount
	Pin-on or dedicated coupler		Over the front only with dedicated coupler
	Pin-on only		Over the front only with CL coupler
	Over the front only		Not recommended

Offerings not available in all areas. Matches are dependent on Wheeled Excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

Note: Demolition and Sorting Grapple: fixed CAN – fixed hinge plates for CW quick coupler usage.





# M316F Wheeled Excavator Specifications

## Lift Capacities – Variable Adjustable Boom

All values are in kg, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (3700 kg), heavy lift on.

Long Stick 2600 mm		Load at maximum reach (stick nose/bucket pin)			Load over front			Load over rear			Load over side			Load point height			mm
		3000 mm			4500 mm			6000 mm			7500 mm						
																	
7500 mm	Lower rear dozer up				*5000	4800	4350								*3450	3450	3100
	Lower rear dozer down				*5000	*5000	4850								*3450	*3450	*3450
	Lower f. dozer & r. stabilizer down				*5000	*5000	*5000								*3450	*3450	*3450
	Lower 2 sets of stabilizers down				*5000	*5000	*5000								*3450	*3450	*3450
	Lower rear dozer up (HD – parallel dozer)				*5000	*5000	4450								*3450	*3450	3150
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)				*5000	*5000	*5000								*3450	*3450	*3450
6000 mm	Lower rear dozer up				*4900	4800	4350	4400	2950	2700					*3000	2400	2150
	Lower rear dozer down				*4900	*4900	4850	4350	*4700	3000					*3000	*3000	2450
	Lower f. dozer & r. stabilizer down				*4900	*4900	*4900	*4700	*4700	4550					*3000	*3000	*3000
	Lower 2 sets of stabilizers down				*4900	*4900	*4900	*4700	*4700	*4700					*3000	*3000	*3000
	Lower rear dozer up (HD – parallel dozer)				*4900	*4900	4450	4550	3150	2750					*3000	2550	2200
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)				*4900	*4900	*4900	*4700	*4700	4650					*3000	*3000	*3000
4500 mm	Lower rear dozer up				*5750	4550	4150	4300	2900	2600	*2850	1950	1750		*2800	1950	1750
	Lower rear dozer down				*5750	*5750	4600	4300	*4900	2950	*2850	*2850	2000		*2800	*2800	2000
	Lower f. dozer & r. stabilizer down				*5750	*5750	*5750	*4900	*4900	4450	*2850	*2850	*2850		*2800	*2800	*2800
	Lower 2 sets of stabilizers down				*5750	*5750	*5750	*4900	*4900	*4900	*2850	*2850	*2850		*2800	*2800	*2800
	Lower rear dozer up (HD – parallel dozer)				*5800	4850	4200	4450	3100	2700	*2900	2100	1800		*2800	2100	1800
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)				*5800	*5800	*5800	*4900	*4900	4550	*2900	*2900	*2900		*2800	*2800	*2800
3000 mm	Lower rear dozer up				6450	4200	3750	4150	2750	2450	2900	1900	1750		2700	1750	1550
	Lower rear dozer down				6450	*6900	4250	4100	*5200	2800	2900	*4150	1950		2650	*2800	1800
	Lower f. dozer & r. stabilizer down				*6900	*6900	6700	*5200	*5200	4300	*4150	*4150	3000		*2800	*2800	2750
	Lower 2 sets of stabilizers down				*6900	*6900	*6900	*5200	*5200	5150	*4150	*4150	3600		*2800	*2800	*2800
	Lower rear dozer up (HD – parallel dozer)				6700	4500	3850	4300	2950	2550	3050	2050	1800		2800	1850	1600
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)				*6950	*6950	6850	*5200	*5200	4400	*4150	*4150	3100		*2800	*2800	*2800
1500 mm	Lower rear dozer up				6050	3850	3450	3950	2550	2300	2850	1850	1650		2600	1650	1500
	Lower rear dozer down				6050	*7750	3900	3950	*5650	2600	2850	4150	1900		2550	*2900	1700
	Lower f. dozer & r. stabilizer down				*7750	*7750	6300	*5650	*5650	4100	*4350	4300	2950		*2900	*2900	2700
	Lower 2 sets of stabilizers down				*7750	*7750	7700	*5650	*5650	4950	*4350	*4350	3550		*2900	*2900	*2900
	Lower rear dozer up (HD – parallel dozer)				6300	4150	3550	4100	2750	2400	2950	2000	1700		2700	1800	1550
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)				*7750	*7750	6450	*5650	*5650	4200	*4350	*4350	3050		*2950	*2950	2750
0 mm	Lower rear dozer up				5850	3650	3250	3850	2450	2200	2800	1800	1600		2650	1700	1550
	Lower rear dozer down				5800	*7800	3700	3800	*5700	2500	2800	4100	1850		2650	*3200	1750
	Lower f. dozer & r. stabilizer down				*7800	*7800	6050	*5700	*5700	4000	*4300	4250	2900		*3200	*3200	2750
	Lower 2 sets of stabilizers down				*7800	*7800	7500	*5700	*5700	4800	*4300	*4300	3500		*3200	*3200	*3200
	Lower rear dozer up (HD – parallel dozer)				6050	3950	3350	4000	2650	2250	2900	1950	1650		2750	1850	1600
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)				*7800	*7800	6250	*5700	*5700	4100	*4250	*4250	3000		*3200	*3200	2850
-1500 mm	Lower rear dozer up			*6800	6750	5850	5800	3600	3200	3800	2400	2150			2900	1850	1700
	Lower rear dozer down			*6800	*6800	*6800	5750	*7100	3650	3800	*5200	2450			2900	*3700	1900
	Lower f. dozer & r. stabilizer down			*6800	*6800	*6800	*7100	*7100	6000	*5200	*5200	3950			*3700	*3700	3050
	Lower 2 sets of stabilizers down			*6800	*6800	*6800	*7100	*7100	*7100	*5200	*5200	4750			*3700	*3700	3650
	Lower rear dozer up (HD – parallel dozer)			*6850	*6850	6000	6000	3900	3300	3950	2600	2250			3050	2050	1750
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)			*6850	*6850	*6850	*7050	*7050	6200	*5200	*5200	4050			*3700	*3700	3100
-3000 mm	Lower rear dozer up				*5500	3650	3250	*3750	2450	2200					*3150	2300	2100
	Lower rear dozer down				*5500	*5500	3700	*3750	*3750	2500					*3150	*3150	2350
	Lower f. dozer & r. stabilizer down				*5500	*5500	*5500	*3750	*3750	*3750					*3150	*3150	*3150
	Lower 2 sets of stabilizers down				*5500	*5500	*5500	*3750	*3750	*3750					*3150	*3150	*3150
	Lower rear dozer up (HD – parallel dozer)				*5450	3950	3350	*3750	2650	2300					*3150	2500	2150
	Lower f. dozer & r. stabilizer down (HD – parallel dozer)				*5450	*5450	*5450	*3750	*3750	*3750					*3150	*3150	*3150

\*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface and the Variable Boom Cylinder adjusted to the maximum length. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.







# M316F Standard Equipment

## Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

### ELECTRICAL

- Alternator, 100 A
- Lighting
  - LED light package, including all working lights (compatible with falling object guard)
  - Boom LED working light
  - Cab interior LED Light
  - Rooding lights two front, halogen
  - Rooding lights two LED modules rear
  - LED working lights, cab mounted (two front, one rear, and one counterweight for the rear camera)
- Main shut-off switch
- Maintenance free batteries, heavy duty
- Signal/warning horn
- Electrical refueling pump
- Signal/warning horn

### ENGINE

- Cat C4.4 engine with ACERT Technology meets Tier 4 Final emission standards
- Aftertreatment technologies including the Cat Clean Emission Module package (CEM)
- Automatic Engine Speed Control (AESC), including one touch low idle
- Engine Idle Shutdown (EIS)
- Power mode selector
- Altitude 3000 m (9,842 ft)
- Automatic starting aid
- Fuel/water separator with water in fuel switch
- Electric fuel priming pump

### HYDRAULICS

- Adjustable hydraulic sensitivity
- All Cat XT™-6 ES hoses
- Anti-drift valves for bucket, and tool control/multi-function circuits
- Basic control circuits:
  - Medium pressure
    - Two-way, medium pressure circuit, for rotating or tilting of work tools
  - Tool control/multi function
    - One/two-way high pressure for hammer application or opening and closing of a work tool
  - Programmable flow and pressure for up to 10 work tools – selection via monitor
  - Quick coupler circuit and lines for hydraulic quick coupler (pin grabber and CW types)

- Boom Lowering Check Valve (BLCV), including overload warning device
- Heavy lift mode
- Load-sensing hydraulic system
- Separate swing pump
- Stick Lowering Check Device (SLCV)
- Stick regeneration circuit

### OPERATOR STATION

- Reinforced (ROPS) cab structure compliant with 2006/42/EC and tested according to ISO 12117-2:2008
- Adjustable armrests
- Air conditioner, heater and defroster with automatic climate control
- Cigarette lighter (24 volt)
- Beverage cup/can holder
- Bolt-on Falling Object Guards (FOGS) capability
- Bottle holder
- Bottom mounted intermittent (four speeds) wiping system that covers the upper and lower windshield glass
- Cameras
  - Rear mounted wide angle camera (integrated into the counterweight) display through the cab monitor
  - Right side wide angle camera, mounted on the cooling hood, displayed on a dedicated large color monitor
- Coat hook
- Cruise Control System
- Fastened seat belt warning signal
- Floor mat, washable, with storage compartment
- FM Radio with CD player, speakers and USB port
- Fully adjustable suspension seat
- Instrument panel, full graphic and color display
  - Information and warning messages in local language
  - Gauges for fuel level, engine coolant, Diesel Exhaust Fluid (DEF) and hydraulic oil temperature
  - Filters/fluids change intervals
  - Indicators for headlights, turning signal, low fuel, engine dial setting
  - Clock with 10-day backup battery
- Interior LED lighting with door switch
- Joystick pilot operated

- Laminated upper front windshield
- Left side console, tiltable, with lock out for all controls
- Literature holder in right hand side panel
- Mobile phone holder
- Parking brake
- Pin-code, engine start prevention
- Power supply, 12V-10A
- Rain protector
- Rear window, emergency, tempered glass, with hammer
- Retractable seat belt, integrated into the seat
- Safety lever, integrated into the left console
- Skylight, laminated glass
- Sealed cab with positive filtered ventilation
- Sliding door windows
- Steering column, adjustable height and angle
- Storage area suitable for a lunch box
- Sunshade for windshield and skylight

### UNDERCARRIAGE

- All wheel drive
- Automatic axle/brake lock
- Creeper speed
- Electronic swing and travel lock
- Heavy-duty axles, advanced disc brake system and travel motor, adjustable braking force
- Oscillating front axle, lockable, with remote greasing point
- Steps with box in undercarriage (left and right)
- Two-piece drive with extended greasing intervals
- Two speed hydrostatic transmission

### OTHER EQUIPMENT

- Auto-lube, centralized greasing (implement and swing gear)
- Automatic swing brake
- Counterweight, 3200 kg (7,055 lb)
- Engine emergency shutoff switch
- Mirrors, wide angle, frame and cab
- Product Link
- S•O•S<sup>SM</sup> sampling valves for engine oil, hydraulic oil and coolant

## Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

### AUXILIARY CONTROLS AND LINES

- Basic control circuits:
  - Second high pressure
    - Additional two-way, high pressure circuit, for tools requiring a second high or medium pressure function
- SmartBoom

### HYDRAULICS

- Cat BIO HYDO Advanced HEES biodegradable hydraulic oil

### FRONT LINKAGE

- Booms
  - One-piece boom, 5050 mm (16'7")
  - VA boom (two piece), 5200 mm (17'1")
  - Offset boom, 5200 mm (17'1")
- Sticks
  - 2100 mm (6'11")
  - 2400 mm (7'10")
  - 2600 mm (8'6")
  - 3100 mm (10'2") Industrial Stick\*

### ELECTRICAL

- Travel alarm
- Rotating beacon on cab

### OPERATOR STATION

- Joystick steering
- Seat, adjustable back, with vertical and horizontal air-suspension and head rest
  - Comfort, automatic weight adjustment, mechanical lumbar support, heated
  - Deluxe seat adds automatic height and weight adjustment, pneumatic lumbar support, premium fabric, heated and cooled
- Windshield
  - One-piece high impact resistant, laminated, (EN356 P5A standards)
  - 70/30 split, openable
- Mirrors heated, frame and cab
- High pressure pedal
- Joystick pattern, changeable
- Falling Object Guards (top and front)

### UNDERCARRIAGE

- Rear blade only (radial or parallel)
- Front blade (radial or parallel)/ rear outriggers
- Front outriggers/rear blade (radial)
- Front and rear outriggers
- Spacer rings for tires
- Travel restraint

### OTHER EQUIPMENT

- Cat Machine Security System (MSS)
- Cooling protection package for dusty applications (includes fine mesh for enhanced radiator protection and engine air precleaner)
- Counterweight, 3700 kg (8,160 lb)
- Fenders, front and rear
- Ride Control
- Tires (see pg. 22)
- Attachments (see pg. 25-27)

\*Without autolube

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

AEHQ7730 (11-2015)

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