

M314F

Wheeled Excavator



Engine

Engine Model	Cat® C4.4 ACERT™	
Emissions	U.S. EPA Tier 4 Final, Korea 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 Work Tool	14 620 kg-	32,230 lb-
	17 610 kg	38,820 lb

Bucket Specifications

Bucket Capacities	0.2 m ³ -	0.26 yd ³ -
	1 m ³	1.31 yd ³

Working Ranges

Maximum Reach at Ground Level	9080 mm	29'9"
Maximum Digging Depth	5790 mm	19'0"

Drive

Maximum Travel Speed	37 km/h	23 mph
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M314F 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 CO₂ 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 M314F 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.

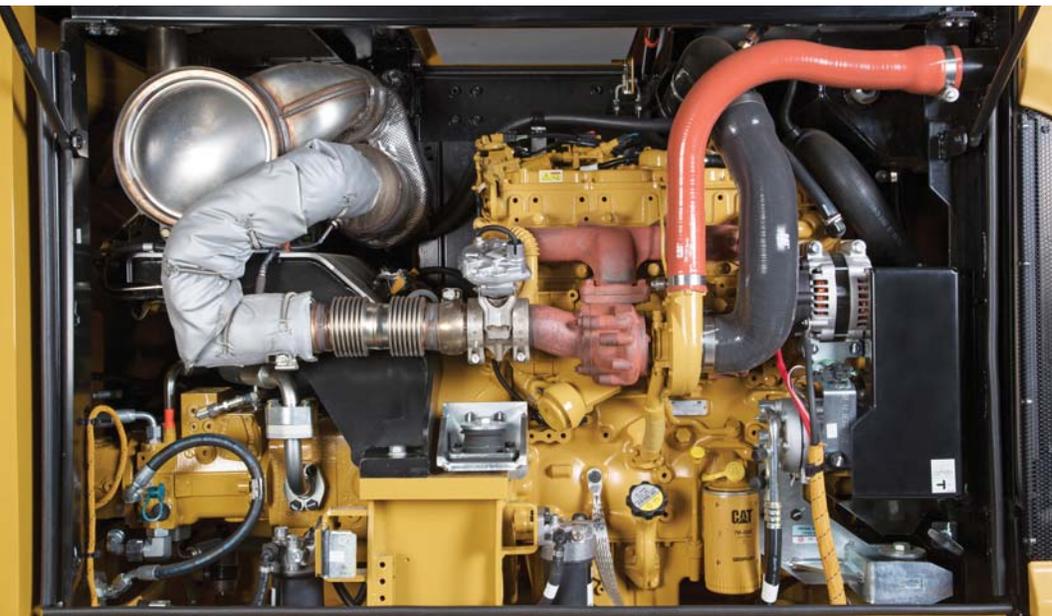
Proven Technology

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.

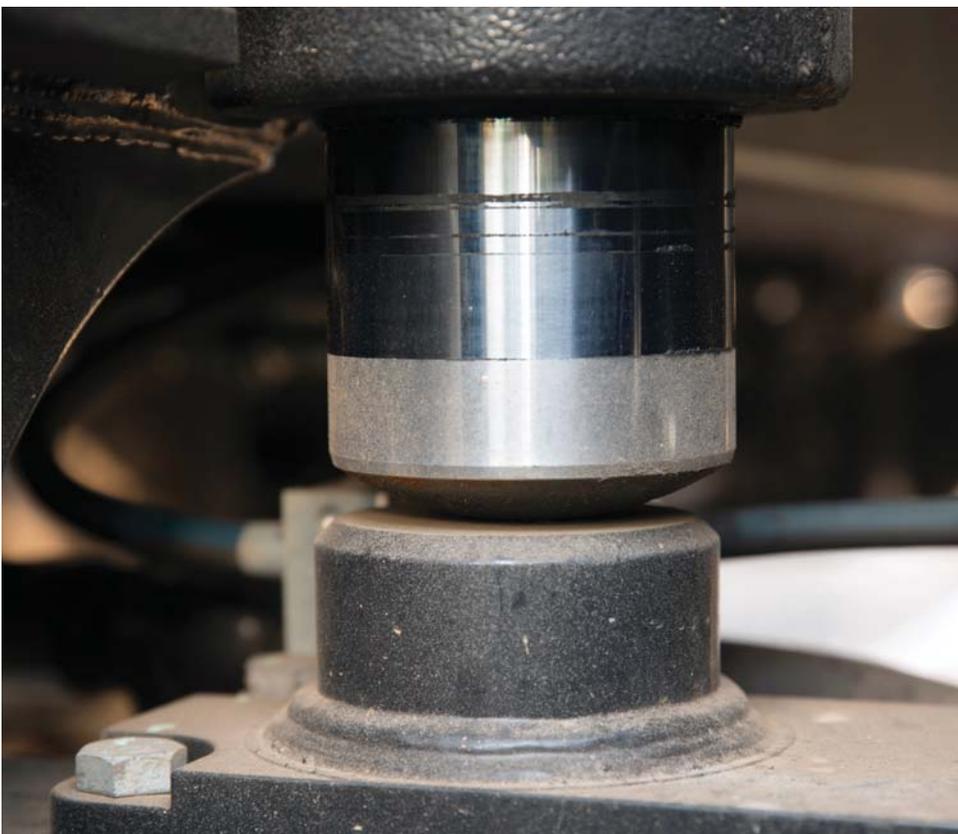


Dig and Go Auto Axle Lock

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

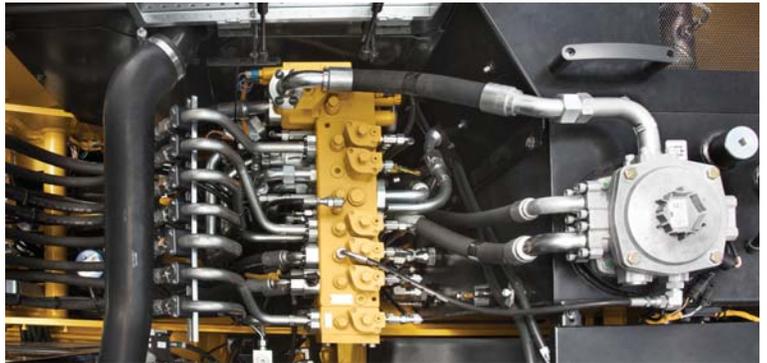
- **Simple Design:** The new hydraulic valve compartment and routings offer a simple and clean design to help ensure durability. Everything is reachable from ground level.
- **Smart Main Hydraulics:** The system allows reducing the load on the engine when not needed, which translates into lower fuel 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 37 km/h (23 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.

A buck rest is available for Korea only with the blade rear/front empty undercarriage.



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.

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 – 2000 mm (6'7")** for maximum breakout force and lifting capability
- **Medium stick – 2300 mm (7'7")** for greater crowd force and lift capacity
- **Long stick – 2600 mm (8'6")** for greater depth and reach
- **Industrial stick – 2900 mm (9'6")**: 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

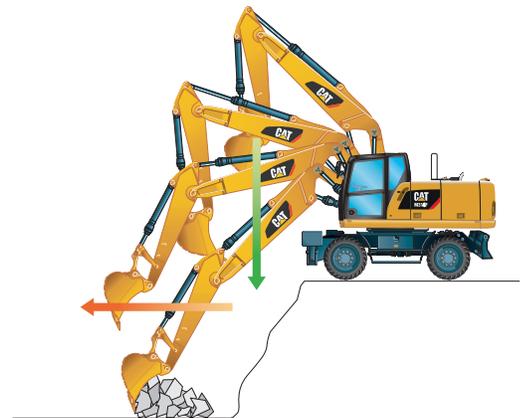
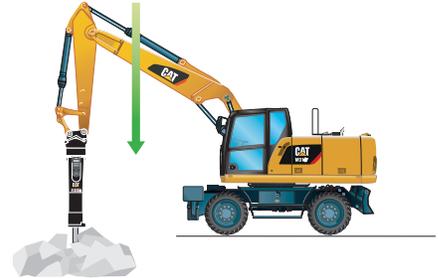
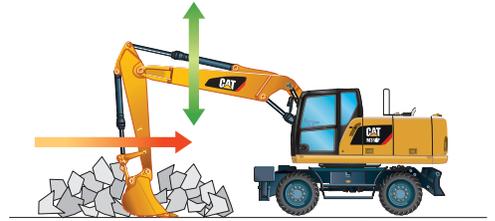
Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows more focus on stick and bucket, while the boom freely goes up and down without using pump flow.

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 M314F 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 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 reduces 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.

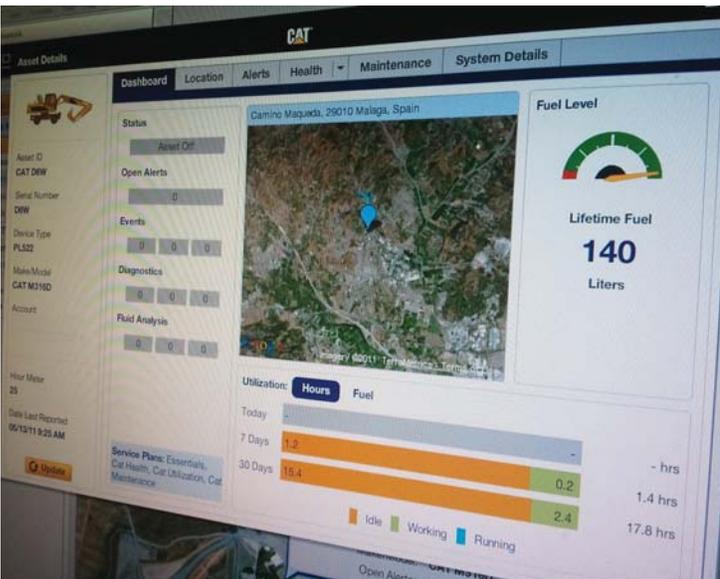
Featured Cat Connect technologies include the following:

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

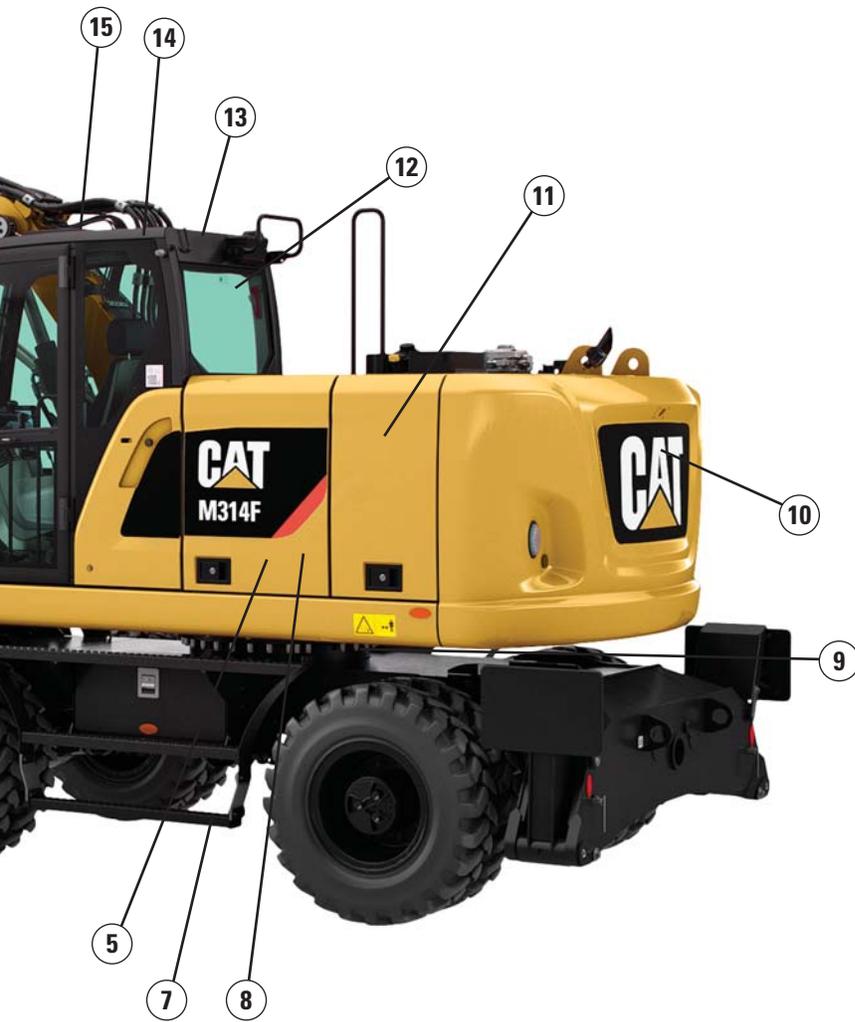
Safe and Quiet Cab

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

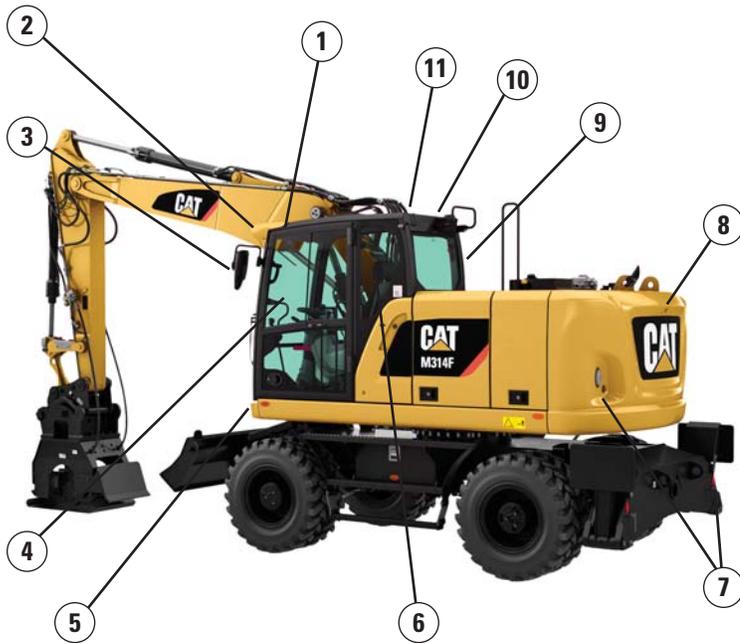


Great Views

- 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.



M314F Wheeled Excavator Specifications

Engine

Engine Model	Cat C4.4 ACERT ⁽¹⁾	
Ratings	2,000 rpm	
Engine Gross Power (maximum)		
ISO 14396	110 kW	148 hp
ISO 14396 (metric)	150 hp (PS)	
Net Power (Rated) ⁽²⁾		
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 ³
Maximum Torque at 1,400 rpm	560 N·m	413.0 lbf-ft
Number of Cylinders	4	

⁽¹⁾ Meets Tier 4 Final emission standards.

⁽²⁾ 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	9 km/h	5.6 mph
2nd Gear	37 km/h	23 mph
Creeper Speed		
1st Gear	3 km/h	1.9 mph
2nd Gear	12 km/h	7.5 mph
Drawbar Pull	73 kN	16,411.1 lbf
Maximum Gradeability (15 000 kg/33,070 lb)	52.5%	

Service Refill Capacities

Fuel Tank (total capacity)	280 L	74 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)	11.2 L	3 gal
Front Steering Axle (differential)	9 L	2.4 gal
Final Drive	2.4 L	0.6 gal
Powershift Transmission	2.5 L	0.7 gal

Swing Mechanism

Swing Speed	9.8 rpm	
Swing Torque	33 kN·m	24,420 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	6200 mm	20.3 ft
End of One-Piece Boom	8100 mm	26.6 ft
End of VA Boom	6700 mm	22 ft
End of Offset Boom	6700 mm	22 ft

Weights

Operating Weights*	14 360 kg-	31,658 lb-
	15 950 kg	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
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
Sticks**		
Short, 2000 mm (6'7")	610 kg	1,345 lb
Medium, 2300 mm (7'7")	630 kg	1,389 lb
Long, 2600 mm (8'6")	675 kg	1,488 lb
Industrial-Drop Nose, 2900 mm (9'6")	390 kg	860 lb
Counterweights		
Standard	2800 kg	6,173 lb
Optional	3300 kg	7,275 lb

*Operating weight includes medium stick, 2800 kg (6,172.936 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.

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

M314F Wheeled Excavator Specifications

Hydraulic System

Tank Capacity	89 L	23.5 gal
System	220 L	58.1 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	350 bar	5,076 psi
Maximum Flow		
Implement/Travel Circuit	180 L/min	48 gal/min
Auxiliary Circuit		
High Pressure	180 L/min	47.6 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) 445/70/R19.5 TL XF (Single Pneumatic)

Dozer Blade

Blade Type	Radial	
Width	2540 mm	8'4"
Blade Roll-Over Height	540 mm	1'9"
Blade Total Height	580 mm	1'11"
Maximum Lowering Depth From Ground	120 mm	0'5"
Maximum Raising Height Above Ground	470 mm	1'7"

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 ²	<8.2 ft/s ²
Maximum Whole Body		
ISO/TR 25398:2006	<0.5 m/s ²	<1.6 ft/s ²
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

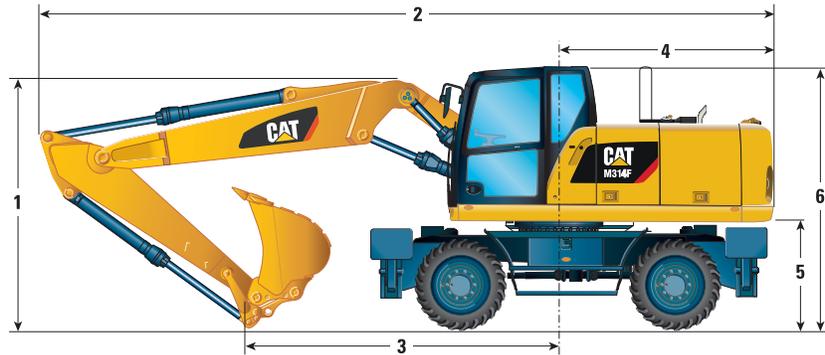
Operator Sound		
2000/14/EC	71 dB(A)	
Spectator Sound		
2000/14/EC	101 dB(A)	

- 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).

M314F Wheeled Excavator Specifications

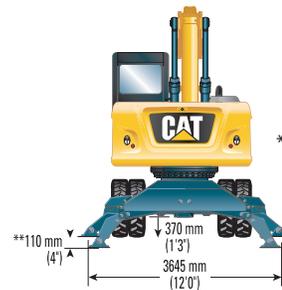
Dimensions

All dimensions are approximate.



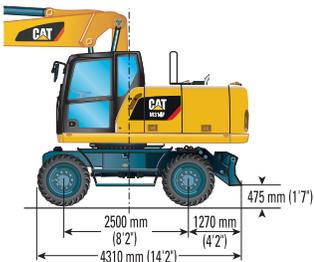
Stick Length	mm (ft/in)	VA Boom				One-Piece Boom				Offset Boom	
		2000 (6'7")	2300 (7'7")	2600 (8'6")	2900 (9'6")	2000 (6'7")	2300 (7'7")	2600 (8'6")	2900 (9'6")	2000 (6'7")	2300 (7'7")
1 Shipping Height with Falling Object Guard and Handrails Lowered (highest point between boom and cab)	mm (ft/in)	3280 (10'9")	3280 (10'9")	3280 (10'9")	3280 (10'9")	3280 (10'9")	3280 (10'9")	3330 (10'11")	3280 (10'9")	3280 (10'9")	3280 (10'9")
2 Shipping Length	mm (ft/in)	8460 (27'9")	8455 (27'9")	8445 (27'8")	8445 (27'8")	8250 (27'1")	8250 (27'1")	8185 (26'10")	8275 (27'2")	8455 (27'9")	8455 (27'9")
3 Support Point	mm (ft/in)	3820 (12'6")	3465 (11'4")	3315 (10'11")	3580 (11'9")	3485 (11'5")	3115 (10'3")	3450 (11'4")	3155 (10'4")	3810 (12'6")	3455 (11'4")
4 Tail Swing Radius	mm (ft/in)	2090 (6'10")				2090 (6'10")				2090 (6'10")	
5 Counterweight Clearance	mm (ft/in)	1230 (4'0")				1230 (4'0")				1230 (4'0")	
6 Cab Height – No Falling Object Guard, Handrails Lowered	mm (ft/in)	3150 (10'4")				3150 (10'4")				3150 (10'4")	
With Handrails not Lowered	mm (ft/in)	3210 (10'6")				3210 (10'6")				3210 (10'6")	
With Falling Object Guard	mm (ft/in)	3280 (10'9")				3280 (10'9")				3280 (10'9")	
7 Overall Machine Width											
Width with Outriggers on Ground	mm (ft/in)	3645 (12'0")				3645 (12'0")				3645 (12'0")	
Width with Outriggers Up	mm (ft/in)	2545 (8'4")				2545 (8'4")				2545 (8'4")	
Width with Blade	mm (ft/in)	2540 (8'4")				2540 (8'4")				2540 (8'4")	
8 Maximum Outriggers Depth	mm (in)	110 (4.3")				110 (4.3")				110 (4.3")	

Note: Values are with 10.00-20 pneumatic tires.

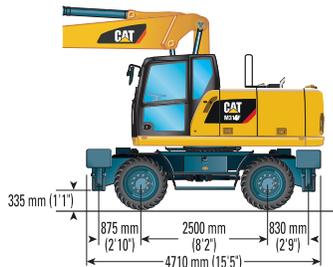


**Maximum tire clearance with outrigger fully down

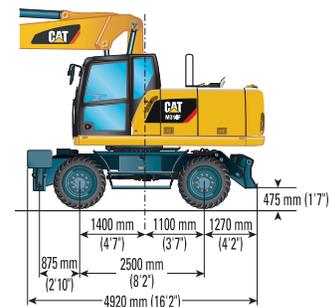
Undercarriage with dozer only



Undercarriage with 2 sets of outriggers

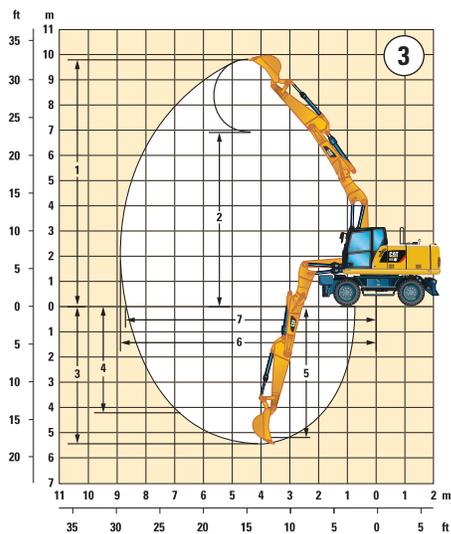
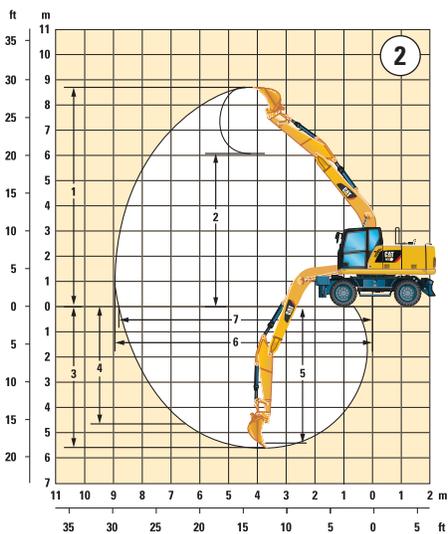
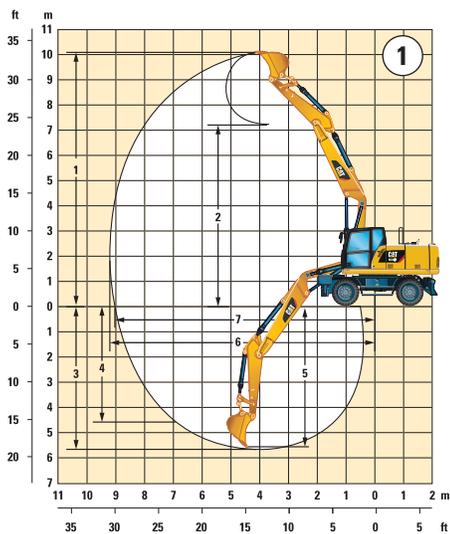


Undercarriage with 1 set of outriggers and dozer



M314F Wheeled Excavator Specifications

Working Ranges



		①				②				③	
		VA Boom				One-Piece Boom				Offset Boom	
Stick Length	mm (ft/in)	2000 (6'7")	2300 (7'7")	2600 (8'6")	2900 (9'6")	2000 (6'7")	2300 (7'7")	2600 (8'6")	2900 (9'6")	2000 (6'7")	2300 (7'7")
1 Digging Height	mm (ft/in)	9720 (31'11")	9870 (32'5")	10110 (33'2")	8500 (27'11")	8690 (28'6")	8700 (28'7")	8870 (29'1")	7140 (23'5")	9710 (31'10")	9850 (32'4")
2 Dump Height	mm (ft/in)	6850 (22'6")	7000 (23'0")	7240 (23'9")		5860 (19'3")	5920 (19'5")	6090 (20'0")		6840 (22'5")	6980 (22'11")
3 Digging Depth	mm (ft/in)	5200 (17'1")	5490 (18'0")	5790 (19'0")	4670 (15'4")	5030 (16'6")	5330 (17'6")	5630 (18'6")	4500 (14'9")	5200 (17'1")	5490 (18'0")
4 Vertical Wall Digging Depth	mm (ft/in)	4140 (13'7")	4310 (14'2")	4610 (15'1")		4270 (14'0")	4430 (14'6")	4740 (15'7")		4120 (13'6")	4280 (14'1")
5 Depth 2.5 m (8'2") in Straight Clean-Up	mm (ft/in)	5090 (16'8")	5380 (17'8")	5680 (18'8")		4790 (15'9")	5120 (16'10")	5430 (17'10")		5080 (16'8")	5380 (17'8")
6 Reach	mm (ft/in)	8710 (28'7")	8960 (29'5")	9250 (30'4")	7910 (25'11")	8470 (27'9")	8700 (28'7")	8990 (29'6")	7610 (25'0")	8710 (28'7")	8950 (29'4")
7 Reach at Ground Level	mm (ft/in)	8530 (28'0")	8780 (28'10")	9080 (29'9")	7705 (25'3")	8280 (27'2")	8520 (27'11")	8810 (28'11")	7400 (24'3")	8520 (27'11")	8780 (28'10")
Bucket Forces (ISO 6015)	kN (lbf)	103 (23,155)	103 (23,155)	103 (23,155)		103 (23,155)	103 (23,155)	103 (23,155)		103 (23,155)	103 (23,155)
Stick Forces (ISO 6015)	kN (lbf)	76 (17,085)	69 (15,512)	64 (14,388)		76 (17,085)	69 (15,512)	64 (14,388)		76 (17,085)	69 (15,512)

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 (36 in), 0.53 m³ (0.69 yd³) with tips J250 and CW-20-H.4.N quick coupler with a tip radius of 1437 mm (4'9").

Breakout force values are calculated with heavy lift on (no quick coupler) and a cutting edge radius of 1111 mm (3'9").

M314F 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						
							2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2000 mm (6'7")	2300 mm (7'7")					
Pin-on Buckets	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	
	mm	in	kg	lb	m ³	yd ³	With 2.8 mt (6,173 lb) Counterweight												
General Duty (GD)	450	18	302	665	0.20	0.27													
	600	24	349	768	0.31	0.40													
	900	36	431	950	0.53	0.69													
	1000	39	456	1005	0.60	0.79													
	1100	43	490	1081	0.68	0.89													
	1200	48	519	1145	0.76	1.00													
Heavy Duty (HD)	1200	48	528	1164	0.76	1.00													
							With 3.3 mt (7,275 lb) Counterweight												
General Duty (GD)	450	18	302	665	0.20	0.27													
	600	24	349	768	0.31	0.40													
	900	36	431	950	0.53	0.69													
	1000	39	456	1005	0.60	0.79													
	1100	43	490	1081	0.68	0.89													
	1200	48	519	1145	0.76	1.00													
Heavy Duty (HD)	1200	48	528	1164	0.76	1.00													
							With 2.8 mt (6,173 lb) Counterweight												
Pin Grabber Coupler	400	18	302	665	0.20	0.27													
	600	24	349	768	0.31	0.40													
	900	36	431	950	0.53	0.69													
	1000	39	456	1005	0.60	0.79													
	1100	43	490	1081	0.68	0.89													
	1200	48	519	1145	0.76	1.00													
	Heavy Duty (HD)	1200	48	528	1164	0.76	1.00												
							With 3.3 mt (7,275 lb) Counterweight												
General Duty (GD)	400	18	302	665	0.20	0.27													
	600	24	349	768	0.31	0.40													
	900	36	431	950	0.53	0.69													
	1000	39	456	1005	0.60	0.79													
	1100	43	490	1081	0.68	0.89													
	1200	48	519	1145	0.76	1.00													

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/m³ (3,540 lb/yd³)
- Maximum material density 1800 kg/m³ (3,000 lb/yd³)
- Maximum material density 1500 kg/m³ (2,500 lb/yd³)
- Maximum material density 1200 kg/m³ (2,000 lb/yd³)
- 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.

M314F Wheeled Excavator Specifications

Bucket Specifications and Compatibility

Contact your Cat dealer for special bucket requirements.

							Variable Adjustable Boom			One-Piece Boom			Offset Boom				
							2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2000 mm (6'7")	2300 mm (7'7")			
Stick Length	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	
CW20/CW20s Buckets					mm	in	kg	lb	m ³	yd ³	With 2.8 mt (6,173 lb) Counterweight						
Ditch Cleaning (DC)	1800	72	476	1050	0.68	0.89	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	2000	78	531	1171	1.00	1.31	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Ditch Cleaning Tilt (DCT)	1800	72	707	1559	0.61	0.80	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
General Duty (GD)	450	18	300	661	0.20	0.27	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	500	20	309	681	0.24	0.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	600	24	328	723	0.31	0.40	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	750	30	374	825	0.41	0.54	Orange	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	900	36	423	931	0.53	0.69	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	1000	39	452	995	0.60	0.78	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	1100	43	482	1062	0.68	0.89	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Heavy Duty (HD)	1200	48	511	1126	0.76	1.00	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	500	20	319	703	0.24	0.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Ditch Cleaning (DC)	1800	72	476	1050	0.68	0.89	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	2000	78	531	1171	1.00	1.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Ditch Cleaning Tilt (DCT)	1800	72	707	1559	0.61	0.80	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
General Duty (GD)	450	18	300	661	0.20	0.27	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	500	20	309	681	0.24	0.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	600	24	328	723	0.31	0.40	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	750	30	374	825	0.41	0.54	Orange	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	900	36	423	931	0.53	0.69	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	1000	39	452	995	0.60	0.78	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	1100	43	482	1062	0.68	0.89	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Heavy Duty (HD)	1200	48	511	1126	0.76	1.00	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	500	20	319	703	0.24	0.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Ditch Cleaning (DC)	1800	72	476	1050	0.68	0.89	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	2000	78	531	1171	1.00	1.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Ditch Cleaning Tilt (DCT)	1800	72	707	1559	0.61	0.80	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
General Duty (GD)	450	18	300	661	0.20	0.27	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	500	20	309	681	0.24	0.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	600	24	328	723	0.31	0.40	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	750	30	374	825	0.41	0.54	Orange	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	900	36	423	931	0.53	0.69	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	1000	39	452	995	0.60	0.78	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	1100	43	482	1062	0.68	0.89	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
Heavy Duty (HD)	1200	48	511	1126	0.76	1.00	Orange	Blue	Orange	Blue	Orange	Orange	Orange	Orange	Orange	Orange	Orange
	500	20	319	703	0.24	0.31	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange

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/m³ (3,540 lb/yd³)
- Maximum material density 1800 kg/m³ (3,000 lb/yd³)
- Maximum material density 1500 kg/m³ (2,500 lb/yd³)
- Maximum material density 1200 kg/m³ (2,000 lb/yd³)
- Not recommended

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M314F Wheeled Excavator Specifications

M314F 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.

Boom Type		One-Piece Boom																								
Counterweight		2.8 mt (6,173 lb)								3.3 mt (7,275 lb)																
Undercarriage		(1)				(2)				(3)				(1)				(2)				(3)				
Stick Length		2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	
Work Tools																										
Hydraulic Hammer	H110Es	Work Tool is a match																								
	H115Es	Work Tool is a match																								
Demolition and Sorting Grapple (D-Demolition shells, R-Recycling shells)	G310 GC	Work Tool is a match																								
	G310B-D/R	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only
	G313 GC	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only	Over the front only
Scrap and Demolition Shear	S320B	Boom Mount																								
Compactor Plate	CVP75	Work Tool is a match																								
Boom Type		Variable Adjustable Boom																								
Counterweight		2.8 mt (6,173 lb)								3.3 mt (7,275 lb)																
Undercarriage		(1)				(2)				(3)				(1)				(2)				(3)				
Stick Length		2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	2000 mm (6'7")	2300 mm (7'7")	2600 mm (8'6")	2900 mm (9'6")	
Work Tools																										
Hydraulic Hammer	H110Es	Work Tool is a match	Over the front only	Pin-on only	Work Tool is a match																					
	H115Es	Pin-on only	Pin-on only	Pin-on only	Work Tool is a match	Over the front only	Work Tool is a match																			
Demolition and Sorting Grapple (D-Demolition shells, R-Recycling shells)	G310 GC	Work Tool is a match	Over the front only	Pin-on only	Work Tool is a match																					
	G310B-D/R	Work Tool is a match	Work Tool is a match	Work Tool is a match	Pin-on only	Over the front only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only	Pin-on only										
	G313 GC	Work Tool is a match	Over the front only	Pin-on only	Work Tool is a match	Over the front only	Work Tool is a match																			
Scrap and Demolition Shear	S320B	Boom Mount																								
Compactor Plate	CVP75	Work Tool is a match																								
Pin Grabber Coupler	Cat-PG	This coupler is available for the M314F.																								

- (1) Dozer lowered
 - (2) 2 sets outriggers lowered
 - (3) Dozer and outrigger lowered
- Work Tool is a match
 - Pin-on only
 - Over the front only
 - Boom Mount
 - Over the front only with Cat-PG (match Pin-on and Cat-PG)
 - 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.

M314F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in kg, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (3300 kg), heavy lift on.

Medium Stick 2300 mm	Load at maximum reach (stick nose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Lift Capacity (kg)												mm
						3000 mm			4500 mm			6000 mm			7500 mm			
						Up	Down	Stabilizer	Up	Down	Stabilizer	Up	Down	Stabilizer	Up	Down	Stabilizer	
7500 mm	Lower rear dozer up				*3950	*3950	3700							*3450	*3450	*3450	4640	
	Lower rear dozer down				*3950	*3950	*3950							*3450	*3450	*3450		
	Lower f. dozer & r. stabilizer down				*3950	*3950	*3950							*3450	*3450	*3450		
	Lower 2 sets of stabilizers down				*3950	*3950	*3950							*3450	*3450	*3450		
6000 mm	Lower rear dozer up				*4550	4150	3750	*3450	2550	2300				*2900	2450	2200	6130	
	Lower rear dozer down				*4550	*4550	4200	*3450	*3450	2600				*2900	*2900	2500		
	Lower f. dozer & r. stabilizer down				*4550	*4550	*4550	*3450	*3450	*3450				*2900	*2900	*2900		
	Lower 2 sets of stabilizers down				*4550	*4550	*4550	*3450	*3450	*3450				*2900	*2900	*2900		
4500 mm	Lower rear dozer up				*5150	3950	3600	3650	2500	2300				*2700	1950	1750	6980	
	Lower rear dozer down				*5150	*5150	4050	3650	*4300	2550				*2700	*2700	2000		
	Lower f. dozer & r. stabilizer down				*5150	*5150	*5150	*4300	*4300	3950				*2700	*2700	*2700		
	Lower 2 sets of stabilizers down				*5150	*5150	*5150	*4300	*4300	*4300				*2700	*2700	*2700		
3000 mm	Lower rear dozer up				5500	3700	3300	3550	2400	2200				2550	1700	1550	7420	
	Lower rear dozer down				5450	*5950	3750	3500	*4550	2450				2550	*2700	1750		
	Lower f. dozer & r. stabilizer down				*5950	*5950	5950	*4550	*4550	3800				*2700	*2700	*2700		
	Lower 2 sets of stabilizers down				*5950	*5950	*5950	*4550	*4550	*4550				*2700	*2700	*2700		
1500 mm	Lower rear dozer up				5200	3400	3050	3400	2300	2050	2450	1650	1500	2450	1650	1500	7520	
	Lower rear dozer down				5150	*6550	3500	3400	*4800	2350	2450	*3050	1700	2450	*2800	1650		
	Lower f. dozer & r. stabilizer down				*6550	*6550	5650	*4800	*4800	3700	*3050	*3050	2650	*2800	*2800	2650		
	Lower 2 sets of stabilizers down				*6550	*6550	*6550	*4800	*4800	4450	*3050	*3050	*3050	*2800	*2800	*2800		
0 mm	Lower rear dozer up				5050	3250	2900	3300	2200	2000				2500	1650	1500	7320	
	Lower rear dozer down				5000	*6500	3350	3300	*4700	2250				2500	*3100	1700		
	Lower f. dozer & r. stabilizer down				*6500	*6500	5500	*4700	*4700	3600				*3100	*3100	2700		
	Lower 2 sets of stabilizers down				*6500	*6500	*6500	*4700	*4700	4350				*3100	*3100	*3100		
-1500 mm	Lower rear dozer up	*6750	6050	5300	5000	3250	2900	3300	2200	1950				2800	1850	1700	6760	
	Lower rear dozer down	*6750	*6750	6150	5000	*5700	3300	3300	*4100	2250				2800	*3200	1900		
	Lower f. dozer & r. stabilizer down	*6750	*6750	*6750	*5700	*5700	5450	*4100	*4100	3550				*3200	*3200	3050		
	Lower 2 sets of stabilizers down	*6750	*6750	*6750	*5700	*5700	*5700	*4100	*4100	*4100				*3200	*3200	*3200		
-3000 mm	Lower rear dozer up				*4000	3300	2950											
	Lower rear dozer down				*4000	*4000	3400											
	Lower f. dozer & r. stabilizer down				*4000	*4000	*4000											
	Lower 2 sets of stabilizers down				*4000	*4000	*4000											

*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.

M314F Wheeled Excavator Specifications

Lift Capacities – One-Piece Boom

All values are in lb, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (6,180 lb), heavy lift on.

Long Stick 8'6"	T	Load at maximum reach (stick nose/bucket pin)	Load over front	Load over rear	Load over side	Load point height												
						5.0 ft			10.0 ft			15.0 ft			20.0 ft			ft
						↑	↓	↔	↑	↓	↔	↑	↓	↔	↑	↓	↔	
20.0 ft	Lower rear dozer up														*5,000	5,000	4,600	19.98
	Lower rear dozer down														*5,000	*5,000	*5,000	
	Lower f. dozer & r. stabilizer down														*5,000	*5,000	*5,000	
	Lower 2 sets of stabilizers down														*5,000	*5,000	*5,000	
15.0 ft	Lower rear dozer up																	22.90
	Lower rear dozer down																	
	Lower f. dozer & r. stabilizer down																	
	Lower 2 sets of stabilizers down																	
10.0 ft	Lower rear dozer up																	24.41
	Lower rear dozer down																	
	Lower f. dozer & r. stabilizer down																	
	Lower 2 sets of stabilizers down																	
5.0 ft	Lower rear dozer up																	24.77
	Lower rear dozer down																	
	Lower f. dozer & r. stabilizer down																	
	Lower 2 sets of stabilizers down																	
0.0 ft	Lower rear dozer up																	24.11
	Lower rear dozer down																	
	Lower f. dozer & r. stabilizer down																	
	Lower 2 sets of stabilizers down																	
-5.0 ft	Lower rear dozer up																	22.24
	Lower rear dozer down																	
	Lower f. dozer & r. stabilizer down																	
	Lower 2 sets of stabilizers down																	
-10.0 ft	Lower rear dozer up																	18.86
	Lower rear dozer down																	
	Lower f. dozer & r. stabilizer down																	
	Lower 2 sets of stabilizers down																	

*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. 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.

M314F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in lb, bucket cylinder and bucket linkage installed, work tool: none, with counterweight (7,280 lb), heavy lift on.

Long Stick 8'6"	T	Load at maximum reach (stick nose/bucket pin)			Load over front			Load over rear			Load over side			Load point height						
		10.0 ft			15.0 ft			20.0 ft			25.0 ft			ft						
		Up	Down	Stabilizer	Up	Down	Stabilizer	Up	Down	Stabilizer	Up	Down	Stabilizer	Up	Down	Stabilizer	ft			
25.0 ft	Lower rear dozer up				*8,400	*8,400	8,000										*6,600	*6,600	*6,600	16.27
	Lower rear dozer down				*8,400	*8,400	*8,400										*6,600	*6,600	*6,600	
	Lower f. dozer & r. stabilizer down				*8,400	*8,400	*8,400										*6,600	*6,600	*6,600	
	Lower 2 sets of stabilizers down				*8,400	*8,400	*8,400										*6,600	*6,600	*6,600	
20.0 ft	Lower rear dozer up				*8,700	*8,700	8,200	*7,500	5,500	5,000							*5,500	5,000	4,500	21.06
	Lower rear dozer down				*8,700	*8,700	*8,700	*7,500	*7,500	5,600							*5,500	*5,500	5,100	
	Lower f. dozer & r. stabilizer down				*8,700	*8,700	*8,700	*7,500	*7,500	*7,500							*5,500	*5,500	*5,500	
	Lower 2 sets of stabilizers down				*8,700	*8,700	*8,700	*7,500	*7,500	*7,500							*5,500	*5,500	*5,500	
15.0 ft	Lower rear dozer up				*9,700	8,600	7,800	7,900	5,400	4,900							*5,200	4,000	3,600	23.82
	Lower rear dozer down				*9,700	*9,700	8,800	7,800	*9,000	5,500							*5,200	*5,200	4,100	
	Lower f. dozer & r. stabilizer down				*9,700	*9,700	*9,700	*9,000	*9,000	8,500							*5,200	*5,200	*5,200	
	Lower 2 sets of stabilizers down				*9,700	*9,700	*9,700	*9,000	*9,000	*9,000							*5,200	*5,200	*5,200	
10.0 ft	Lower rear dozer up				11,900	8,000	7,200	7,600	5,200	4,700	5,400	3,600	3,300	*5,100	3,500	3,200	*5,100	3,500	3,200	25.26
	Lower rear dozer down				11,800	*12,400	8,100	7,600	*9,600	5,300	5,300	*6,100	3,700	*5,100	*5,100	3,600	*5,100	*5,100	3,600	
	Lower f. dozer & r. stabilizer down				*12,400	*12,400	*12,400	*9,600	*9,600	8,200	*6,100	5,800	*5,100	*5,100	*5,100	*5,100	*5,100	*5,100		
	Lower 2 sets of stabilizers down				*12,400	*12,400	*12,400	*9,600	*9,600	*9,600	*6,100	*6,100	*6,100	*5,100	*5,100	*5,100	*5,100	*5,100	*5,100	
5.0 ft	Lower rear dozer up				11,200	7,400	6,600	7,300	4,900	4,400	5,300	3,500	3,200	5,100	3,300	3,000	*5,300	*5,300	*5,300	25.62
	Lower rear dozer down				11,100	*13,900	7,500	7,300	*10,200	5,000	5,200	*7,700	3,600	5,000	*5,300	3,400	*5,300	*5,300	*5,300	
	Lower f. dozer & r. stabilizer down				*13,900	*13,900	12,200	*10,200	*10,200	7,900	*7,700	*7,700	5,700	*5,300	*5,300	*5,300	*5,300	*5,300	*5,300	
	Lower 2 sets of stabilizers down				*13,900	*13,900	*13,900	*10,200	*10,200	9,600	*7,700	*7,700	6,900	*5,300	*5,300	*5,300	*5,300	*5,300	*5,300	
0.0 ft	Lower rear dozer up	*7,400	*7,400	*7,400	10,800	7,000	6,200	7,100	4,700	4,200				5,200	3,400	3,100	*5,900	*5,900	*5,900	24.97
	Lower rear dozer down	*7,400	*7,400	*7,400	10,700	*14,100	7,100	7,100	*10,200	4,800				5,200	*5,900	3,500	*5,900	*5,900	*5,900	
	Lower f. dozer & r. stabilizer down	*7,400	*7,400	*7,400	*14,100	*14,100	11,700	*10,200	*10,200	7,700				*5,900	*5,900	5,600	*5,900	*5,900	*5,900	
	Lower 2 sets of stabilizers down	*7,400	*7,400	*7,400	*14,100	*14,100	*14,100	*10,200	*10,200	9,400				*5,900	*5,900	*5,900	*5,900	*5,900	*5,900	
-5.0 ft	Lower rear dozer up	*14,500	12,800	11,200	10,700	6,900	6,100	7,000	4,600	4,200				5,800	3,800	3,400	*6,800	*6,800	*6,800	23.20
	Lower rear dozer down	*14,500	*14,500	13,000	10,600	*12,700	7,000	7,000	*9,100	4,700				5,700	*6,800	3,900	*6,800	*6,800	*6,800	
	Lower f. dozer & r. stabilizer down	*14,500	*14,500	*14,500	*12,700	*12,700	11,600	*9,100	*9,100	7,600				*6,800	*6,800	6,200	*6,800	*6,800	*6,800	
	Lower 2 sets of stabilizers down	*14,500	*14,500	*14,500	*12,700	*12,700	*12,700	*9,100	*9,100	*9,100				*6,800	*6,800	*6,800	*6,800	*6,800	*6,800	
-10.0 ft	Lower rear dozer up				*9,400	7,000	6,300													
	Lower rear dozer down				*9,400	*9,400	7,100													
	Lower f. dozer & r. stabilizer down				*9,400	*9,400	*9,400													
	Lower 2 sets of stabilizers down				*9,400	*9,400	*9,400													

*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.

M314F 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 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 (both pin grabber or universal/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, 2800 kg (6,173 lb)
- Engine emergency shutoff switch
- Mirrors, wide angle, frame and cab
- Product Link
- S•O•SSM sampling valves for engine oil, hydraulic oil and coolant

*Not compatible with the falling objects guards

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, 4815 mm (15'10")
 - VA boom (two piece), 5028 mm (16'6")
 - Offset boom, 5028 mm (16'6")
- Sticks
 - 2000 mm (6'7")
 - 2300 mm (7'7")
 - 2600 mm (8'6")
 - 2900 mm (9'6") 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 radial blade only
- Front blade (radial)/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, 3300 kg (7,275 lb)
- Fenders, front and rear
- Ride Control
- Tires (see pg. 22)
- Attachments (see pg. 25-27)

*without autolube

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AEHQ7671 (11-2015)

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