

M315F

Wheeled Excavator

2017



Engine

Engine Model	Cat® C4.4 ACERT™
Emissions	EU Stage IV
Net Power (maximum)	
ISO 9249 at 1,800 rpm	112 kW (150 hp)
ISO 9249 at 1,800 rpm (metric)	152 hp (PS)
ISO 14396 at 1,800 rpm (gross)	117 kW (157 hp)
ISO 14396 at 1,800 rpm (metric)	159 hp (PS)

Weights

Operating Weight with Attachment	16 280 kg-18 660 kg
----------------------------------	---------------------

Bucket Specifications

Bucket Capacities	0.2 m ³ -1 m ³
-------------------	--------------------------------------

Working Ranges

Maximum Reach at Ground Level	8740 mm
Maximum Digging Depth	5570 mm

Drive

Maximum Travel Speed	35 km/h
----------------------	---------

Made to conquer new markets.

- Work everywhere; swing with confidence, even in confined areas.
- Be efficient; experience optimum performance, stability and speed.
- Do all kinds of jobs; reach unlimited versatility, with multiple configurations and Cat attachments.

Made to keep your costs down.

- Low fuel consumption.
- Keep it Simple! Maintenance is quick and easy.

Made to make operation easy and pleasant.

- You need space? The rear of machine is compact, not the cab.
- Have a seat! Enjoy the quietness and comfort of the cab.
- Feel relaxed, we help you make sure you're safe.

Enjoy integrated technologies; they act transparently.

Contents

A New Era of Compact Efficiency4

Sustainability4

Engine5

Built-in Fuel Savers That Add Up5

Premium Comfort6

Simplicity and Functionality7

The Next Generation8

Cruise Control8

Smart Technologies9

Dig and Go Auto Axle Lock.....9

Hydraulics10

Undercarriage11

Booms and Sticks12

SmartBoom™.....13

Ride Control.....13

Attachments.....14

Serviceability16

Integrated Technologies17

Safety18

Unmatched Visibility.....20

Complete Customer Care.....20

Specifications.....21

Standard Equipment.....31

Optional Equipment.....33

Notes.....34





Working hard has never been easier! Our compact radius introduces you into new markets like those with tight-quarter tasks and turning radius constraints. They are designed to help you take on the wide variety of challenges you face everyday, as efficiently as their standard radius counterpart.

F Series Wheeled Excavators – Easier Than Ever.

A New Era of Compact Efficiency

Think Big with our Compacts

M315F vs. M314F

-20%
Rear Swing
Radius

-6%
Front Swing
Radius

+6%
Net Power

+3.5%
Stability

Similar
Travel
Speed

Same
Reach & Lift
Capacity

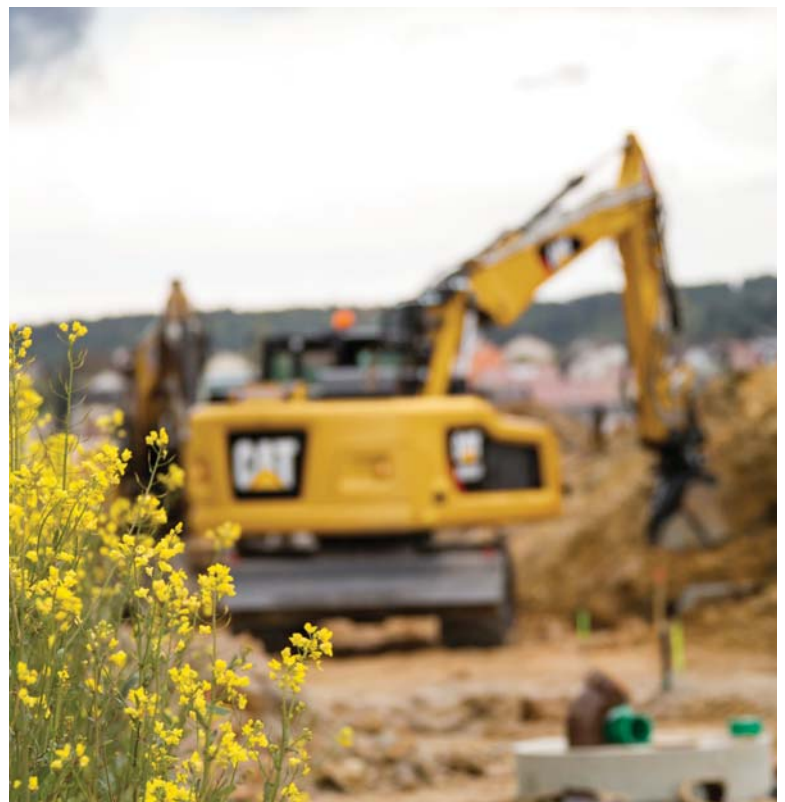


Are you longing for the day compact wheeled excavators will be able to deliver as much as their standard radius counterpart? The time has come. You're ready to take on more challenging projects which call for compactness, strength and reach? You just want to have the right-size machine anywhere there's work? Try our compact and stop trading efficiency against short radius.

Sustainability Generations Ahead in Every Way

Keep working in any city, even where environmental regulations are stringent.

- Reduce fuel consumption with built-in fuel savers like the Eco Mode
- Reduce particulate matters with fit-for-life Diesel Particulate Filter (DPF)
- Engine meets Stage IV emission standards
- Compatibility with ultra-low-sulfur diesel (ULSD) fuel with 10 ppm of sulfur or less
- Compatibility with up to B20 biodiesel fuel blended with ULSD
- Compatibility with Cat BIO HYDO™ Advanced HEES™
- Long service intervals and quick couplings, meaning fewer fluids and disposals
- Low sound levels for noise sensitive urban areas



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.

Do You Want More Power?

You know that size only is not what makes the difference. **Get 6% more power** and don't jeopardize efficiency for just a short swing radius.

A Transparent Emission Solution That Works

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

- **Transparent:** no operator intervention
- **Durable:** fit-for-life Diesel Particulate Filter
- **Efficient:** no work interruption, even in the case of extended idling time
- **Simple:** minimum maintenance – longitudinal engine installation, which further simplifies maintenance

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.
- **Engine Idle Shutdown:** turns the engine off when it's been idling for more than a pre-set amount of time.
- **On-Demand Cooling System:** variable speed and on-demand fan.
- **Refined Eco Mode:** reduces engine speed while delivering the same power.
- **Automatic Shift to Travel Mode** when you start driving.
- **Optimized Travel Mode:** travel mode rpm levels are set automatically on-demand only to further reduce fuel consumption.



Premium Comfort

When Compact Radius Does Not Mean Reduced Cab Size



Why Should the Cab Be Smaller?

Enjoy the same cab as on any other of our standard models. All cabs have the same size.

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. Several areas provide sufficient room to store a hard hat, a drink, phone, or keys.

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 ventilated seats are available.

Safety Is Not Optional

ROPS cab, compatible with FOPS, 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 and left pedal controls assignments: can be set up as desired and per tool
- Optional advanced joystick offering more controls (two sliders, five buttons each)
- Automatic air conditioning
- Optional heated mirrors are also electrically adjustable from the cab

Low Sound Levels, Less Fatigue

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

Outstanding Visibility: See the Difference!

- Glass areas are outstandingly large
- Standard LED working lights and halogen front roading lights
- LED dome light
- Standard rearview AND sideview wide angle cameras
- Wide angle mirrors for better visibility even down to the ground
- Parallel intermittent (four speeds) wipers covering the whole windshield

Standard LED Lights for BOTH Cameras to See What's Going on Around, Day or Night

The rear camera is integrated into the counterweight for enhanced protection.

Split-Screen View of BOTH Cameras on the Same Monitor

The views from both cameras are displayed side by side on the additional wide color monitor for better visibility at first glance.

Large Color Machine 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 (including the new Cat Tilt-Rotator) 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

Swing and Auto Travel Lock: Press, Go and Relax

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.

The swing lock can be applied independently from the implements lock at low speed (below 5 km/h).

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 hydraulic valve compartment and routings offer a simple and clean design to help ensure durability.
- **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 second 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, high pressure and hydraulic quick coupler lines and circuits: they all come standard.



Undercarriage

Strength and Versatility at 35 km/h



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. The drive shaft offers longer service intervals (1,000 hours).

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.

Blade Design

- Optimized design to provide rigidity, stability and ease of maintenance.
- Optional parallel kinematic to keep the blade parallel to the ground, in every height position.
- 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

- **Medium stick** – 2300 mm for greater crowd force and lift capacity
- **Long stick** – 2450 mm for optimum balance between depth/reach and compactness

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. The Cat Tilt-Rotator lets you operate the highest versatile system.
- **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 will further extend your versatility.



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.



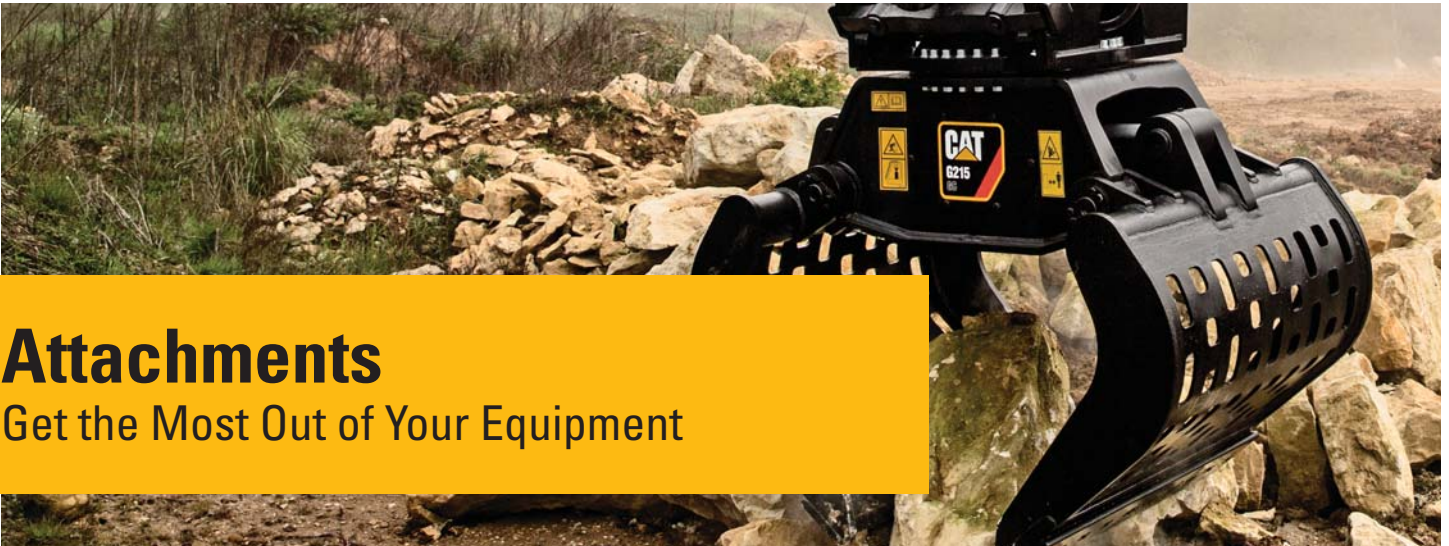


NEW! Cat Tilt-Rotator and Tilt-Rotator-Ready Option – If You Need Extreme Versatility, You Need a Cat Tilt-Rotator

Tilt-Rotators eliminate the need to constantly reposition the machine, by providing a 40° tilt and 360° rotary connection between its integrated quick coupler and any Cat attachment.

The wheeled excavator Tilt-Rotator-Ready Package includes all that you need, with lines, circuits, software and advanced joysticks. This is a perfectly integrated interface between the machine and this tool.

NEW! Cat Tilt-Rotator parameters can be set directly from the machine monitor.



Attachments

Get the Most Out of Your Equipment



Save Time with Every Attachment Change

Perform hydraulic attachment changes in seconds ... The new Auto-Connect hydraulic coupler automates work tool exchange fully, so operators can change attachments quickly, from the safety and comfort of their cabs. The unique design of the Auto-Connect prevents ruptured hoses, avoiding unplanned downtime. It makes your operators more efficient and productive.



Power Match

Match your Cat hydraulic attachments 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, our compact can help. And you can easily expand all the possibilities it offers by utilizing any of the variety of Cat attachments.

Change Jobs Quickly

A quick coupler brings the ability to quickly change attachments and increase your flexibility. The new quick coupler circuit and lines are compatible with both Cat dedicated and Pin Grabber Couplers and do not require any change or addition to the machine.

Dig, Load and Landscape

A wide range of buckets offers solutions for digging, excavating, trenching, loading and finishing. Ditch Cleaning buckets are suitable for grading and finishing in landscaping applications or for loading loose material that is stockpiled, where teeth would damage the surface.

Sort and Handle Material

With increasing environmental regulations, you need efficient ways to deal with waste. Save on transportation, manpower and dumping costs with Cat grapples by sorting debris at source and trucking it separately. When you need good penetration, you can count on Cat digging grabs.

Build, Compact and Maintain Roads

Whether you do finish grading with leveling buckets, ditch cleaning, sewer and water, or compaction, the machine in combination with the appropriate attachment will do the job quickly.

Break and Scrap

When a structure needs to be demolished, it has to be done quickly. Cat E Series hammers deliver very high blow rates, and shears provide effective scrap processing. They also have the ability to rotate 360°.



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.

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.

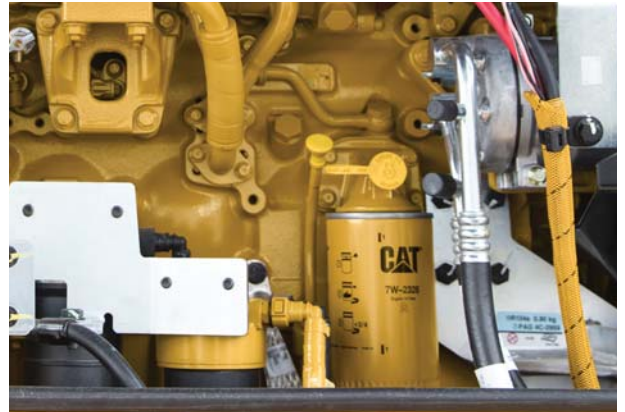
A Fresh Idea

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 Standard Features

An electric lubrication system is a 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 work 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:



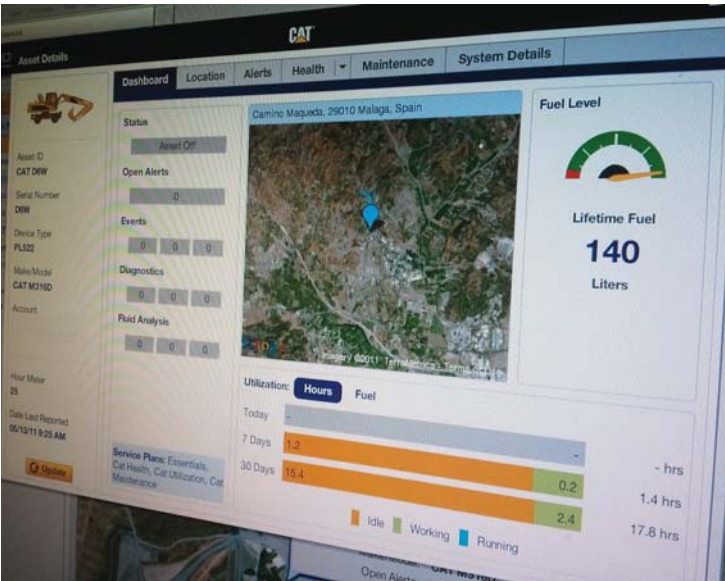
Equipment Management – increase uptime and reduce operating costs.



Productivity – monitor production and manage job site efficiency.



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

Cab Ingress

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
- Convenient door handrail
- Tilttable console to make sure the way in and out is free of obstacle

Safe and Quiet Cab

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





Embedded Features

Smart embedded devices help enforce safe behavior:

- 1) Laminated windshield and skylight window. One-piece 10 mm windshield and skylight, fulfilling EN356 P5A standards.
- 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) Adjustable 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
- 16) Quick coupler control switch, ISO 13031 compliant

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
- Dedicated LED lights for both rear and side cameras

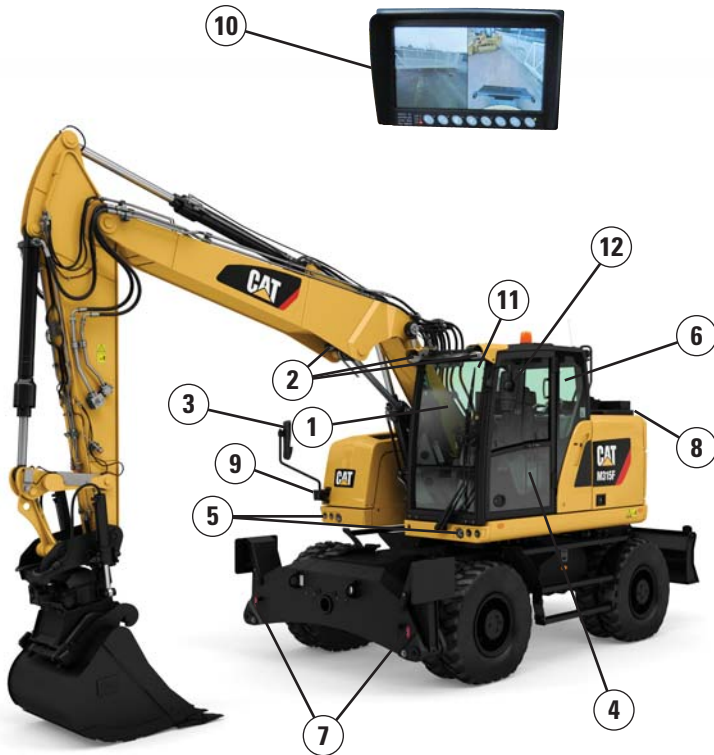


Great Views

- 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
- Standard sideview camera, to check nothing is hidden to you from the front right hand side to the rear of the machine
- Monitor split-screen to easily check cameras rearview and sideview on the same display
- 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) Large skylight and windshield glass areas
- 2) Efficient lighting with standard LED lights for all working lights
- 3) Optional electrically adjustable and heated mirrors
- 4) Great left hand side visibility with all glass door
- 5) Halogen front roading lights
- 6) Wide rear window
- 7) Red reflectors, on counterweight and rear blade/outriggers
- 8) Standard wide rearview camera with LED light
- 9) Standard wide sideview camera with LED light
- 10) Split-screen display of both cameras on the same monitor
- 11) Large right hand side window
- 12) 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.



M315F Wheeled Excavator Specifications

Engine

Engine Model	Cat C4.4 ACERT ⁽¹⁾
Ratings	1,800 rpm
Engine Gross Power (maximum)	
ISO 14396	117 kW (157 hp)
ISO 14396 (metric)	159 hp (PS)
Net Power (Rated) ⁽²⁾	
ISO 9249/SAE J1349	112 kW (150 hp)
ISO 9249/SAE J1349 (metric)	152 hp (PS)
80/1269/EEC	112 kW (150 hp)
Net Power (maximum)	
ISO 9249/SAE J1349	112 kW (150 hp)
ISO 9249/SAE J1349 (metric)	152 hp (PS)
80/1269/EEC	112 kW (150 hp)
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L
Maximum Torque at 1,400 rpm	710 N·m
Number of Cylinders	4

⁽¹⁾ Meets Stage IV emission standards.

⁽²⁾ Rated speed 1,800 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 altitude. Automatic derating occurs after 3000 m.

Transmission

Forward/Reverse	
1st Gear	10 km/h
2nd Gear	35 km/h
Creeper Speed	
1st Gear	3 km/h
2nd Gear	10 km/h
Drawbar Pull	104 kN
Maximum Gradeability (16 500 kg)	78%

Service Refill Capacities

Fuel Tank (total capacity)	295 L
Diesel Exhaust Fluid Tank	19 L
Cooling System	38 L
Engine Crankcase	10.5 L
Rear Axle Housing (differential)	14 L
Front Steering Axle (differential)	10.5 L
Final Drive	2.5 L
Powershift Transmission	2.5 L

Swing Mechanism

Maximum Swing Speed	8.1 rpm
Maximum Swing Torque	37.5 kN·m

Undercarriage

Ground Clearance	370 mm
Maximum Steering Angle	35°
Oscillation Axle Angle	±8.5°
Minimum Turning Radius	
Outside of Tire	6300 mm
End of VA Boom	7100 mm
End of Offset Boom	7100 mm

Weights

Operating Weights*	16 490 kg-18 030 kg
Weights	
VA Boom	
Rear Dozer Only	16 490 kg
Front Dozer, Rear Outriggers	17 470 kg
Offset Boom	
Rear Dozer Only	17 050 kg
Front Dozer, Rear Outriggers	18 030 kg
Sticks**	
Medium, 2300 mm	615 kg
Long, 2450 mm	660 kg
Counterweight	
Standard	3750 kg

*Operating weight includes medium stick, 3750 kg counterweight, full fuel tank, operator, quick coupler (210 kg) bucket (490 kg) and dual pneumatic tires. Weight varies depending on configuration.

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

M315F Wheeled Excavator Specifications

Hydraulic System

Tank Capacity	115 L
System	230 L
Maximum Pressure	
Implement Circuit	
Normal	350 bar
Heavy Lift	375 bar
Travel Circuit	350 bar
Auxiliary Circuit	
High Pressure	350 bar
Medium Pressure	185 bar
Swing Mechanism	330 bar
Maximum Flow	
Implement/Travel Circuit	220 L/min
Auxiliary Circuit	
High Pressure	220 L/min
Medium Pressure	48 L/min
Swing Mechanism	70 L/min

Tires

Standard	10.00-20 (Dual Pneumatic)
Optional	10.00-20 (Dual Solid Rubber) 315/70R22.5 (Dual Pneumatic – No spacer ring between tires) 445/70/R19.5 TL XF (Single Pneumatic)

Dozer Blade

Blade Type	Radial	Parallel
Width	2540 mm	2550 mm
Blade Roll-Over Height	540 mm	576 mm
Blade Total Height	580 mm	680 mm
Maximum Lowering Depth from Ground	120 mm	131 mm
Maximum Raising Height above Ground	475 mm	496 mm

Emissions and Safety

Engine Emissions	Stage IV
Diesel Exhaust Fluid	Must meet ISO 22241
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
Vibration Levels	
Maximum Hand/Arm	
ISO 5349:2001	<2.5 m/s ²
Maximum Whole Body	
ISO/TR 25398:2006	<0.5 m/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

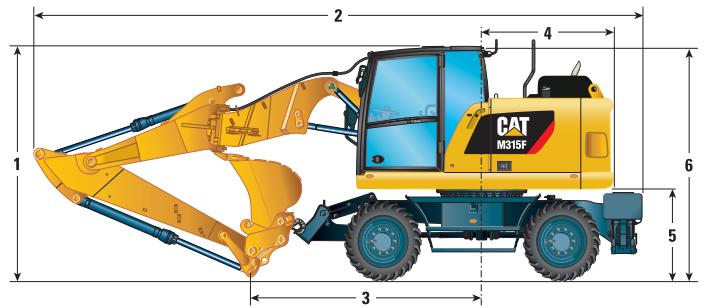
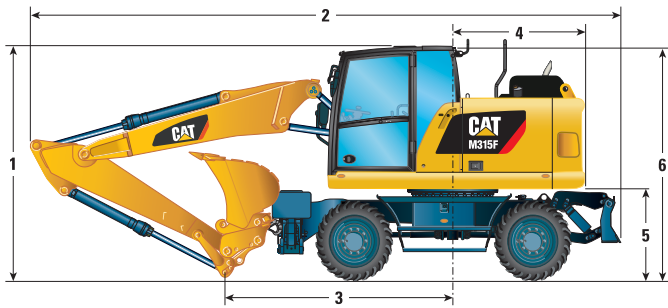
Operator Sound	
2000/14/EC	71 dB(A)
Spectator Sound	
2000/14/EC	100 dB(A)

- 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).

M315F Wheeled Excavator Specifications

Dimensions

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



		Variable Adjustable Boom		Offset Boom	
Stick Length	mm	2300	2450	2300	2450
1 Shipping Height with Falling Object Guard and Handrails Lowered (highest point between boom and cab)	mm	3300	3300	3300	3300
2 Shipping Length (dozer blade lowered)	mm	8140	8150	8140	8150
3 Support Point	mm	3370	3140	3360	3120
4 Tail Swing Radius	mm	1750		1750	
5 Counterweight Clearance	mm	1260		1260	
6 Cab Height – No Falling Object Guard, Handrails Lowered	mm	3170		3170	
No Falling Object Guard, Handrails not Lowered	mm	3240		3240	
With Falling Object Guard	mm	3300		3300	
7 Overall Machine Width		Radial/Parallel Blade Undercarriage			
Width with Outriggers on Ground	mm	3645/3680		3645/3680	
Width with Outriggers Up	mm	2545/2550		2545/2550	
Width with Blade	mm	2540/2550		2540/2550	
8 Maximum Outriggers Depth	mm	120/130		120/130	

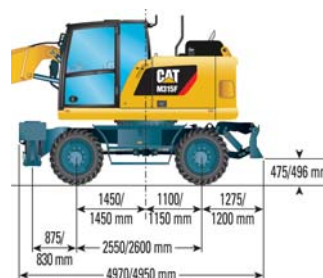
*Maximum tire clearance with outrigger fully down



Roading position with 2450 mm stick

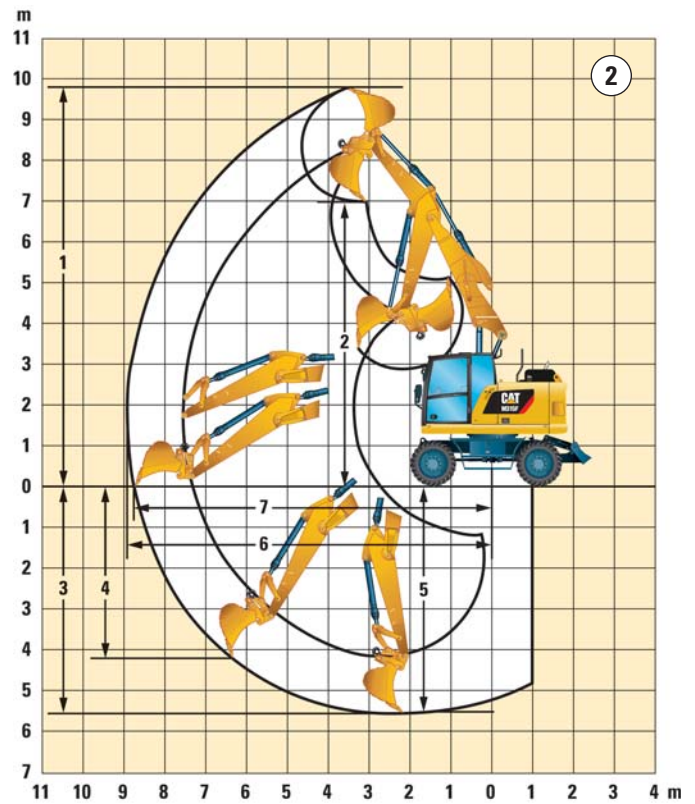
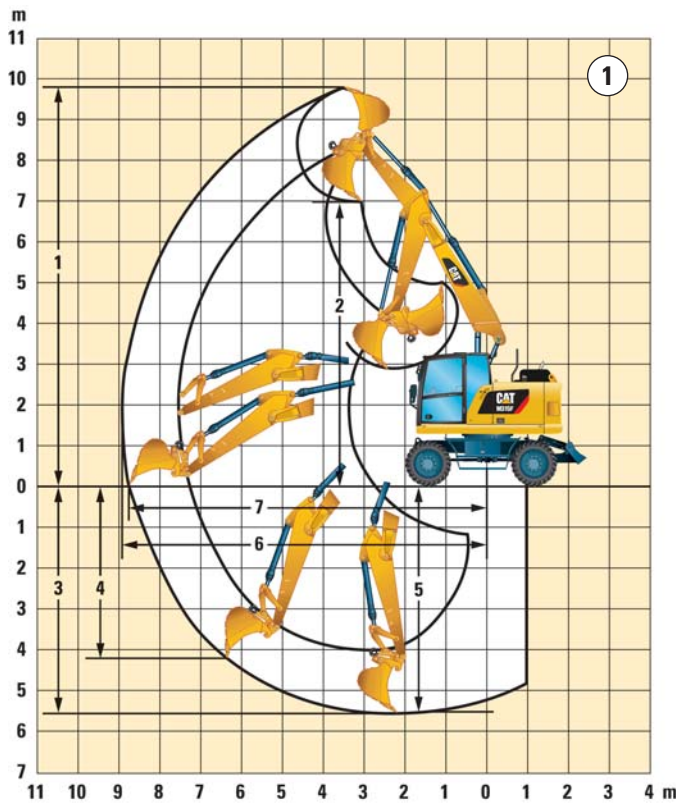


Undercarriage with 1 set of outriggers and dozer



M315F Wheeled Excavator Specifications

Working Ranges



		①		②	
		Variable Adjustable Boom		Offset Boom	
Stick Length	mm	2300	2450	2300	2450
1 Digging Height	mm	9900	9770	9880	9740
2 Dump Height	mm	7030	6930	7010	6900
3 Digging Depth	mm	5460	5570	5460	5570
4 Vertical Wall Digging Depth	mm	4280	4160	4260	4130
5 Depth 2.5 m in Straight Clean-Up	mm	5350	5460	5350	5460
6 Reach	mm	8880	8920	8870	8910
7 Reach at Ground Level	mm	8700	8740	8690	8720
Bucket Forces (ISO 6015)	kN	103	103	103	103
Stick Forces (ISO 6015)	kN	69	68	69	68

Working range dimensions with pneumatic tires.

Range values are calculated with GD Bucket, 1100 mm, 0.68 m³ with tips J250 and CW-20-H.4.N quick coupler with a tip radius of 1437 mm.

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

M315F Wheeled Excavator Specifications

Bucket Specifications and Compatibility

Contact your Cat dealer for special bucket requirements.

Stick Length				Variable Adjustable Boom								Offset Boom							
				2300 mm				2450 mm				2300 mm				2450 mm			
	Width	Weight	Capacity (ISO)	Free on wheels	Rear dozer lowered	Front dozer/rear outriggers raised	Front dozer/rear outriggers lowered	Free on wheels	Rear dozer lowered	Front dozer/rear outriggers raised	Front dozer/rear outriggers lowered	Free on wheels	Rear dozer lowered	Front dozer/rear outriggers raised	Front dozer/rear outriggers lowered	Free on wheels	Rear dozer lowered	Front dozer/rear outriggers raised	Front dozer/rear outriggers lowered
Pin-on Buckets				mm	kg	m ³													
General Duty (GD)	450	302	0.20																
	600	349	0.31																
	900	431	0.53																
	1000	456	0.60																
	1100	490	0.68																
	1200	519	0.76																
Heavy Duty (HD)	1200	528	0.76																
Pin Grabber Coupler				mm	kg	m ³													
General Duty (GD)	450	302	0.20																
	600	349	0.31																
	900	431	0.53																
	1000	456	0.60																
	1100	490	0.68																
	1200	519	0.76																
CW20/CW20s Buckets				mm	kg	m ³													
Ditch Cleaning (DC)	1800	476	0.68																
	2000	531	1.00																
Ditch Cleaning Tilt (DCT)	1800	707	0.61																
General Duty (GD)	450	300	0.20																
	500	309	0.24																
	600	328	0.31																
	750	374	0.41																
	900	423	0.53																
	1000	452	0.60																
	1100	482	0.68																
	1200	511	0.76																
Heavy Duty (HD)	500	319	0.24																
	1200	511	0.76																
TRS10 Tilt-Rotator System				mm	kg	m ³													
General Duty (GD)	450	300	0.20																
	500	309	0.24																
	600	328	0.31																
	750	374	0.41																
	900	423	0.53																
	1000	452	0.60																
	1100	482	0.68																
	1200	511	0.76																

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
- Maximum material density 1800 kg/m³
- Maximum material density 1500 kg/m³
- Maximum material density 1200 kg/m³
- Not recommended

Caterpillar recommends using appropriate attachments to maximize the value customers receive from our products. Use of attachments, 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 an attachment resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

M315F Wheeled Excavator Specifications

Attachment Offering Guide*

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

Boom Type		Undercarriage Type		Variable Adjustable Boom								Offset Boom								
				Radial Dozer Blade				Parallel Dozer Blade				Radial Dozer Blade				Parallel Dozer Blade				
Undercarriage		Stick Length		(1)		(2)		(1)		(2)		(1)		(2)		(1)		(2)		
		2300 mm	2450 mm	2300 mm	2450 mm	2300 mm	2450 mm	2300 mm	2450 mm	2300 mm	2450 mm	2300 mm	2450 mm	2300 mm	2450 mm	2300 mm	2450 mm	2300 mm	2450 mm	
Attachments																				
Hydraulic Hammer	H110Es																			
	H115Es																			
Demolition and Sorting Grapple (D—Demolition shells, R—Recycling shells)	G310 GC																			
	G310 GC fixed CAN																			
	G310B-D/R																			
	G310B-D/R fixed CAN																			
	G313 GC																			
	G313 GC fixed CAN																			
Scrap and Demolition Shear	S320B																			
Compactor Plate	CVP75																			
Material Handling Grapples																				
Orange Peel Grapple (5 Tines)	GSM22 – 250 L, 300 L, 400 L	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
	GSM22 – 500 L	1.8	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.8	1.8	1.2	1.2	1.8	1.8	1.8	
	GSM25 – 400 L	1.2	1.2	1.8	1.8	1.2	1.2	1.8	1.8				1.8	1.8					1.8	1.8
	GSM25 – 500 L			1.8	1.8				1.8	1.8			1.8	1.8					1.8	1.8
	GSM25 – 600 L			1.8	1.8				1.8	1.8			1.8	1.8					1.8	1.8
	GSM25 – 800 L			1.2	1.2				1.2	1.2			1.2	1.2					1.2	1.2
Clamshell Grapple (Digging) Width from 310 mm to 1000 mm	GG25 – 170 L up to	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
	GG25 – 580 L			1.8	1.8				1.8	1.8			1.8	1.8				1.8	1.8	
Material Density		1.2 [T/m ³] (less dense material)								1.8 [T/m ³] (standard material)										
Cat Tilt-Rotator TRS10																				
Hinge Type (Top/Bottom)	S60/S60																			
	Pin-On/S60																			
	Pin-On/CW Coupler																			
Demolition and Sorting Grapple	G210 GC G213 GC	These D & S Grapples, Compactor Plate and also Buckets are available for the Tilt-Rotator. Match is dependent on application. Consult your dealer for correct match.																		
Compactor Plate	CVP75																			
Hydraulic Hammer	H110Es/H115Es	Hydraulic hammers are allowed with limited usage.																		
Quick Couplers																				
Pin Grabber Coupler	Cat PG	These couplers are available for the M315F.																		
Dedicated Quick Coupler	CW-20/CW-20s																			
	CWAC-40 (AutoConnect)																			

- (1) Dozer lowered
- (2) Dozer and outrigger lowered

	Attachment is a match		Over the front only with Cat dedicated coupler (match Pin-on and CW)
	Pin-on, Cat dedicated or Pin Grabber coupler		Over the front only with Cat Pin Grabber coupler (match Pin-on, CW and Cat PG)
	Pin-on only		Over the front only with Cat AutoConnect (match Pin-on, CW, Cat PG and CWAC)
	Over the front only		Not recommended
	Boom mount		

*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 attachment match.

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

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

M315F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in kg, bucket cylinder and bucket linkage installed, attachment: none, with counterweight (3750 kg), heavy lift on.

Long Stick 2450 mm	Load at maximum reach (stick nose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	3000 mm			4500 mm			6000 mm			mm				
						Lower rear dozer up	Lower rear dozer down	Lower front dozer and rear stabilizer down	Lower rear dozer down	Lower front stabilizer and rear dozer up	Lower front stabilizer and rear dozer down	Lower front dozer and rear stabilizer down	Lower rear dozer up	Lower rear dozer down		Lower front dozer and rear stabilizer down	Lower rear dozer up	Lower rear dozer down	Lower front dozer and rear stabilizer down
7500 mm	Lower rear dozer up					*3650	*3650	*3650				*3250	*3250	*3250	4660				
	Lower rear dozer down					*3650	*3650	*3650				*3250	*3250	*3250					
	Lower front dozer and rear stabilizer down					*3650	*3650	*3650				*3250	*3250	*3250					
	Lower rear dozer down					*3700	*3700	*3700				*3250	*3250	*3250					
	Lower front stabilizer and rear dozer up					*3700	*3700	*3700				*3250	*3250	*3250					
	Lower front stabilizer and rear dozer down					*3700	*3700	*3700				*3250	*3250	*3250					
	Lower front dozer and rear stabilizer down					*3700	*3700	*3700				*3250	*3250	*3250					
6000 mm	Lower rear dozer up					*4400	4350	3900	*3250	2700	2400	*2850	2600	2350	6120				
	Lower rear dozer down					*4400	*4400	4400	*3250	*3250	2700	*2850	*2850	2600					
	Lower front dozer and rear stabilizer down					*4400	*4400	*4400	*3250	*3250	*3250	*2850	*2850	*2850					
	Lower rear dozer down					*4450	*4450	*4450	*3250	*3250	2750	*2850	*2850	2650					
	Lower front stabilizer and rear dozer up					*4450	*4450	4200	*3250	*3250	2600	*2850	*2850	2500					
	Lower front stabilizer and rear dozer down					*4450	*4450	*4450	*3250	*3250	*3250	*2850	*2850	*2850					
	Lower front dozer and rear stabilizer down					*4450	*4450	*4450	*3250	*3250	*3250	*2850	*2850	*2850					
4500 mm	Lower rear dozer up					*4950	4200	3750	4000	2650	2400	*2750	2050	1850	6950				
	Lower rear dozer down					*4950	*4950	4200	4000	*4150	2700	*2750	*2750	2100					
	Lower front dozer and rear stabilizer down					*4950	*4950	*4950	*4150	*4150	4150	*2750	*2750	*2750					
	Lower rear dozer down					*4950	*4950	4300	4100	*4150	2750	*2750	*2750	2150					
	Lower front stabilizer and rear dozer up					*4950	*4950	4000	4000	3350	2550	*2750	2600	2000					
	Lower front stabilizer and rear dozer down					*4950	*4950	*4950	*4150	*4150	4100	*2750	*2750	*2750					
	Lower front dozer and rear stabilizer down					*4950	*4950	*4950	*4150	*4150	*4150	*2750	*2750	*2750					
3000 mm	Lower rear dozer up					*5750	3900	3450	3850	2550	2250	*2800	1800	1600	7380				
	Lower rear dozer down					*5750	*5750	3950	3850	*4400	2550	*2800	*2800	1850					
	Lower front dozer and rear stabilizer down					*5750	*5750	*5750	*4400	*4400	4000	*2800	*2800	*2800					
	Lower rear dozer down					*5750	4000	4000	4000	*4400	2600	*2800	*2800	1900					
	Lower front stabilizer and rear dozer up					*5750	4900	3750	3900	3200	2450	*2800	2350	1800					
	Lower front stabilizer and rear dozer down					*5750	*5750	*5750	*4400	*4400	3950	*2800	*2800	*2800					
	Lower front dozer and rear stabilizer down					*5750	*5750	*5750	*4400	*4400	4100	*2800	*2800	*2800					
1500 mm	Lower rear dozer up					5750	3600	3200	3750	2400	2150	2700	1750	1550	7480				
	Lower rear dozer down					5700	*6350	3650	3700	*4650	2450	2700	*2950	1750					
	Lower front dozer and rear stabilizer down					*6350	*6350	5950	*4650	*4650	3850	*2950	*2950	2800					
	Lower rear dozer down					5900	*6350	3700	3850	*4650	2500	2800	*2950	1800					
	Lower front stabilizer and rear dozer up					5750	4600	3450	3750	3100	2350	2700	2250	1700					
	Lower front stabilizer and rear dozer down					*6350	*6350	5850	*4650	*4650	3850	*2950	*2950	2800					
	Lower front dozer and rear stabilizer down					*6350	*6350	6100	*4650	*4650	3950	*2950	*2950	2900					
0 mm	Lower rear dozer up	*4150	*4150	*4150	5550	3450	3050	3650	2300	2050	2800	1750	1600	7270					
	Lower rear dozer down	*4150	*4150	*4150	5550	*6300	3500	3600	*4600	2350	2750	*3350	1800						
	Lower front dozer and rear stabilizer down	*4150	*4150	*4150	*6300	*6300	5750	*4600	*4600	3800	*3350	*3350	2900						
	Lower rear dozer down	*4200	*4200	*4200	5700	*6300	3550	3750	*4600	2400	2850	*3350	1850						
	Lower front stabilizer and rear dozer up	*4200	*4200	*4200	5550	4450	3300	3650	3000	2250	2800	2300	1750						
	Lower front stabilizer and rear dozer down	*4200	*4200	*4200	*6300	*6300	5700	*4600	*4600	3750	*3350	*3350	2850						
	Lower front dozer and rear stabilizer down	*4200	*4200	*4200	*6300	*6300	5900	*4600	*4600	3900	*3350	*3350	2950						
-1500 mm	Lower rear dozer up	*7550	6350	5450	5500	3400	3000	3600	2300	2050	3100	2000	1750	6710					
	Lower rear dozer down	*7550	*7550	6400	5500	*5600	3450	3600	*4050	2300	3100	*3300	2000						
	Lower front dozer and rear stabilizer down	*7550	*7550	*7550	*5600	*5600	*5600	*4050	*4050	3750	*3300	*3300	3200						
	Lower rear dozer down	*7550	*7550	6550	*5600	*5600	3500	3750	*4050	2350	3200	*3300	2050						
	Lower front stabilizer and rear dozer up	*7550	*7550	5950	5500	4400	3250	3600	2950	2250	3100	2600	1950						
	Lower front stabilizer and rear dozer down	*7550	*7550	*7550	*5600	*5600	*5600	*4050	*4050	3700	*3300	*3300	3200						
	Lower front dozer and rear stabilizer down	*7550	*7550	*7550	*5600	*5600	*5600	*4050	*4050	3850	*3300	*3300	*3300						
-3000 mm	Lower rear dozer up				*4050	3450	3050												
	Lower rear dozer down				*4050	*4050	3500												
	Lower front dozer and rear stabilizer down				*4050	*4050	*4050												
	Lower rear dozer down				*4050	*4050	3600												
	Lower front stabilizer and rear dozer up				*4050	*4050	3350												
	Lower front stabilizer and rear dozer down				*4050	*4050	*4050												
	Lower front dozer and rear stabilizer down				*4050	*4050	*4050												

*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.

M315F Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom

All values are in kg, bucket cylinder and bucket linkage installed, attachment: none, with counterweight (3750 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			mm
		3000 mm			4500 mm			6000 mm						
														
7500 mm	Lower rear dozer up				*3800	*3800	*3800				*3450	*3450	*3450	4600
	Lower rear dozer down				*3800	*3800	*3800				*3450	*3450	*3450	
	Lower front dozer and rear stabilizer down				*3800	*3800	*3800				*3450	*3450	*3450	
	Lower rear dozer down				*3900	*3900	*3900				*3450	*3450	*3450	
	Lower front stabilizer and rear dozer up				*3900	*3900	*3900				*3450	*3450	*3450	
	Lower front stabilizer and rear dozer down				*3900	*3900	*3900				*3450	*3450	*3450	
	Lower front dozer and rear stabilizer down				*3900	*3900	*3900				*3450	*3450	*3450	
6000 mm	Lower rear dozer up				*4600	4350	3900	*3250	2650	2400	*2900	2600	2350	6070
	Lower rear dozer down				*4600	*4600	*4600	*3250	*3250	*3250	*2900	*2900	*2900	
	Lower front dozer and rear stabilizer down				*4600	*4600	*4600	*3250	*3250	*3250	*2900	*2900	*2900	
	Lower rear dozer down				*4600	*4600	4450	*3300	*3300	2750	*2900	*2900	2700	
	Lower front stabilizer and rear dozer up				*4600	*4600	4150	*3300	*3300	2600	*2900	*2900	2550	
	Lower front stabilizer and rear dozer down				*4600	*4600	*4600	*3300	*3300	*3300	*2900	*2900	*2900	
	Lower front dozer and rear stabilizer down				*4600	*4600	*4600	*3300	*3300	*3300	*2900	*2900	*2900	
4500 mm	Lower rear dozer up				*5050	4150	3750	4000	2650	2400	*2700	2050	1850	6910
	Lower rear dozer down				*5050	*5050	4200	4000	*4250	2700	*2700	*2700	2100	
	Lower front dozer and rear stabilizer down				*5050	*5050	*5050	*4250	*4250	4150	*2700	*2700	*2700	
	Lower rear dozer down				*5100	*5100	4300	4100	*4250	2750	*2700	*2700	2150	
	Lower front stabilizer and rear dozer up				*5100	*5100	4000	4000	3350	2600	*2700	2650	2050	
	Lower front stabilizer and rear dozer down				*5100	*5100	*5100	*4250	*4250	4100	*2700	*2700	*2700	
	Lower front dozer and rear stabilizer down				*5100	*5100	*5100	*4250	*4250	*4250	*2700	*2700	*2700	
3000 mm	Lower rear dozer up				*5850	3900	3450	3900	2550	2250	*2700	1850	1650	7340
	Lower rear dozer down				*5850	*5850	3900	3850	*4500	2550	*2700	*2700	1850	
	Lower front dozer and rear stabilizer down				*5850	*5850	*5850	*4500	*4500	4000	*2700	*2700	*2700	
	Lower rear dozer down				*5850	*5850	4000	4000	*4500	2600	*2700	*2700	1900	
	Lower front stabilizer and rear dozer up				*5850	4900	3750	3900	3200	2450	*2700	2350	1800	
	Lower front stabilizer and rear dozer down				*5850	*5850	*5850	*4500	*4500	4000	*2700	*2700	*2700	
	Lower front dozer and rear stabilizer down				*5850	*5850	*5850	*4500	*4500	4100	*2700	*2700	*2700	
1500 mm	Lower rear dozer up				5750	3600	3200	3750	2400	2150	2750	1750	1550	7440
	Lower rear dozer down				5700	*6400	3650	3750	*4700	2450	2700	*2800	1800	
	Lower front dozer and rear stabilizer down				*6400	*6400	5950	*4700	*4700	3900	*2800	*2800	*2800	
	Lower rear dozer down				5900	*6400	3700	3850	*4700	2500	*2800	*2800	1850	
	Lower front stabilizer and rear dozer up				5750	4600	3450	3750	3100	2350	2750	2300	1700	
	Lower front stabilizer and rear dozer down				*6400	*6400	5850	*4700	*4700	3850	*2800	*2800	*2800	
	Lower front dozer and rear stabilizer down				*6400	*6400	6100	*4700	*4700	4000	*2800	*2800	*2800	
0 mm	Lower rear dozer up				5600	3450	3050	3650	2350	2100	2850	1800	1600	7230
	Lower rear dozer down				5550	*6300	3500	3650	*4600	2350	2800	*3100	1850	
	Lower front dozer and rear stabilizer down				*6300	*6300	5800	*4600	*4600	3800	*3100	*3100	2950	
	Lower rear dozer down				5750	*6300	3600	3800	*4600	2400	2900	*3100	1900	
	Lower front stabilizer and rear dozer up				5600	4450	3350	3650	3000	2250	2850	2350	1750	
	Lower front stabilizer and rear dozer down				*6300	*6300	5700	*4600	*4600	3750	*3100	*3100	2900	
	Lower front dozer and rear stabilizer down				*6300	*6300	5950	*4600	*4600	3900	*3100	*3100	3000	
-1500 mm	Lower rear dozer up	*7150	6400	5500	*5550	3450	3050	3650	2300	2050	3150	2050	1800	6670
	Lower rear dozer down	*7150	*7150	6450	5500	*5550	3500	3650	*4000	2350	3150	*3150	2050	
	Lower front dozer and rear stabilizer down	*7150	*7150	*7150	*5550	*5550	*5550	*4000	*4000	3800	*3150	*3150	*3150	
	Lower rear dozer down	*7250	*7250	6600	*5500	*5500	3550	3750	*3950	2400	*3150	*3150	2100	
	Lower front stabilizer and rear dozer up	*7250	*7250	6000	*5500	4450	3300	3650	3000	2250	*3150	2650	2000	
	Lower front stabilizer and rear dozer down	*7250	*7250	*7250	*5500	*5500	*5500	*3950	*3950	3750	*3150	*3150	*3150	
	Lower front dozer and rear stabilizer down	*7250	*7250	*7250	*5500	*5500	*5500	*3950	*3950	3900	*3150	*3150	*3150	
-3000 mm	Lower rear dozer up				*3850	3500	3100							
	Lower rear dozer down				*3850	*3850	3550							
	Lower front dozer and rear stabilizer down				*3850	*3850	*3850							
	Lower rear dozer down				*3850	*3850	3650							
	Lower front stabilizer and rear dozer up				*3850	*3850	3400							
	Lower front stabilizer and rear dozer down				*3850	*3850	*3850							
	Lower front dozer and rear stabilizer down				*3850	*3850	*3850							

*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.

M315F Wheeled Excavator Specifications

Lift Capacities – Offset Boom

All values are in kg, bucket cylinder and bucket linkage installed, attachment: none, with counterweight (3750 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										mm			
						3000 mm			4500 mm			6000 mm						
																		
7500 mm	Lower rear dozer up					*3650	*3650	*3650				*3300	*3300	*3300	4590			
	Lower rear dozer down					*3650	*3650	*3650				*3300	*3300	*3300				
	Lower front dozer and rear stabilizer down					*3650	*3650	*3650				*3300	*3300	*3300				
	Lower rear dozer down					*3700	*3700	*3700				*3300	*3300	*3300				
	Lower front stabilizer and rear dozer up					*3700	*3700	*3700				*3300	*3300	*3300				
	Lower front stabilizer and rear dozer down					*3700	*3700	*3700				*3300	*3300	*3300				
	Lower front dozer and rear stabilizer down					*3700	*3700	*3700				*3300	*3300	*3300				
6000 mm	Lower rear dozer up					*4550	4350	3900	*3100	2550	2300	*2750	2500	2250	6060			
	Lower rear dozer down					*4550	*4550	4350	*3100	*3100	2600	*2750	*2750	2550				
	Lower front dozer and rear stabilizer down					*4550	*4550	*4550	*3100	*3100	*3100	*2750	*2750	*2750				
	Lower rear dozer down					*4550	*4550	4450	*3150	*3150	2650	*2750	*2750	2600				
	Lower front stabilizer and rear dozer up					*4550	*4550	4150	*3150	*3150	2500	*2750	*2750	2450				
	Lower front stabilizer and rear dozer down					*4550	*4550	*4550	*3150	*3150	*3150	*2750	*2750	*2750				
	Lower front dozer and rear stabilizer down					*4550	*4550	*4550	*3150	*3150	*3150	*2750	*2750	*2750				
4500 mm	Lower rear dozer up					*4950	4100	3650	3950	2550	2300	*2600	1950	1750	6900			
	Lower rear dozer down					*4950	*4950	4150	3900	*4100	2600	*2600	*2600	2000				
	Lower front dozer and rear stabilizer down					*4950	*4950	*4950	*4100	*4100	4050	*2600	*2600	*2600				
	Lower rear dozer down					*4950	*4950	4250	4050	*4100	2650	*2600	*2600	2050				
	Lower front stabilizer and rear dozer up					*4950	*4950	3950	3950	3250	2500	*2600	2550	1900				
	Lower front stabilizer and rear dozer down					*4950	*4950	*4950	*4100	*4100	4050	*2600	*2600	*2600				
	Lower front dozer and rear stabilizer down					*4950	*4950	*4950	*4100	*4100	*4100	*2600	*2600	*2600				
3000 mm	Lower rear dozer up					*5650	3750	3300	3800	2400	2150	*2600	1700	1500	7330			
	Lower rear dozer down					*5650	*5650	3800	3750	*4300	2450	*2600	*2600	1750				
	Lower front dozer and rear stabilizer down					*5650	*5650	*5650	*4300	*4300	3900	*2600	*2600	*2600				
	Lower rear dozer down					*5650	*5650	3850	3900	*4300	2500	*2600	*2600	1800				
	Lower front stabilizer and rear dozer up					*5650	4750	3600	3800	3100	2350	*2600	2250	1650				
	Lower front stabilizer and rear dozer down					*5650	*5650	*5650	*4300	*4300	3850	*2600	*2600	*2600				
	Lower front dozer and rear stabilizer down					*5650	*5650	*5650	*4300	*4300	4000	*2600	*2600	*2600				
1500 mm	Lower rear dozer up					5550	3400	2950	3600	2250	2000	2600	1600	1450	7440			
	Lower rear dozer down					5500	*6100	3450	3600	*4450	2300	2600	*2700	1650				
	Lower front dozer and rear stabilizer down					*6100	*6100	5750	*4450	*4450	3750	*2700	*2700	2700				
	Lower rear dozer down					5700	*6100	3500	3700	*4450	2350	2700	*2700	1700				
	Lower front stabilizer and rear dozer up					5550	4400	3250	3600	2950	2200	2600	2150	1600				
	Lower front stabilizer and rear dozer down					*6100	*6100	5650	*4450	*4450	3700	*2700	*2700	2700				
	Lower front dozer and rear stabilizer down					*6100	*6100	5900	*4450	*4450	3850	*2700	*2700	*2700				
0 mm	Lower rear dozer up					5300	3200	2800	3500	2150	1900	2700	1650	1450	7220			
	Lower rear dozer down					5300	*6000	3250	3500	*4350	2200	2700	*3000	1700				
	Lower front dozer and rear stabilizer down					*6000	*6000	5550	*4350	*4350	3650	*3000	*3000	2800				
	Lower rear dozer down					5500	*5950	3300	3600	*4350	2250	2800	*3000	1750				
	Lower front stabilizer and rear dozer up					5350	4200	3050	3500	2850	2100	2700	2200	1600				
	Lower front stabilizer and rear dozer down					*5950	*5950	5450	*4350	*4350	3600	*3000	*3000	2800				
	Lower front dozer and rear stabilizer down					*5950	*5950	5700	*4350	*4350	3750	*3000	*3000	2900				
-1500 mm	Lower rear dozer up	*6800	5950	5050	*5200	3150	2750	3450	2100	1850	*2950	1850	1650	6660				
	Lower rear dozer down	*6800	*6800	6000	*5200	*5200	3200	3450	*3700	2150	*2950	*2950	1900					
	Lower front dozer and rear stabilizer down	*6800	*6800	*6800	*5200	*5200	*5200	*3700	*3700	3600	*2950	*2950	*2950					
	Lower rear dozer down	*6750	*6750	6150	*5150	*5150	3300	3600	*3700	2200	*2950	*2950	1950					
	Lower front stabilizer and rear dozer up	*6750	*6750	5550	*5150	4150	3050	3450	2800	2050	*2950	2450	1800					
	Lower front stabilizer and rear dozer down	*6750	*6750	*6750	*5150	*5150	*5150	*3700	*3700	3550	*2950	*2950	*2950					
	Lower front dozer and rear stabilizer down	*6750	*6750	*6750	*5150	*5150	*5150	*3700	*3700	*3700	*2950	*2950	*2950					
-3000 mm	Lower rear dozer up				*3550	3250	2850											
	Lower rear dozer down				*3550	*3550	3300											
	Lower front dozer and rear stabilizer down				*3550	*3550	*3550											
	Lower rear dozer down				*3500	*3500	3400											
	Lower front stabilizer and rear dozer up				*3500	*3500	3150											
	Lower front stabilizer and rear dozer down				*3500	*3500	*3500											
	Lower front dozer and rear stabilizer down				*3500	*3500	*3500											

*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.

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). Working lights include cab mounted lights (two front, one rear), one on the counterweight for the rear camera and one on the right for the sideview camera.
 - Boom LED working light
 - Cab interior LED Light
 - Roading lights two front, halogen
 - Roading lights two rear, LED modules
- Main shut-off switch
- Maintenance free batteries, heavy duty
- Electrical refueling pump
- Signal/warning horn

ENGINE

- Cat C4.4 Twin Turbo engine with ACERT Technology meets Stage IV emission standards
- Aftertreatment technologies including the Cat Clean Emission Module package (CEM), including a Diesel Oxidation Catalyst (DOC), Diesel Particulate Filter (DPF), Selective Catalyst Reduction (SCR) and Diesel Exhaust Fluid (DEF) system
- Automatic Engine Speed Control (AESC), including one touch low idle
- Engine Idle Shutdown (EIS)
- Power mode selector
- Altitude 3000 m capability without de-rate
- 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
- Auxiliary boom and stick lines
- Basic control circuits:
 - Medium pressure
 - Two-way, medium pressure circuit, for rotating or tilting of attachments
 - Tool control/multi function
 - One/two-way high pressure for hammer application or opening and closing of attachments
 - Programmable flow and pressure for up to 10 attachments – selection via monitor
 - Quick coupler circuit and lines for hydraulic quick coupler (both Cat Pin Grabber and dedicated/CW Quick Couplers, controlled by a dedicated switch)
- 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

(continued on next page)

Standard Equipment *(continued)*

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

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)
 - Right side wide angle camera, mounted on the cooling hood
 - Both cameras are displayed side by side 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 with one proportional slider
- 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
- Rain protector*
- Rear window (tempered glass)/ emergency exit, 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 brake/axle 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 shaft with 1,000 hours greasing intervals
- Two speed hydrostatic transmission
- Spacer rings for tires

OTHER EQUIPMENT

- Auto-lube, centralized greasing (implement and swing gear)
- Automatic swing brake
- Counterweight, 3750 kg
- Engine emergency shutoff switch
- Mirrors, wide angle, frame and cab
- Product Link
- S•O•SSM sampling valves for engine oil, hydraulic oil and coolant
- Bucket linkage for digging sticks

*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
- Grapple open/close controllable via bucket control on right joystick, can be selected in the monitor
- SmartBoom

HYDRAULICS

- Cat BIO HYDO Advanced HEES biodegradable hydraulic oil

FRONT LINKAGE

- Booms
 - VA boom (two piece), 5020 mm
 - Offset boom, 5020 mm
- Sticks
 - 2300 mm
 - 2450 mm

ELECTRICAL

- Adjustable travel alarm
- Rotating beacon on cab

OPERATOR STATION

- Advanced joysticks with two proportional sliders
- Joystick steering
- Seat, adjustable high-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 ventilated
- Windshield
 - One-piece impact resistant, laminated windshield and skylight (EN356 P5A standards, 10 mm)
 - 70/30 split, openable
- Mirrors electrically adjustable and heated, frame and cab
- High pressure auxiliary pedal
- Falling Objects Guards (top and front)

UNDERCARRIAGE

- Rear blade only (radial or parallel)
- Front blade (radial or parallel)/ rear outriggers
- Front outriggers/rear blade (parallel)
- Travel restraint, for roading with a clamshell

OTHER EQUIPMENT

- Cat Machine Security System (MSS)
- Cooling protection package for dusty applications (includes fine mesh for enhanced radiator protection and engine air precleaner)
- Fenders, front and rear
- Ride Control
- Tires (see pg. 22)
- Attachments (see pg. 25-26)
- Tilt-Rotator-Ready Package

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

AEHQ7926
(Europe)

© 2016 Caterpillar
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

