

# M315D

## Wheel Excavator



### Engine

Engine Model	Cat® C4.4 with ACERT™ Technology
Net Power (ISO 9249) at 2,000 rpm (DIN)	101 kW (137 hp)

### Weights

Operating Weight	16 100 to 18 300 kg
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### Bucket Specifications

Bucket Capacities	0.38 to 1.26 m³
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### Working Ranges

Maximum Reach at Ground Level	9380 mm
Maximum Digging Depth	6070 mm

### Drive

Maximum Travel Speed	34 km/h
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Features

Engine

*The EU Stage IIIA compliant C4.4 offers increased performance and reliability while reducing fuel consumption and sound levels.*

Environmentally Responsible Design

*Helping to protect our environment, the engine has low operator and spectator sound levels, longer filter change intervals and is more fuel-efficient.*

Hydraulics

*The state of the art load-sensing hydraulic system combined with a separate dedicated swing pump provides fast cycle times, increased lift capacity and high bucket and stick forces. This combination maximizes your productivity in any job.*

Serviceability

*For increased safety, all daily maintenance points are accessible from ground level. A centralized greasing system allows lubrication of critical points.*

Operator Comfort

*The operator station maximizes comfort while increasing safety. The available auto-weight adjusted air-suspension seat with heated and cooled ventilated cushions improves operator comfort. Safety is enhanced by the new color monitor and standard rear-mounted camera.*

Undercarriage

*Various undercarriage configuration with blade and outriggers are available to provide the best solution for you.*

Contents

Engine .....3

Hydraulics .....4

SmartBoom™.....5

Environmentally Responsible Design .....5

Operator Comfort .....6

Undercarriage .....8

Booms and Sticks .....9

Work Tools.....10

Serviceability and Complete Customer Support.....12

Versatility.....14

Specifications.....15

Standard Equipment.....26

Optional Equipment.....27



**The D Series incorporates innovations for improved performance and versatility.**

**High lifting capacity, short cycle times and ease of operation lead to increased productivity and lower operating costs.**

# Engine

Built for power, reliability, low maintenance, excellent fuel economy and low emissions.

## **Powerful Performance**

The Cat® C4.4 engine with ACERT™ Technology includes a series of evolutionary, incremental improvements that provide breakthrough engine performance. The building blocks of ACERT Technology are fuel delivery, air management and electronic control. ACERT Technology optimizes engine performance while meeting EU Stage IIIA engine emission standards. The Cat C4.4 engine in the M315D delivers a maximum gross power of 108 kW at a rated speed of 2,000 rpm.

## **Low Fuel Consumption**

The C4.4 is electronically controlled and uses the Cat Common Rail Fuel System and fuel pump. This combination provides outstanding fuel consumption during both production and travel. When the system recognizes roading application the engine will operate at the most efficient system operating point to save fuel without compromising road performance.

## **Low Noise, Low Vibration**

The Cat C4.4 design improves operator comfort by reducing sound and vibration.

## **Cooling System**

An electronically controlled, hydraulic motor drives a variable speed on-demand fan for engine coolant and hydraulic oil. The optimum fan speed is determined based on coolant and hydraulic oil temperature resulting in reduced fuel consumption and lower sound levels. The electronic engine control continuously compensates for the varying fan load, providing consistent net power, regardless of operating conditions.

## **One-Touch Low Idle Control**

The two stage, one-touch Automatic Engine Speed Control reduces engine speed if no operation is performed, maximizing fuel efficiency and reducing sound levels.





# Hydraulics

Load-sensing hydraulic system provides fast cycle times, increased lift capacity and high bucket and stick forces to maximize your productivity in any job.



## **Dedicated Swing Pump**

A dedicated variable displacement piston pump and fixed displacement piston motor power the swing drive. This closed hydraulic circuit maximizes swing performance without reducing power to the other hydraulic functions, resulting in smoother combined movements.

## **Heavy Lift Mode**

This mode maximizes lifting performance by boosting the lifting capability of the excavator by 7%.

## **Adjustable Hydraulic Sensitivity**

This function allows the operator to adjust the aggressiveness of the machine according to the application.

## **Proportional Auxiliary Hydraulics**

Versatility of the hydraulic system can be expanded to utilize a wide variety of hydraulic work tools using multiple valve options.

- The Multi-Combined Valve is the core of the Tool Control System, allowing the operator to select up to ten preprogrammed work tools from the monitor. These preset hydraulic parameters support either one-way or two-way flow. The joystick sliding switches allow modulated control of the work tool.
- The Medium Pressure Function Valve provides proportional flow that is ideal for tilting buckets or rotating tools.
- A feature for the D Series Wheel Excavators is the optional second High Pressure valve. In combination with the Multi-Combined Valve, it provides the possibility to operate the machine with work tools or in applications requiring a third auxiliary hydraulic function, such as a tilting/rotating work tool.

## **Stick Regeneration Circuit**

The stick regeneration circuit increases efficiency and helps increase controllability for higher productivity and lower operating costs.

## **Quick Coupler**

The machine can be optionally equipped with a dedicated hydraulic circuit to operate hydraulic quick couplers.

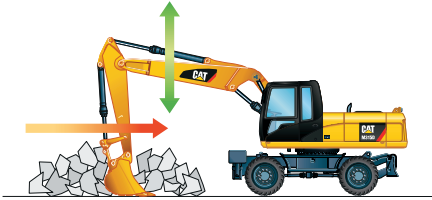
## **Hydraulic Snubbers**

Caterpillar integrates its cylinder snubber technology into all Wheel Excavator boom and stick cylinders. These snubbers help cushion shocks, reduce sound and increase cylinder life.



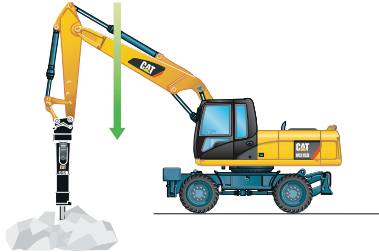
# SmartBoom™

Reduces stress and vibrations transmitted to the machine and provides a more comfortable environment.



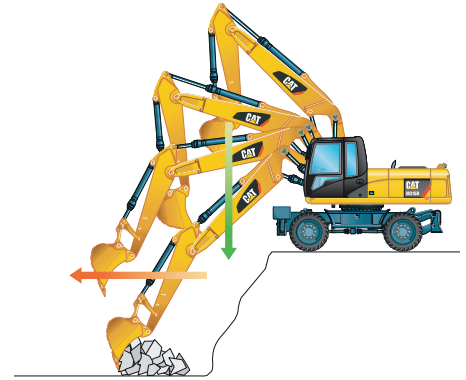
## Rock Scraping

Scraping rock and finishing work is easy and fast. SmartBoom simplifies the task and allows the operator to concentrate on stick and bucket, while 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.

# Environmentally Responsible Design

The M315D helps build a better world and preserve the fragile environment.

## Fuel Efficiency

The D Series Wheel Excavators are designed for outstanding performance with high fuel efficiency. This means more work done in a day, less fuel consumed and minimal impact on our environment.

## Low Exhaust Emissions

The Cat® C4.4 engine meets the EU Stage IIIA emission standards while offering increased performance, reliability and reduced fuel consumption and sound levels.

## Quiet Operation

Operator and spectator noise levels are extremely low as a result of the new variable speed fan and remote cooling system.

## Biodegradable Hydraulic Oil

The optional biodegradable hydraulic oil (Cat BIO HYDO Advanced HEEST™) is formulated to provide excellent

high-pressure and high temperature characteristics, and is fully compatible with all hydraulic components. Cat BIO HYDO Advanced HEEST™ is fully decomposed by soil or water microorganisms, providing a more environmentally sound alternative to mineral-based oils.

## Fewer Leaks and Spills

Lubricant fillers and drains are designed to minimize spills. Cat O-Ring Face Seals, Cat XT™ Hose and hydraulic cylinders are all designed to help prevent fluid leaks that can reduce the machine performance and cause harm to the environment.

## Longer Service Intervals

Working closely with your Cat dealer can help extend service intervals for engine oil, hydraulic oil, axle oil and coolant. Meaning fewer required fluids and fewer disposal, all adding up to lower operating costs.

# Operator Comfort

The interior layout maximizes operator space, provides exceptional comfort and reduces operator fatigue.



## Interior Operator Station

Improved visibility and ergonomics are some of the many features of the D Series Wheel Excavators. The operator station provides maximum space and is designed for simplicity and functionality. Frequently used switches are centralized and are situated on the right-hand switch console. The left-hand seat console controls dozer blade and/or outriggers, and is tiltable for easy access to the cab. The fully automatic climate control adjusts temperature and air flow for exceptional operator comfort. Other comfort features include a cigar lighter, ashtray, cup/can holder, magazine rack and integrated mobile phone holder.

## Cab Construction

The exterior design uses thick steel tubing along the bottom perimeter of the cab, improving the resistance to fatigue and vibration. This design allows the falling object guards to be bolted directly to the cab. The cab shell is attached to the frame with rubber mounts that limit vibration and sound transmitted from the frame, substantially reducing interior noise levels.

## Viewing Area

To maximize visibility, all glass is affixed directly to the cab, eliminating the use of window frames. Choice of fixed or easy-to-open split front windshield meet operator preference and application conditions.

- The 70/30 split front windshield stores the upper portion above the operator. The lower front windshield features a rounded design to maximize downward visibility and improves wiper coverage. Also features the one-touch action release system.
- The fixed front windshield comes with high impact resistant laminated glass.
- A large skylight provides superb upward visibility. The retractable sunscreen blocks direct sunlight.

## Heated Mirrors

The optional electrically heated mirrors provide increased safety and visibility in cold conditions.

## Wipers

The parallel wiper system maximizes visibility in poor weather conditions. The wiper virtually covers the entire front windshield, cleaning the operator's immediate line of sight.





## Monitor

The new compact color monitor displays information in local language that is easy to read and understand. Functions include:

- 2 times 5 programmable “Quick Access” buttons for one-touch selection of favorite functions.
- Filter and oil change warnings are displayed when the number of hours reaches the maintenance interval.
- Tool select function allows the operator to select up to 10 predefined hydraulic work tools.
- Adjustable braking characteristics enable the operator to select three levels of travel motor retarder aggressiveness when releasing the travel pedal.
- Provides a rear camera view that is activated through the monitor menu.



## Deluxe Seat

The optional deluxe seat, equipped with an active seat climate system, improves operator comfort. Cooled air flows through the seat cushions to reduce body perspiration. On cold days, a two-step seat heater keeps the operator warm and comfortable. The fully adjustable seat with adjustable lumbar support automatically adjusts to the driver's weight providing a more relaxed and comfortable environment.



## Lunch Box

A large storage compartment is located behind the operator's seat. The compartment provides sufficient room to store items such as a lunch box. A cover secures the contents during machine operation.



## Foot Pedals

Two-way pedals for travel and auxiliary circuits provide increased floor space, reducing the need to change positions. The foot pedal for auxiliary high-pressure circuit can be locked in the off position and used as a footrest for greater operator comfort.

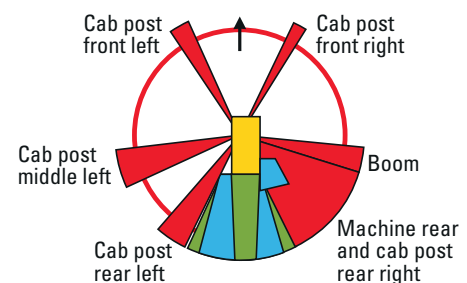
## Cat Standard Rearview Camera

The rearview camera displays on the operator monitor. Together with the best in class visibility to the front, up, left and right, the rearview camera ensures the safe operation of the machine and fulfills the requirements of ISO 5006/EN474

## Machine Security

An optional Machine Security System is available from the factory. This system controls who can operate the machine when, and utilizes specific keys to prevent unauthorized machine use.

## Field of Vision



Legend:

Red: limitations due to cab post and/or boom

Blue: additional visibility due to mirrors

Green: additional visibility due to rearview camera



# Undercarriage

Undercarriage and axle design provides maximum strength, flexibility and mobility on wheels.

## Increased Travel Speed

The maximum travel speed for the M315D is 34 km/h, reducing travel time between sites and increasing productivity.

## Heavy-Duty Axles and Stabilizers

The D Series undercarriage provides rigidity and long life. Effective hydraulic line routing, transmission protection and heavy-duty axles make the undercarriage perfect for wheel excavator applications. The front axle offers wide oscillating and steering angles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance.

## Advanced Disc Brake System

The disc brake system acts directly on the hub instead of the drive shaft to avoid planetary gear backlash. This solution minimizes the rocking effect associated with working free on wheels. The axle design lowers maintenance and lifetime costs. Oil change intervals are at 2,000 working hours, further reducing owning and operating costs.

## Fenders

The optional fenders provide excellent coverage of the front and rear tires, protecting the machine from mud and dirt. Water cannot splash up on the windscreen or cooler. The fenders further protect the machine from stones and debris being thrown up by the tires, providing additional safety for the machine, other vehicles and personnel working close to the excavator.

## Adjustable Travel Alarm

An adjustable travel alarm is available to warn people when the machine is moving. Three settings can be selected through the monitor:

- Auto mode – alarm will stop sounding immediately when the machine is no longer traveling, or has been sounding for an uninterrupted 10-second interval.
- Standard mode – alarm operates constantly during moving, with only manual cancellation.
- Off mode – travel alarm is disabled.



# Booms and Sticks

Designed for maximum flexibility to keep production high on all jobs.

## Design

Booms and sticks are welded, box section structures with thick, multiplate fabrications in high stress areas, for rugged performance and long service life.

## Flexibility

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

## Variable Adjustable (VA) Boom

The VA boom offers improved right side visibility and machine roading balance. When working in tight quarters or lifting heavy loads, the VA boom offers the best flexibility.

## One-Piece Boom

The 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 (left/right 2460/2760 mm) 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.

## Sticks

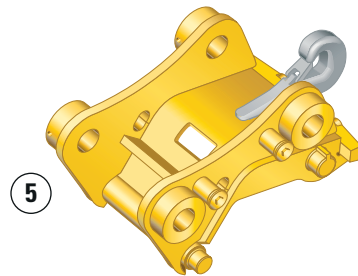
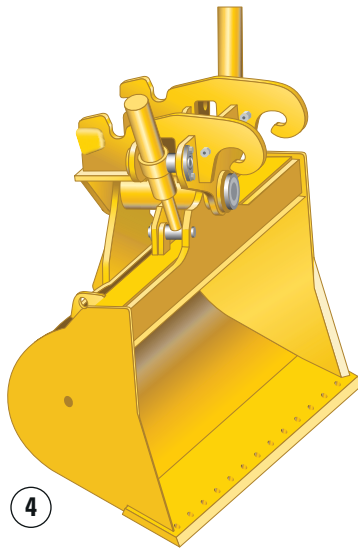
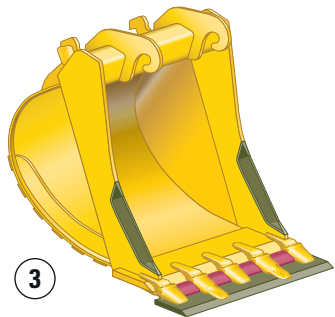
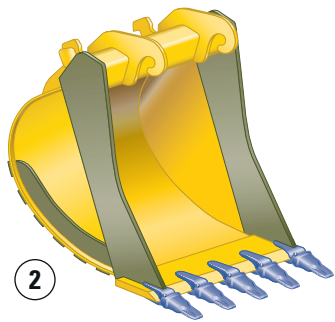
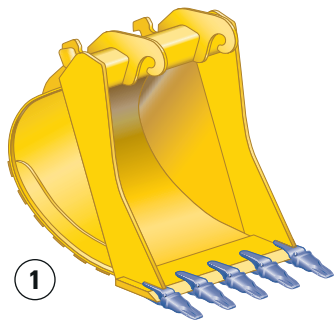
Three different stick lengths are offered to match different application requirements:

- Short stick (2100 mm) for maximum breakout force and lifting capability.
- Medium stick (2400 mm) for greater crowd force and lift capacity.
- Long stick (2600 mm) for greater depth and reach requirements.



# Work Tools

A wide variety of Work Tools help optimize machine performance.



## Work Tools

Cat work tools are designed to function as an integral part of your excavator and to provide the best possible performance in your particular application. All work tools are performance-matched to Cat machines.

### Quick Couplers

Quick Couplers enable the operator to simply release one work tool and connect to another, making your hydraulic excavator highly versatile. Productivity also increases, as a carrier no longer needs to be idle between jobs. Caterpillar offers hydraulic and spindle quick coupler versions.

### Buckets

Caterpillar offers a wide range of specialized buckets, each designed and tested to function as an integral part of your excavator. Buckets feature the new Cat K Series™ Ground Engaging Tools.

- ① **Excavation (X)**
- ② **Extreme Excavation (EX)**
- ③ **Excavation Leveling**
- ④ **Ditch Cleaning**
- ⑤ **Quick Coupler**

### Hammers

Cat hammer series deliver very high blow rates, increasing the productivity of your tool carriers in demolition and construction applications. Wide oil flow acceptance ranges make the Cat hammers suitable for a wide range of carriers and provide a system solution from one safe source.

### Orange Peel Grapples

The Orange Peel Grapple is constructed of high-strength, wear-resistant steel, with a low and compact design that makes it ideal for dump clearance. There are several choices of tine and shell versions.



## Purpose designed and built to Caterpillar's high durability standards.

### Multi-Grapples

The Multi-Grapple with unlimited left and right rotation is the ideal tool for stripping, sorting, handling and loading. The powerful closing force of the grab shells combined with fast opening/closing time ensures rapid cycle time which translates to more tons per hour.

### Multi-Processors

Thanks to its single basic housing design, the Multi-Processor series of hydraulic demolition equipment makes it possible to use a range of jaw sets that can handle any demolition job. The Multi-Processor is the most versatile demolition tool on the market.

### Vibratory Plate Compactors

Cat compactors are performance-matched to Cat machines, and integrate perfectly with the Cat hammer line – brackets and hydraulic kits are fully interchangeable between hammers and compactors.

### Shears

Cat shears provide superior and effective scrap processing, and are highly productive in demolition environments. Shears are compatible with a matching Cat excavator, and bolt-on brackets are available for either stick or boom-mounted options.

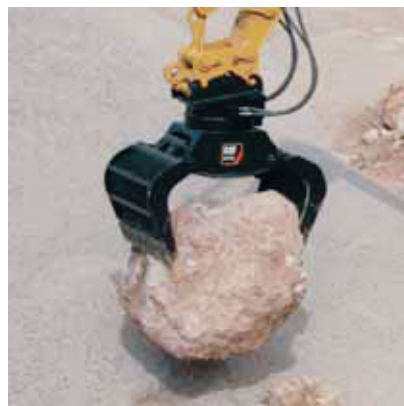
### Crushers

The hydraulic concrete crusher has taken modern demolition technology a step further. This equipment substantially limits the amount of vibration and noise released. It is well suited for concrete demolition in residential areas. The hydraulic concrete crusher combines several concrete demolition operations in one piece of equipment:

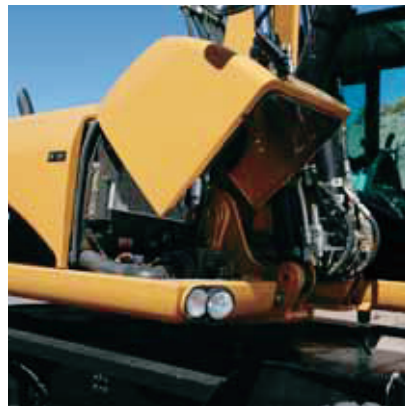
- breaking out concrete from fixed structures
- pulverizing concrete
- cutting reinforcement rods and small steel profiles

### Pulverizers

Using our powerful hydraulic concrete pulverizers means you can handle virtually any demolition and reduction job with confidence. The pulverizers enable fine crushing of concrete blocks at source. Wide jaws with pick-up tips and a large amount of teeth permit easy separation of concrete and the reinforcement. This considerably reduces the transport volume, saving dumping and transportation expenses.



# Serviceability and Complete Customer Support



## Ground Level Maintenance

Caterpillar designed its D Series Wheel Excavators with the operator and service technician in mind. Gull-wing doors, with pneumatically-assisted lift cylinders, effortlessly lift up to allow critical maintenance to be performed quickly and efficiently while maintaining operator safety.

## Extended Service Intervals

The D Series Wheel Excavator service and maintenance intervals have been extended to reduce machine service time, increase machine availability and reduce operating costs. Using S·O·S<sup>SM</sup> oil sampling analysis, hydraulic oil change intervals can be extended up to 6,000 hours.

## Engine Oil

Cat engine oil is formulated to optimize engine life and performance. The specially formulated oil is more cost effective and increases engine oil change interval to 500 hours, providing industry leading performance and savings.

## Air Filters

Cat air filters eliminate the use of service tools, reducing maintenance time. The air filter features a double-element construction with wall flow filtration in the main element and built-in mini-cyclone precleaners for superior cleaning efficiency. The air filters are constantly monitored for optimum performance. If airflow becomes restricted, a warning is displayed by the way of the in-cab monitor.

## Capsule Filter

The hydraulic return filter, a capsule filter, prevents contaminants from entering the system when the hydraulic oil is changed.

## Fuel Filters

Cat high efficiency fuel filters with a Stay-Clean Valve<sup>TM</sup> features a special media that removes more than 98% of particles, increasing fuel injector life. Both the primary and secondary fuel filters are located in the engine compartment and can be easily changed from ground level.

## Water Separator

The D Series is equipped with a primary fuel filter with water separator located in the engine compartment. For ease of service, the water separator can be easily accessed from ground level.

## Fuel Tank Drain

The durable, corrosion-free tank has a remote drain located at the bottom of the upper frame to remove water and sediment. The tank drain with hose connection allows simple, spill-free fluid draining.



**Simplified and easy maintenance save you time and money.  
Cat dealer services help you operate longer with lower costs.**

### **Front Compartment**

The front compartment hood can be opened vertically, providing outstanding ground level access to the batteries, air-to-air aftercooler, air conditioner condenser and the air cleaner filter.

### **Swing-out Air Conditioner Condenser**

The air conditioning condenser swings out horizontally to allow complete cleaning on both sides as well as excellent access to the air-to-air aftercooler.

### **S·O·S<sup>SM</sup>**

Caterpillar has specially developed S·O·S<sup>SM</sup> oil sampling analysis to help ensure better performance, longer life and increased customer satisfaction. This thorough and reliable early warning system detects traces of metals, dirt and other contaminants in your engine, axle and hydraulic oil. It can predict potential trouble avoiding costly failures. Your Cat dealer can give you results and specific recommendations shortly after receiving your sample.

### **Engine Inspection**

The engine can be accessed from both ground level and the upper structure. The longitudinal layout ensures that all daily inspection items can be accessed from ground level.

### **Anti-Skid Plates**

They cover the top of the steps and upper structure to help prevent slipping during maintenance. The Anti-Skid plates reduce the accumulation of mud on the upper structure, improving the cleanliness and safety.

### **Easy to Clean Coolers**

Flat fins on all coolers reduce clogging, making it easier to remove debris. The main cooling fan and air conditioner condenser are both hinged for easier cleaning.

### **Remote Greasing Blocks**

For those hard to reach locations, greasing blocks have been provided to reduce maintenance time.

### **Handrails and Steps**

Large handrails and steps assist the operator in climbing on and off the machine.



# Versatility

A wide variety of optional factory-installed attachments are available to enhance performance and improve job site management.



## Tool Control

The integrated Tool Control system allows the operator to select up to 10 preset combinations. This eliminates the need to reset the hydraulic parameters each time a tool is changed. Individual flow and pressure can be programmed easily as well as one-way/two-way hydraulic functions. Each of the ten-programmed tools can even be given a specific name. The unique Cat proportional sliding switches and optional auxiliary pedal provide modulation to the tool to make precision work easy.

## Joystick Steering

The unique joystick steering option enables an operator to reposition the machine while traveling in first gear by the use of the slider switch on the right joystick. This enables the operator to keep both hands on the joysticks while simultaneously moving the implements and traveling. The operator can do more precise work faster with increased safety around the machine.



## Working and Travel Modes

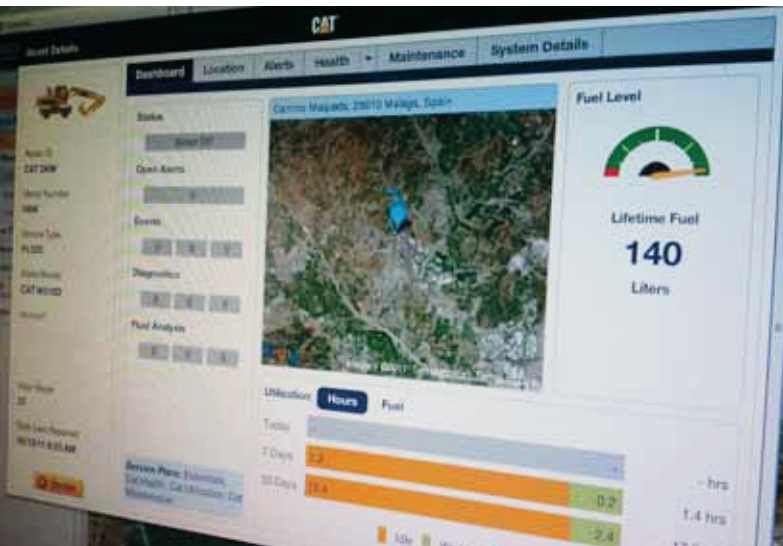
There are 2 selectable working modes and one automatic travel setting. The operator can choose the best power setting for both engine and hydraulic power versus fuel efficiency.

- Economy Mode – used for lifting, pipe setting, grading, slope finishing and precise work while reducing fuel consumption.
- Power Mode – used for normal truck loading and digging applications, trenching or hammer use.
- Travel Mode – automatically set when the travel pedal is actuated. It provides maximum speed and drawbar pull.

## Product Link

Product Link allows remote monitoring of the machine, using a powerful telemetric system to transmit needed information to the customer and the dealer via a secure, web-based application, VisionLink™.

Critical information, such as event and diagnostic codes, is readily accessible, as are machine statistics, such as hour-meter reading, fuel consumption and idle time. Mapping functions include location and geo-fencing, which assist in servicing operations and in preventing unauthorized machine use. With Product Link, the customer and the dealer have an invaluable tool for more efficiently managing machines and fleets.



## Ride Control

The ride control system improves operator comfort and allows the machine to travel faster over rough terrain with improved ride quality for the operator. The ride control system features accumulators acting as shock absorbers to dampen the front part motion. Ride control can be activated through a button located on the soft switch panel in the cab.



# M315D Wheel Excavator Specifications

## Engine

Engine Model	Cat® C4.4 with ACERT™ Technology
Ratings	2,000 rpm
Gross Power	108 kW (147 hp)
Net Power	
ISO 9249	101 kW (137 hp)
80/1269/EEC	101 kW (137 hp)
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L
Cylinders	4
Maximum Torque at 1,400 rpm	550 N·m
<ul style="list-style-type: none"> <li>• All engine horsepower (hp) are metric including front page.</li> <li>• EU Stage IIIA compliant.</li> <li>• Full engine net power up to 3000 m altitude.</li> </ul>	

## Hydraulic System

Tank Capacity	135 L
System	255 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	370 bar
Maximum Flow	
Implement/Travel Circuit	220 L/min
Auxiliary Circuit	
High Pressure	220 L/min
Medium Pressure	50 L/min
Swing Mechanism	80 L/min

## Weights

VA Boom*	
Rear Dozer Only	15 840 kg
Rear Dozer, Front Outriggers	16 790 kg
Front and Rear Outriggers	17 090 kg
One-Piece Boom*	
Rear Dozer Only	15 340 kg
Rear Dozer, Front Outriggers	16 290 kg
Front and Rear Outriggers	16 590 kg
Offset Boom*	
Rear Dozer Only	16 290 kg
Rear Dozer, Front Outriggers	17 240 kg
Front and Rear Outriggers	17 540 kg
Sticks	
Short (2100 mm)	470 kg
Medium (2400 mm)	514 kg
Long (2600 mm)	530 kg
Dozer Blade	750 kg
Outriggers	960 kg
Counterweight	
Standard	3500 kg
Optional	3900 kg

\* Machine weight with medium stick, 3900 kg counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.

## Transmission

Forward/Reverse	
1st Gear	8 km/h
2nd Gear	34 km/h
Creeper Speed	
1st Gear	3 km/h
2nd Gear	13 km/h
Drawbar Pull	97 kN
Maximum Gradeability	69%

## Swing Mechanism

Swing Speed	10.5 rpm
Swing Torque	40 kN·m

## Tires

Standard	
• 10.00-20 (dual pneumatic)	
Optional	
• 11.00-20 (dual pneumatic)	
• 18 R 19.5 XF (single pneumatic)	
• 10.00-20 (dual solid rubber)	

## Undercarriage

Ground Clearance	370 mm
Maximum Steering Angle	35°
Oscillation Axle Angle	± 9°
Minimum Turning Radius	
Outside of Tire	6300 mm
End of VA Boom	6900 mm
End of One-Piece Boom	8300 mm

## Service Refill Capacities

Fuel Tank	240 L
Cooling	33 L
Engine Crankcase	8 L
Rear Axle Housing (differential)	14 L
Front Steering Axle (differential)	10.5 L
Final Drive	2.5 L
Powershift Transmission	2.5 L

## Sound Levels

### Exterior Sound

- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EC is 102 dB(A).

## Cab/ROPS/FOGS

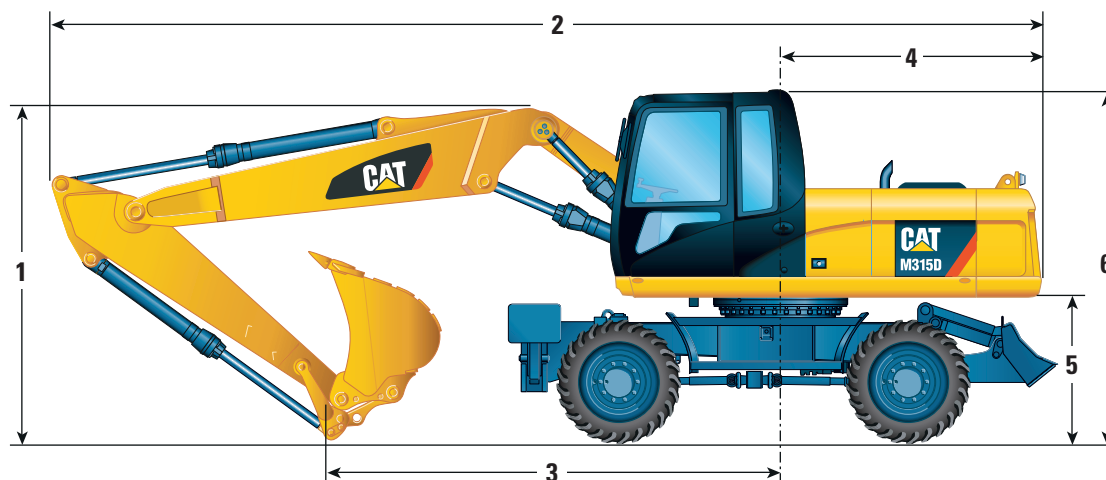
- Cat cab with integrated Roll Over Protective Structure (ROPS) meets ISO 12117-2:2008 criteria.
- Cab with Falling Object Guard Structure (FOGS) meets ISO 10262.



# M315D Wheel Excavator Specifications

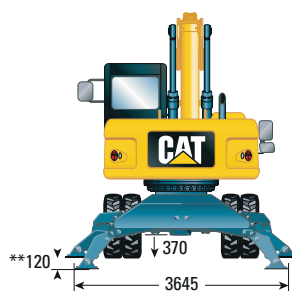
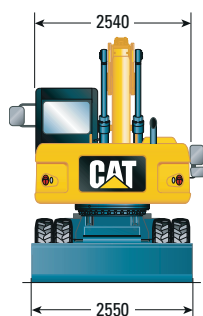
## Dimensions

All dimensions are approximate.

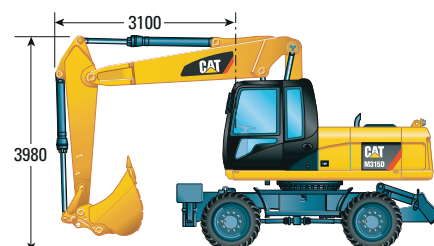


		VA Boom			One-Piece Boom			Offset Boom	
Stick Length	mm	2100	2400	2600	2100	2400	2600	2100	2400
1 Shipping Height	mm	3150	3150	3150	3150	3150	3150	3150	3150
2 Shipping Length	mm	8480	8480	8470	8320	8330	8330	8480	8470
3 Support Point	mm	3910	3660	3560	3560	3280	3160	4020	3780
4 Tail Swing Radius	mm		2210			2210		2210	
5 Counterweight Clearance	mm		1332			1332		1332	
6 Cab Height	mm		3150			3150		3150	
Overall Machine Width	mm		2550			2550		2550	

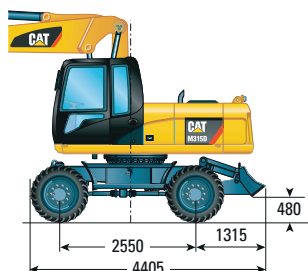
\*\* Maximum tire clearance with outrigger fully down



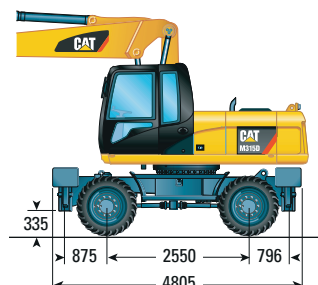
Roading position with 2400 mm stick



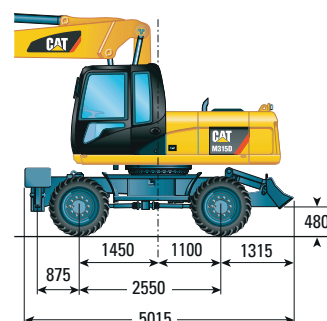
Undercarriage with dozer only



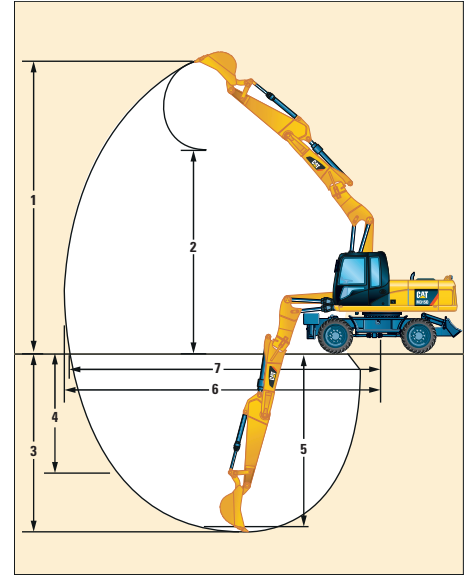
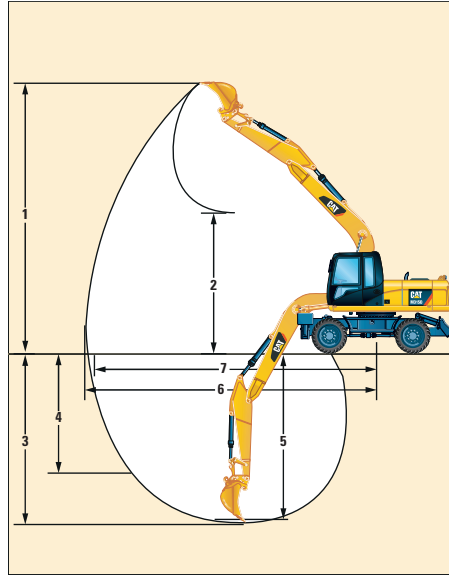
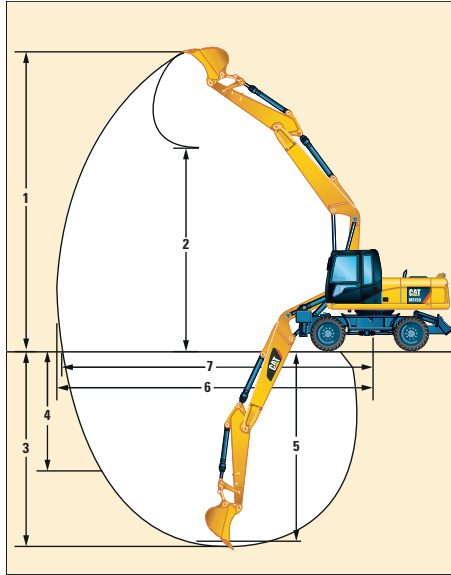
Undercarriage with 2 sets of outriggers



Undercarriage with 1 set of outriggers and dozer



## Working Ranges



		VA Boom			One-Piece Boom			Offset Boom	
Stick Length	mm	2100	2400	2600	2100	2400	2600	2100	2400
<b>1</b> Digging Height	mm	10 040	10 230	10 380	8980	9070	9190	10 040	10 230
<b>2</b> Dump Height	mm	6950	7140	7300	6000	6110	6230	6950	7140
<b>3</b> Digging Depth	mm	5590	5890	6090	5390	5690	5890	5590	5890
<b>4</b> Vertical Wall Digging Depth	mm	3720	3920	4090	3510	3650	3820	3720	3920
<b>5</b> Depth 2.5 m Straight Clean-Up	mm	5370	5690	5900	5170	5490	5700	5370	5690
<b>6</b> Reach	mm	9100	9360	9560	8900	9160	9350	9100	9360
<b>7</b> Reach at Ground Level	mm	8910	9190	9380	8710	8970	9170	8910	9190
Bucket Forces (ISO 6015)	kN	101	101	101	101	101	101	101	101
Stick Forces (ISO 6015)	kN	81	74	71	81	74	71	81	74

Values 1-7 are calculated with bucket and quick coupler with a tip radius of 1552 mm.

Breakout force values are calculated with heavy lift on (no quick coupler) and a tip radius of 1405 mm.

# M315D Wheel Excavator Specifications

## Bucket Specifications

Contact your Cat dealer for special bucket requirements.

Pin-On Buckets					Variable Adjustable Boom 5200 mm												One-Piece Boom 5050 mm											
Stick Length					2100 mm				2400 mm				2600 mm				2100 mm				2400 mm				2600 mm			
	Width	Weight*	Capacity (ISO)	Adapters	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized
	mm	kg	m <sup>3</sup>																									
Excavation	600	459	0.38	3																								
	750	495	0.52	3																								
	900	557	0.65	4																								
	1000	591	0.75	4																								
	1100	622	0.84	4																								
	1200	668	0.94	5																								
	1300	699	1.03	5																								
	1400	731	1.13	5																								
Extreme Excavation	1200	702	0.94	5																								
	1300	735	1.03	5																								
Excavation (leveling)	600	485	0.41	3																								
	750	529	0.56	3																								
	800	547	0.61	3																								
	900	596	0.70	4																								
	1000	636	0.82	4																								
	1100	672	0.92	4																								
	1200	725	1.04	5																								
	1300	762	1.14	5																								
	1400	798	1.26	5																								
Extreme Excavation (leveling)	1200	757	1.04	5																								
Ditch Cleaning	1800	505	0.73																									
	2000	540	0.83																									
Tiltable Ditch Cleaning	1800	815	0.61																									
	2000	855	0.68																									

\* Bucket weight includes Ground Engaging Tools

Maximum material  
density 1800 kg/m<sup>3</sup>

Maximum material  
density 1500 kg/m<sup>3</sup>

Maximum material  
density 1200 kg/m<sup>3</sup>

Not recommended



## Bucket Specifications

Contact your Cat dealer for special bucket requirements.

CW Quick Coupler Buckets					Variable Adjustable Boom 5200 mm												One-Piece Boom 5050 mm											
Stick Length					2100 mm				2400 mm				2600 mm				2100 mm				2400 mm				2600 mm			
	Width	Weight*	Capacity (ISO)	Adapters	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized	Free on wheels	Dozer lowered	1 set of stabilizer lowered	Fully stabilized
	mm	kg	m <sup>3</sup>																									
Excavation	600	468	0.38	3																								
	750	504	0.52	3																								
	900	534	0.65	4																								
	1000	568	0.75	4																								
	1100	600	0.84	4																								
	1200	645	0.94	5																								
	1300	676	1.03	5																								
	1400	708	1.13	5																								
Extreme Excavation	1200	679	0.94	5																								
	1300	712	1.03	5																								
Excavation (leveling)	600	498	0.41	3																								
	750	547	0.56	3																								
	800	526	0.61	3																								
	900	575	0.70	4																								
	1000	614	0.82	4																								
	1100	651	0.92	4																								
	1200	704	1.04	5																								
	1300	741	1.14	5																								
	1400	777	1.26	5																								
Extreme Excavation (leveling)	600	523	0.41	3																								
	800	555	0.61	3																								
	1000	644	0.82	4																								
	1200	736	1.04	5																								
Ditch Cleaning	1800	470	0.73																									
	2000	505	0.83																									
Tiltable Ditch Cleaning	1800	775	0.61																									
	2000	815	0.68																									

\* Bucket weight includes Ground Engaging Tools

Maximum material density 1800 kg/m<sup>3</sup>

Maximum material density 1500 kg/m<sup>3</sup>

Maximum material density 1200 kg/m<sup>3</sup>

Not recommended

# M315D Wheel Excavator Specifications

## Work Tools Matching 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.

Without Quick Coupler			Variable Adjustable Boom 5200 mm									One-Piece Boom 5050 mm									Offset Boom 5200 mm					
			(1)			(2)			(3)			(1)			(2)			(3)			(1)		(2)		(3)	
			2100	2400	2600	2100	2400	2600	2100	2400	2600	2100	2400	2600	2100	2400	2600	2100	2400	2600	2100	2400	2100	2400	2100	2400
Stick Length (mm)																										
Hammers	H100, H100 S																									
	H115 S, H120C S																									
Multiprocessors	MP15	CC, CR																								
	MP15	PP																								
	MP15	PS																								
	MP15	S																								
Crusher	P315																									
Hydraulic Shears (* boom mounted)	S320B																									
	S320B*																									
	S325B*																									
Multi-Grapples	G310B	D, R																								
	G315B	D																								
		R																								
Hydraulic Pulverizer	P215																									
Compactor	CVP75																									
Orange Peel Grapples	GSH15B 5 tines	400																								
		500																								
		600																								
		800																								
	GSH15B 4 tines	400																								
		500																								
		600																								
		800																								
With Quick Coupler (CW-20, CW-20S)																										
Hammers	H100, H100 S																									
	H115 S, H120C S																									
Multiprocessors	MP15	CC, CR, PS																								
	MP15	S																								
Multi-Grapples	G310B	D																								
	G310B	R																								
	G315B	D, R																								
Hydraulic Pulverizer	P215																									
Compactor	CVP75																									

360° Working Range

Over the front only

Maximum material density 3000 kg/m<sup>3</sup>

Maximum material density 1800 kg/m<sup>3</sup>

Maximum material density 1200 kg/m<sup>3</sup>



















## Lift Capacities – Variable Adjustable Boom (5200 mm)

All values are in kg, without bucket and without QC, with counterweight (3900 kg), heavy lift on.

		Load at maximum reach (sticknose/bucket pin)				Load over front				Load over rear				Load over side				Load point height			
Short Stick 2100 mm		Undercarriage configuration			3.0 m			4.5 m			6.0 m			7.5 m						m	
6.0 m	Rear dozer up				*5700	4750	4250	4250	2950	2650				*3950	2750	2500	6.17				
	Rear dozer down					*5700	4850		*5000	3000					*3950	2850					
	Dozer and stabilizer down					*5700	*5700		*5000	4500					*3950	*3950					
	2 sets of stabilizers down					*5700	*5700	*5700	*5000	*5000	*5000				*3950	*3950					
4.5 m	Rear dozer up				*6350	4500	4050	4200	2900	2600				3250	2200	2000	7.01				
	Rear dozer down					*6350	4650		*5100	2950					*3650	2300					
	Dozer and stabilizer down					*6350	*6350		*5100	4450					*3650	3450					
	2 sets of stabilizers down					*6350	*6350	*6350	*5100	*5100	*5100				*3650	*3650					
3.0 m	Rear dozer up				6250	4150	3700	4050	2750	2450				2900	1950	1750	7.44				
	Rear dozer down					*7350	4300		*5450	2850					*3600	2050					
	Dozer and stabilizer down					*7350	6700		*5450	4300					*3600	3100					
	2 sets of stabilizers down					*7350	*7350	*7350	*5450	*5450	5000				*3600	3600					
1.5 m	Rear dozer up				5950	3850	3400	3900	2600	2350	2850	1900	1700	2800	1900	1700	7.54				
	Rear dozer down					*8000	4000		*5800	2700		*4300	1950		*3750	1950					
	Dozer and stabilizer down					*8000	6350		*5800	4150		*4300	3000		*3750	3000					
	2 sets of stabilizers down					*8000	7550	*5800	*5800	4850	*4300	*4300	3500	*3750	*3750	3450					
0.0 m	Rear dozer up				5800	3750	3300	3800	2550	2250				2900	1950	1750	7.33				
	Rear dozer down					*7750	3850		*5700	2600					*4100	2000					
	Dozer and stabilizer down					*7750	6200		*5700	4100					*4100	3100					
	2 sets of stabilizers down					*7750	7400	*5700	*5700	4750				*4100	*4100	3600					
-1.5 m	Rear dozer up	*7150	7000	6050	5800	3750	3300	3800	2500	2250				3250	2150	1950	6.76				
	Rear dozer down		*7150	*7150		*6750	3850		*4950	2600					*3900	2250					
	Dozer and stabilizer down		*7150	*7150		*6750	6200		*4950	4050					*3900	3450					
	2 sets of stabilizers down	*7150	*7150	*7150	*6750	*6750	*6750	*4950	*4950	4750				*3900	*3900	*3900					
-3.0 m	Rear dozer up				*4800	3850	3400														
	Rear dozer down					*4800	3950														
	Dozer and stabilizer down					*4800	*4800														
	2 sets of stabilizers down				*4800	*4800	*4800														

## Medium Stick 2400 mm

		3.0 m			4.5 m			6.0 m			7.5 m							
																	m	
Undercarriage configuration																		
6.0 m	Rear dozer up				*5400	4800	4300	4300	2950	2700				*3300	2550	2300	6.50	
	Rear dozer down					*5400	4900		*4900	3050					*3300	2650		
	Dozer and stabilizer down					*5400	*5400		*4900	4550					*3300	*3300		
	2 sets of stabilizers down				*5400	*5400	*5400	*4900	*4900					*3300	*3300	*3300		
4.5 m	Rear dozer up				*6050	4550	4100	4200	2900	2600				3050	2100	1850	7.29	
	Rear dozer down					*6050	4700		*5000	3000					*3100	2150		
	Dozer and stabilizer down					*6050	*6050		*5000	4500					*3100	*3100		
	2 sets of stabilizers down				*6050	*6050	*6050	*5000	*5000					*3100	*3100	*3100		
3.0 m	Rear dozer up				6300	4200	3750	4050	2750	2500	2900	1950	1750	2750	1850	1650	7.71	
	Rear dozer down					*7100	4350		*5300	2850		*4300	2000		*3100	1900		
	Dozer and stabilizer down					*7100	6750		*5300	4350		*4300	3050		*3100	2950		
	2 sets of stabilizers down				*7100	*7100	*7100	*5300	*5300	5050	*4300	*4300	3550	*3100	*3100	*3100		
1.5 m	Rear dozer up				5950	3900	3450	3900	2600	2350	2800	1900	1700	2650	1800	1600	7.81	
	Rear dozer down					*7900	4000		*5750	2700		4300	1950		*3250	1850		
	Dozer and stabilizer down					*7900	6400		*5750	4150		4300	3000		*3250	2850		
	2 sets of stabilizers down				*7900	*7900	7550	*5750	*5750	4850	*4450	4400	3500	*3250	*3250	*3250		
0.0 m	Rear dozer up				5750	3700	3300	3800	2500	2250	2800	1850	1650	2750	1800	1600	7.60	
	Rear dozer down					*7850	3850		*5700	2600		*4250	1900		*3550	1900		
	Dozer and stabilizer down					*7850	6200		*5700	4050		*4250	2950		*3550	2900		
	2 sets of stabilizers down				*7850	*7850	7350	*5700	*5700	4750	*4250	*4250	3450	*3550	*3550	3400		
-1.5 m	Rear dozer up	*7100	6900	5950	5750	3700	3250	3750	2500	2200				3050	2000	1800	7.06	
	Rear dozer down		*7100	*7100		*7000	3800		*5150	2550					*3800	2100		
	Dozer and stabilizer down		*7100	*7100		*7000	6150		*5150	4050					*3800	3250		
	2 sets of stabilizers down	*7100	*7100	*7100	*7000	*7000	*7000	*5150	*5150	4700				*3800	*3800	3750		
-3.0 m	Rear dozer up				*5250	3750	3300	*3400	2550	2300								
	Rear dozer down					*5250	3900		*3400	2650								
	Dozer and stabilizer down					*5250	*5250		*3400	*3400								
	2 sets of stabilizers down				*5250	*5250	*5250	*3400	*3400									




















\*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

# M315D Wheel Excavator Specifications

## Lift Capacities – Variable Adjustable Boom (5200 mm)

All values are in kg, without bucket and without QC, with counterweight (3900 kg), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)		 Load over front		 Load over rear		 Load over side		 Load point height									
Long Stick 2600 mm		3.0 m			4.5 m			6.0 m			7.5 m						
		Undercarriage configuration															m
6.0 m	Rear dozer up				*4950	4800	4350	4300	3000	2700				*3000	2450	2200	6.73
	Rear dozer down					*4950	*4950		*4750	3100					*3000	2500	
	Dozer and stabilizer down					*4950	*4950		*4750	4600					*3000	*3000	
	2 sets of stabilizers down				*4950	*4950	*4950	*4750	*4750	*4750					*3000	*3000	
4.5 m	Rear dozer up				*5800	4600	4150	4250	2950	2650	*2850	2000	1800	*2850	2000	1800	7.50
	Rear dozer down					*5800	4750		*4900	3000		*2850	2050		*2850	2050	
	Dozer and stabilizer down					*5800	*5800		*4900	4500		*2850	*2850		*2850	*2850	
	2 sets of stabilizers down				*5800	*5800	*5800	*4900	*4900	*4900	*2850	*2850	*2850	*2850	*2850	*2850	
3.0 m	Rear dozer up				6350	4250	3800	4100	2800	2500	2900	1950	1750	2650	1800	1600	7.91
	Rear dozer down					*6950	4400		*5200	2850		*4200	2050		*2850	1850	
	Dozer and stabilizer down					*6950	6800		*5200	4350		*4200	3100		*2850	2850	
	2 sets of stabilizers down				*6950	*6950	*6950	*5200	*5200	5050	*4200	*4200	3550	*2850	*2850	*2850	
1.5 m	Rear dozer up				6000	3900	3450	3900	2650	2350	2800	1900	1700	2550	1700	1550	8.00
	Rear dozer down					*7800	4050		*5700	2700		4350	1950		*2950	1750	
	Dozer and stabilizer down					*7800	6400		*5700	4200		4300	3000		*2950	2750	
	2 sets of stabilizers down				*7800	*7800	7600	*5700	*5700	4850	*4400	*4400	3500	*2950	*2950	*2950	
0.0 m	Rear dozer up				5800	3750	3300	3800	2500	2250	2750	1850	1650	2650	1750	1550	7.80
	Rear dozer down					*7900	3850		*5750	2600		4250	1900		*3200	1800	
	Dozer and stabilizer down					*7900	6200		*5750	4050		4250	2950		*3200	2800	
	2 sets of stabilizers down				*7900	*7900	7400	*5750	*5750	4750	*4350	*4350	3450	*3200	*3200	*3200	
-1.5 m	Rear dozer up	*6850	*6850	5900	5750	3700	3250	3750	2500	2200				2900	1950	1700	7.28
	Rear dozer down		*6850	*6850		*7150	3800		*5250	2550					*3750	2000	
	Dozer and stabilizer down		*6850	*6850		*7150	6150		*5250	4000					*3750	3100	
	2 sets of stabilizers down	*6850	*6850	*6850	*7150	*7150	*7150	*5250	*5250	4700				*3750	*3750	3600	
-3.0 m	Rear dozer up				*5550	3750	3300	3800	2550	2250				*3200	2350	2100	6.35
	Rear dozer down					*5550	3850		*3850	2600					*3200	2450	
	Dozer and stabilizer down					*5550	*5550		*3850	*3850					*3200	*3200	
	2 sets of stabilizers down				*5550	*5550	*5550	*3850	*3850	*3850					*3200	*3200	

\*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.



## Lift Capacities – One-Piece Boom (5050 mm)

All values are in kg, without bucket and without QC, with counterweight (3900 kg), heavy lift on.

		Load at maximum reach (sticknose/bucket pin)			Load over front			Load over rear			Load over side			Load point height			
Short Stick 2100 mm		3.0 m			4.5 m			6.0 m			7.5 m						
																	m
6.0 m		Undercarriage configuration															
		Rear dozer up												*3850	3000	2700	5.92
		Rear dozer down													*3850	3100	
		Dozer and stabilizer down													*3850	*3850	
		2 sets of stabilizers down													*3850	*3850	
4.5 m		Rear dozer up			*6050	4550	4100	4200	2900	2650				3400	2350	2150	6.79
		Rear dozer down				*6050	4650		*5100	3000					*3600	2450	
		Dozer and stabilizer down				*6050	*6050		*5100	4450					*3600	*3600	
		2 sets of stabilizers down			*6050	*6050		*5100	*5100						*3600	*3600	
3.0 m		Rear dozer up			6300	4250	3800	4050	2800	2500				3050	2100	1900	7.23
		Rear dozer down				*7150	4350		*5500	2900					*3600	2150	
		Dozer and stabilizer down				*7150	6750		*5500	4350					*3600	3250	
		2 sets of stabilizers down			*7150	*7150		*5500	*5500	5000					*3600	*3600	
1.5 m		Rear dozer up			6000	3950	3550	3950	2650	2400				2950	2000	1800	7.34
		Rear dozer down				*8000	4100		*5850	2750					*3800	2050	
		Dozer and stabilizer down				*8000	6400		*5850	4200					*3800	3150	
		2 sets of stabilizers down			*8000	*8000	7600	*5850	*5850	4850					*3800	3600	
0.0 m		Rear dozer up			5850	3850	3400	3850	2600	2300				3050	2050	1850	7.12
		Rear dozer down				*8050	3950		*5850	2700					*4250	2150	
		Dozer and stabilizer down				*8050	6250		*5850	4100					*4250	3250	
		2 sets of stabilizers down			*8050	*8050	7400	*5850	*5850	4800					*4250	3750	
-1.5 m		Rear dozer up	*8750	7100	6150	5850	3800	3400	3850	2600	2300			3400	2300	2100	6.54
		Rear dozer down					*7250	3950		*5250	2650				*4450	2400	
		Dozer and stabilizer down					*7250	6250		*5250	4100				*4450	3650	
		2 sets of stabilizers down	*8750	*8750	*8750	*7250	*7250	*7250	*5250	*5250	4750				*4450	4250	
-3.0 m		Rear dozer up	*7100	*7100	6300	*5400	3900	3450						*3900	3000	2700	5.48
		Rear dozer down					*7100	*7100							*3900	3100	
		Dozer and stabilizer down					*7100	*7100							*3900	*3900	
		2 sets of stabilizers down	*7100	*7100	*7100	*5400	*5400	*5400							*3900	*3900	

## Medium Stick 2400 mm

		3.0 m			4.5 m			6.0 m			7.5 m						
Medium Stick 2400 mm		Undercarriage configuration															
																	m
6.0 m		Rear dozer up						4250	2950	2700				*3250	2750	2500	6.24
		Rear dozer down							*4300	3050					*3250	2850	
		Dozer and stabilizer down							*4300	*4300					*3250	*3250	
		2 sets of stabilizers down						*4300	*4300	*4300					*3250	*3250	
4.5 m		Rear dozer up			*5700	4600	4100	4200	2900	2650				*3100	2200	2000	7.07
		Rear dozer down				*5700	4700		*4900	3000					*3100	2300	
		Dozer and stabilizer down				*5700	*5700		*4900	4450					*3100	*3100	
		2 sets of stabilizers down			*5700	*5700	*5700	*4900	*4900	*4900					*3100	*3100	
3.0 m		Rear dozer up			6350	4250	3800	4100	2800	2500				2900	2000	1800	7.50
		Rear dozer down				*6900	4400		*5350	2900					*3100	2050	
		Dozer and stabilizer down				*6900	6750		*5350	4350					*3100	3100	
		2 sets of stabilizers down			*6900	*6900	*6900	*5350	*5350	5000					*3100	*3100	
1.5 m		Rear dozer up			6000	3950	3550	3950	2650	2400	2850	1950	1750	2800	1900	1700	7.60
		Rear dozer down				*7850	4100		*5750	2750		*4150	2000		*3300	1950	
		Dozer and stabilizer down				*7850	6450		*5750	4200		*4150	3050		*3300	2950	
		2 sets of stabilizers down			*7850	*7850	7600	*5750	*5750	4850	*4150	*4150	3500	*3300	*3300	*3300	
0.0 m		Rear dozer up			5850	3800	3400	3850	2550	2300				2850	1950	1750	7.39
		Rear dozer down				*8050	3950		*5850	2650					*3650	2000	
		Dozer and stabilizer down				*8050	6250		*5850	4100					*3650	3050	
		2 sets of stabilizers down			*8050	*8050	7400	*5850	*5850	4750					*3650	3550	
-1.5 m		Rear dozer up	*8500	7050	6050	5800	3750	3350	3800	2550	2250			3200	2150	1950	6.83
		Rear dozer down					*7450	3900		*5400	2650				*4350	2250	
		Dozer and stabilizer down					*7450	6200		*5400	4050				*4350	3400	
		2 sets of stabilizers down	*8500	*8500	*8500	*7450	*7450	7350	*5400	*5400	4750				*4350	3950	
-3.0 m		Rear dozer up	*7900	7150	6200	5850	3850	3400						*3950	2700	2450	5.83
		Rear dozer down					*5850	3950							*3950	2800	
		Dozer and stabilizer down					*5850	*5850							*3950	*3950	
		2 sets of stabilizers down	*7900	*7900	*7900	*5850	*5850	*5850							*3950	*3950	

\*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.

# M315D Wheel Excavator Specifications

## Lift Capacities – One-Piece Boom (5050 mm)

All values are in kg, without bucket and without QC, with counterweight (3900 kg), heavy lift on.

Long Stick 2600 mm		Load at maximum reach (sticknose/bucket pin)			 Load over front			 Load over rear			 Load over side			 Load point height			
		3.0 m			4.5 m			6.0 m			7.5 m			 m			
	Undercarriage configuration																
6.0 m	Rear dozer up							4300	3000	2700				*2950	2600	2350	6.47
	Rear dozer down								*4350	3100					*2950	2700	
	Dozer and stabilizer down								*4350	*4350					*2950	*2950	
	2 sets of stabilizers down							*4350	*4350	*4350					*2950	*2950	
4.5 m	Rear dozer up							4250	2950	2650				*2800	2150	1900	7.27
	Rear dozer down								*4800	3050					*2800	2200	
	Dozer and stabilizer down								*4800	4500					*2800	*2800	
	2 sets of stabilizers down							*4800	*4800	*4800					*2800	*2800	
3.0 m	Rear dozer up				6400	4300	3850	4100	2800	2550	2900	2000	1800	2800	1900	1700	7.69
	Rear dozer down					*6700	4450		*5250	2900		*3900	2050		*2850	1950	
	Dozer and stabilizer down					*6700	*6700		*5250	4350		*3900	3100		*2850	*2850	
	2 sets of stabilizers down				*6700	*6700	*6700	*5250	*5250	5050	*3900	*3900	3550	*2850	*2850	*2850	
1.5 m	Rear dozer up				6050	4000	3550	3950	2700	2400	2850	1950	1750	2700	1800	1650	7.79
	Rear dozer down					*7750	4150		*5700	2750		4300	2000		*3000	1900	
	Dozer and stabilizer down					*7750	6450		*5700	4200		4300	3050		*3000	2850	
	2 sets of stabilizers down				*7750	*7750	7650	*5700	*5700	4900	*4600	4400	3500	*3000	*3000	*3000	
0.0 m	Rear dozer up	*4400	*4400	*4400	5850	3800	3400	3850	2600	2300	2800	1900	1700	2750	1850	1650	7.58
	Rear dozer down		*4400	*4400		*8100	3950		*5850	2650		*4050	1950		*3300	1950	
	Dozer and stabilizer down		*4400	*4400		*8100	6250		*5850	4100		*4050	3000		*3300	2950	
	2 sets of stabilizers down	*4400	*4400	*4400	*8100	*8100	7400	*5850	*5850	4750	*4050	*4050	3450	*3300	*3300	*3300	
-1.5 m	Rear dozer up	*8150	7000	6050	5800	3750	3350	3800	2550	2250				3050	2050	1850	7.04
	Rear dozer down		*8150	7250		*7600	3900		*5500	2600					*3950	2150	
	Dozer and stabilizer down		*8150	*8150		*7600	6200		*5500	4050					*3950	3250	
	2 sets of stabilizers down	*8150	*8150	*8150	*7600	*7600	7350	*5500	*5500	4750				*3950	*3950	3800	
-3.0 m	Rear dozer up	*8450	7150	6150	5850	3800	3400	3850	2600	2300				3800	2550	2300	6.07
	Rear dozer down		*8450	7350		*6150	3950		*4100	2700					*3950	2650	
	Dozer and stabilizer down		*8450	*8450		*6150	*6150		*4100	*4100					*3950	*3950	
	2 sets of stabilizers down	*8450	*8450	*8450	*6150	*6150	*6150	*4100	*4100	*4100				*3950	*3950	*3950	

\*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.

## Lift Capacities – Offset Boom (5200 mm)

All values are in kg, without bucket and without QC, with counterweight (3900 kg), heavy lift on.

		Load at maximum reach (sticknose/bucket pin)						Load over front						Load over side						Load point height		
Short Stick 2100 mm		3.0 m			4.5 m			6.0 m			7.5 m						m					
6.0 m	Rear dozer up				*5600	4700	4200	4150	2850	2550				*3550	2650	2350	6.19					
	Rear dozer down					*5600	4850		*4900	2900					*3550	2750						
	Dozer and stabilizer down					*5600	*5600		*4900	4450					*3550	*3550						
	2 sets of stabilizers down				*5600	*5600	*5600	*4900	*4900	*4900				*3550	*3550	*3550						
4.5 m	Rear dozer up				*6200	4450	3950	4100	2800	2500				3150	2100	1850	7.02					
	Rear dozer down					*6200	4550		*5000	2900					*3250	2150						
	Dozer and stabilizer down					*6200	*6200		*5000	4400					*3250	*3250						
	2 sets of stabilizers down				*6200	*6200	*6200	*5000	*5000	*5000				*3250	*3250	*3250						
3.0 m	Rear dozer up				6150	4000	3550	3950	2600	2350				2800	1850	1600	7.45					
	Rear dozer down					*7100	4150		*5300	2700					*3200	1900						
	Dozer and stabilizer down					*7100	6550		*5300	4200					*3200	2950						
	2 sets of stabilizers down				*7100	*7100	*7100	*5300	*5300	4900				*3200	*3200	*3200						
1.5 m	Rear dozer up				5700	3650	3200	3750	2450	2150	2700	1750	1550	2650	1750	1550	7.55					
	Rear dozer down					*7650	3750		*5600	2550		*4150	1800		*3300	1800						
	Dozer and stabilizer down					*7650	6150		*5600	4000		*4150	2900		*3300	2850						
	2 sets of stabilizers down				*7650	*7650	7300	*5600	*5600	4700	*4150	*4150	3400	*3300	*3300	*3300						
0.0 m	Rear dozer up				5500	3450	3000	3650	2350	2050				2750	1800	1550	7.34					
	Rear dozer down					*7400	3600		*5450	2450					*3600	1850						
	Dozer and stabilizer down					*7400	5950		*5450	3900					*3600	2950						
	2 sets of stabilizers down				*7400	*7400	7100	*5450	*5450	4600				*3600	*3600	3450						
-1.5 m	Rear dozer up	*7350	6550	5600	5500	3450	3000	3600	2350	2050				3100	2000	1750	6.78					
	Rear dozer down		*7350	6800		*6400	3600		*4700	2400					*3600	2100						
	Dozer and stabilizer down		*7350	*7350		*6400	5950		*4700	3900					*3600	3300						
	2 sets of stabilizers down	*7350	*7350	*7350	*6400	*6400	*6400	*4700	*4700	4600				*3600	*3600	*3600						
-3.0 m	Rear dozer up				*4500	3600	3150															
	Rear dozer down					*4500	3700															
	Dozer and stabilizer down					*4500	*4500															
	2 sets of stabilizers down				*4500	*4500	*4500															

## Medium Stick 2400 mm

		3.0 m			4.5 m			6.0 m			7.5 m						
																	m
6.0 m	Rear dozer up				*5300	4800	4300	4250	2900	2600				*3000	2450	2200	6.52
	Rear dozer down					*5300	4900		*4750	3000					*3000	2500	
	Dozer and stabilizer down					*5300	*5300		*4750	4500					*3000	*3000	
	2 sets of stabilizers down				*5300	*5300	*5300	*4750	*4750	*4750				*3000	*3000	*3000	
4.5 m	Rear dozer up				*5950	4500	4050	4150	2800	2500				*2800	1950	1750	7.31
	Rear dozer down					*5950	4650		*4850	2900					*2800	2000	
	Dozer and stabilizer down					*5950	*5950		*4850	4450					*2800	*2800	
	2 sets of stabilizers down				*5950	*5950	*5950	*4850	*4850	*4850				*2800	*2800	*2800	
3.0 m	Rear dozer up				6200	4050	3600	3950	2650	2350	2750	1800	1600	2650	1700	1500	7.73
	Rear dozer down					*6900	4200		*5150	2750		*4150	1900		*2750	1800	
	Dozer and stabilizer down					*6900	6650		*5150	4250		*4150	2950		*2750	*2750	
	2 sets of stabilizers down				*6900	*6900	*6900	*5150	*5150	4950	*4150	*4150	3450	*2750	*2750	*2750	
1.5 m	Rear dozer up				5750	3650	3200	3750	2450	2150	2700	1750	1550	2500	1650	1450	7.83
	Rear dozer down					*7600	3800		*5500	2550		4200	1800		*2850	1700	
	Dozer and stabilizer down					*7600	6150		*5500	4050		4200	2900		*2850	2700	
	2 sets of stabilizers down				*7600	*7600	7350	*5500	*5500	4700	*4300	*4300	3350	*2850	*2850	*2850	
0.0 m	Rear dozer up				5500	3450	3000	3600	2300	2050	2650	1700	1500	2600	1650	1450	7.62
	Rear dozer down					*7500	3550		*5450	2400		*4050	1750		*3100	1750	
	Dozer and stabilizer down					*7500	5950		*5450	3900		*4050	2850		*3100	2750	
	2 sets of stabilizers down				*7500	*7500	7100	*5450	*5450	4600	*4050	*4050	3300	*3100	*3100	*3100	
-1.5 m	Rear dozer up	*7250	6450	5450	5450	3400	2950	3600	2300	2000				2850	1850	1650	7.08
	Rear dozer down		*7250	6650		*6650	3550		*4900	2400					*3550	1950	
	Dozer and stabilizer down		*7250	*7250		*6650	5900		*4900	3850					*3550	3100	
	2 sets of stabilizers down	*7250	*7250	*7250	*6650	*6650		*4900	*4900	4550				*3550	*3550	*3550	
-3.0 m	Rear dozer up				*4950	3500	3050	*3200	2400	2100							
	Rear dozer down					*4950	3650		*3200	2500							
	Dozer and stabilizer down					*4950	*4950		*3200	*3200							
	2 sets of stabilizers down				*4950	*4950	*4950	*3200	*3200	*3200							

\*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.



# M315D Wheel Excavator Standard Equipment

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

## Electrical

Alternator, 75 A  
Lights  
  Boom working light  
  Cab interior light  
  Rooding lights two front  
  Rooding lights two rear  
  Rotating beacon on cab  
  Working lights, cab mounted  
    (front and rear)  
Main shut-off switch  
Maintenance free batteries  
Signal/warning horn

## Engine

Automatic engine speed control  
Automatic starting aid  
Cat C4.4 with ACERT Technology  
  EU Stage IIIA compliant  
Fuel/water separator with level indicator

## Hydraulics

Heavy lift mode  
Load-sensing Plus hydraulic system  
Manual work modes (economy, power)  
Separate swing pump  
Stick regeneration circuit

## Operator Station

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  
Ash tray with cigarette lighter (24 volt)  
Beverage cup/can holder  
Bolt-on FOGS capability  
Bottle holder  
Bottom mounted parallel wiping system  
  that covers the upper and lower  
  windshield glass  
Camera mounted on counterweight displays  
  through cab monitor  
Coat hook  
Floor mat, washable, with storage  
  compartment  
Fully adjustable suspension seat  
Instrument panel and gauges  
  Information and warning messages  
    in local language  
Gauges for fuel level, engine coolant  
  and hydraulic oil temperature  
Filters/fluids change interval  
Indicators for headlights, turning signal,  
  low fuel, engine dial setting  
Clock with 10-day backup battery  
Laminated front windshield  
Left side console, tiltable, with lock out  
  for all controls  
Literature compartment behind seat  
Literature holder in right console  
Mobile phone holder  
Parking brake  
Positive filtered ventilation  
Power supply, 12V-7A  
Rear window, emergency exit  
Retractable seat belt  
Skylight  
Sliding door windows  
Steering column, tiltable  
Storage area suitable for a lunch box  
Sunshade for windshield and skylight

## Undercarriage

Heavy-duty axles, advanced travel motor,  
  adjustable braking force  
Oscillating front axle with remote greasing  
Tires, 10.00-20 16 PR, dual  
Tool box in undercarriage  
Two-piece drive shaft

## Other Equipment

Automatic swing brake  
Counterweight, 3500 kg  
Mirrors, frame and cab  
Product Link ready

# M315D Wheel Excavator Optional Equipment

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

## Auxiliary Controls and Lines

Auxiliary boom and stick lines  
Anti-drift valves for bucket, stick, VA boom  
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  
Second high pressure  
Additional two-way, high pressure  
circuit, for tools requiring a second  
high or medium pressure function  
Quick coupler control  
Cat BIO HYDO Advanced HEEST™  
biodegradable hydraulic oil  
Lowering control devices for boom  
and stick  
SmartBoom™

## Front Linkage

Booms  
One-piece boom, 5050 mm  
VA boom (two piece), 5200 mm  
Offset boom, 5200 mm  
Bucket linkage with diverter valve  
Sticks  
2100, 2400, 2600 mm

## Electrical

Back-up alarm with three selectable modes  
Heavy-duty maintenance free batteries  
Refueling pump

## Operator Station

Adjustable hydraulic sensitivity  
Falling objects guard  
Joystick steering  
CD/MP3 Radio (12V) at rear location  
including speakers and 12V converter  
Seat, adjustable high-back  
– mechanical suspension  
– air suspension (vertical)  
– deluxe with headrest, air suspension  
Travel speed lock  
Vandalism guards  
Visor for rain protection  
Windshield  
One-piece high impact resistant  
70/30 split, openable

## Undercarriage

Dozer blade, front or rear mounted  
Outriggers, front and/or rear mounted  
Second tool box for undercarriage  
Spacer rings for tires

## Other Equipment

Auto-lube system  
(implements and swing gear)  
Cat Machine Security System  
Cat Product Link  
Counterweight, 3900 kg  
Mirrors heated, frame and cab  
Ride Control  
Tires (see pg.15)  
Tool box in upperframe, lockable

# M315D Wheel Excavator

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