

M313D

Wheel Excavator



Engine

Engine Model	Cat® C4.4 with ACERT™ Technology	
Net power (ISO 9249) at 2,000 rpm	95 kW	128 hp

Weights

Operating Weight	14 000 to 16 200 kg	30,865 to 35,715 lb
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Bucket Specifications

Bucket Capacities	0.18 to 0.92 m ³	0.24 to 1.2 yd ³
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Working Ranges

Maximum Reach at Ground Level	8770 mm	28 ft 9 in
Maximum Digging Depth	5750 mm	18 ft 10 in

Drive

Maximum Travel Speed	37 km/h	23 mph
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Features

Engine

The C4.4 engine offers increased performance and reliability with reduced fuel consumption and sound levels while meeting applicable engine emission standards (ADSD-N EPA/ARB Flexibility Engine).

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.

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The D Series incorporates innovations for improved performance and versatility.

High lifting capacity, fast 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 applicable engine emission standards. The Cat C4.4 engine in the M313D delivers a maximum net engine power of 95 kW (128 hp) 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.
- The D Series feature an 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

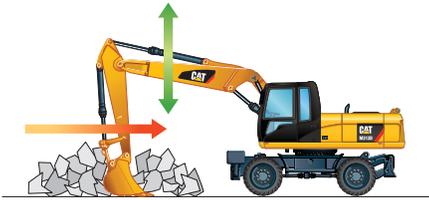
The machine can be optionally equipped with a dedicated hydraulic circuit to operate hydraulic quick couplers.

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.



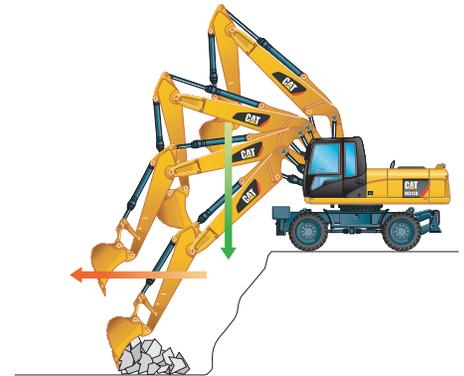
Rock Scraping

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 M313D 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 applicable engine 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 HEES™) is formulated to provide excellent

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

Fewer Leaks and Spills

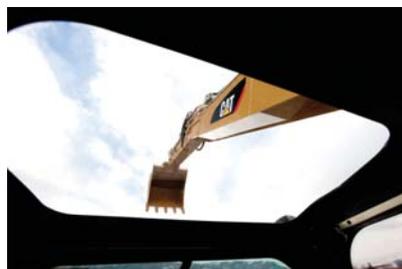
Lubricant fillers and drains are designed to minimize spills. Cat O-Ring Face Seals, Cat XT™ Hose and hydraulic cylinders are all designed to help prevent fluid leaks that can reduce the machine performance and cause harm to the environment.

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 sunshade 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.

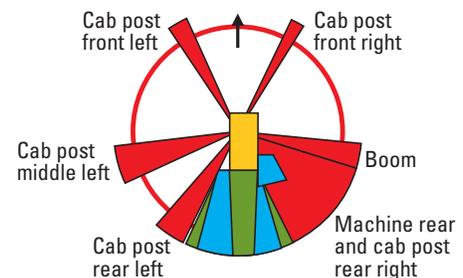
Cat Standard Rearview Camera

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 M313D is 37 km/h (23 mph), 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.

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 four 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 2480/2760 mm [8 ft/9 ft]) 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

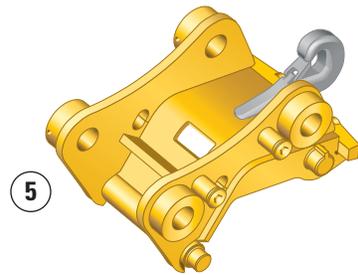
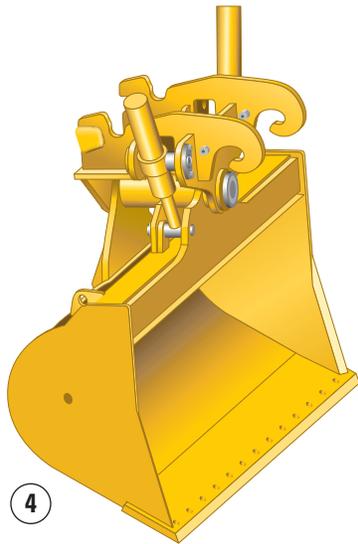
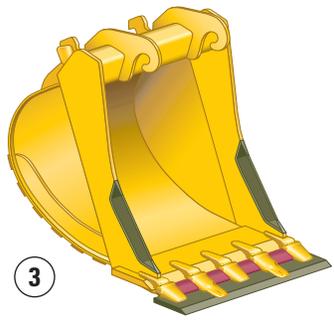
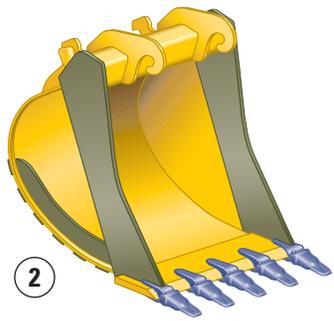
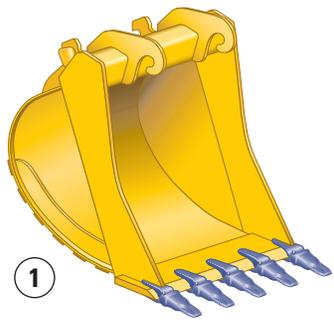
Four different stick lengths are offered to match different application requirements:

- Short stick (2000 mm/6 ft 7 in) for maximum breakout force and lifting capability.
- Medium stick (2300 mm/7 ft 7 in) for greater crowd force and lift capacity.
- Long stick (2600 mm/8 ft 6 in) for greater depth and reach requirements.
- Industrial stick (2900 mm/9 ft 6 in) for use with free-swinging grapples in material handling and industrial applications.



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**

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

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.

Vibratory Plate Compactors

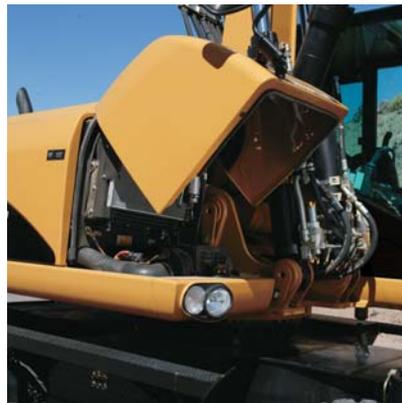
Cat compactors are performance-matched to Cat machines, and integrate perfectly with the Cat hammer line – brackets and hydraulic kits are fully interchangeable between hammers and compactors.

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.



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·SSM 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 ValveTM 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-SSM

Caterpillar has specially developed S-O-S 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.

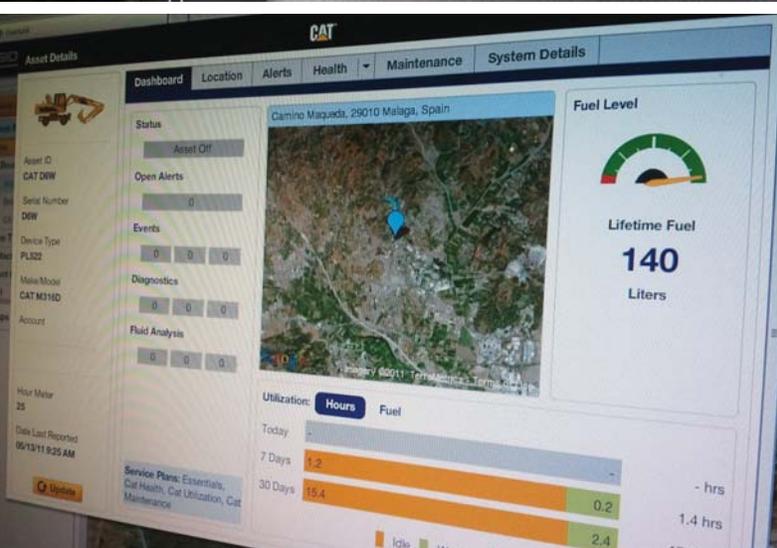
Product Link

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

On the D Series, 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.



M313D Wheel Excavator Specifications

Engine

Engine Model	Cat® C4.4 with ACERT™ Technology	
Ratings	2,000 rpm	
Gross Power	102 kW	139 hp
Net Power		
SAE J1349/ISO 9249	95 kW	128 hp
80/1269/EEC	95 kW	128 hp
Bore	105 mm	4.1 in
Stroke	127 mm	5 in
Displacement	4.4 L	268 in ³
Cylinders	4	
Maximum Torque at 1,400 rpm	550 N·m	405 lb ft

- U.S. Tier 3 compliant while meeting applicable engine emission standards (ADSD-N EPA/ARB Flexibility Engine).
- Full engine net power up to 3000 m (10,000 ft) altitude.

Hydraulic System

Tank Capacity	95 L	25 gal
System	180 L	47.6 gal
Maximum Pressure		
Implement Circuit		
Normal	350 bar	5,076 psi
Heavy Lift	375 bar	5,440 psi
Travel Circuit	350 bar	5,076 psi
Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	185 bar	2,683 psi
Swing Mechanism	350 bar	5,076 psi
Maximum Flow		
Implement/Travel Circuit	190 L/min	50 gal/min
Auxiliary Circuit		
High Pressure	190 L/min	50 gal/min
Medium Pressure	50 L/min	13 gal/min
Swing Mechanism	80 L/min	21 gal/min

Weights

VA Boom*		
Rear Dozer Only	13 800 kg	30,424 lb
Rear Dozer, Front Outriggers	14 750 kg	32,520 lb
Front and Rear Outriggers	15 050 kg	33,180 lb
One-Piece Boom*		
Rear Dozer Only	13 500 kg	29,762 lb
Rear Dozer, Front Outriggers	14 450 kg	31,857 lb
Front and Rear Outriggers	14 750 kg	32,250 lb
Offset Boom*		
Rear Dozer Only	14 350 kg	31,636 lb
Rear Dozer, Front Outriggers	15 300 kg	33,731 lb
Front and Rear Outriggers	15 600 kg	34,392 lb
Sticks		
Short – 2000 mm (6'7")	370 kg	816 lb
Medium – 2300 mm (7'7")	390 kg	860 lb
Long – 2600 mm (8'6")	440 kg	970 lb
Industrial – 2900 mm (9'6")	380 kg	838 lb
Dozer Blade	750 kg	1,654 lb
Outriggers	960 kg	2,116 lb
Counterweight		
Standard	2900 kg	6,390 lb
Optional	3300 kg	7,275 lb

- Machine weight with medium stick, 3300 kg (7,275 lb) counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.

Transmission

Forward/Reverse		
1st Gear	9 km/h	5.6 mph
2nd Gear	37 km/h	23 mph
Creeper Speed		
1st Gear	3 km/h	1.9 mph
2nd Gear	13 km/h	8 mph
Drawbar Pull	76 kN	17,085 lb
Maximum Gradeability	58%	

Swing Mechanism

Swing Speed	10.5 rpm	
Swing Torque	35 kN·m	25,815 lb ft

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	14.6 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	± 9°	
Minimum Turning Radius		
Outside of Tire	6200 mm	20 ft 4 in
End of VA Boom	6700 mm	22 ft
End of One-Piece Boom	8100 mm	26 ft 7 in

Service Refill Capacities

Fuel Tank	235 L	62 gal
Cooling	31 L	8.2 gal
Engine Crankcase	8 L	2.1 gal
Rear Axle Housing (differential)	11.2 L	3.0 gal
Front Steering Axle (differential)	9 L	2.4 gal
Final Drive	2.4 L	0.6 gal
Powershift Transmission	2.5 L	0.7 gal

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).

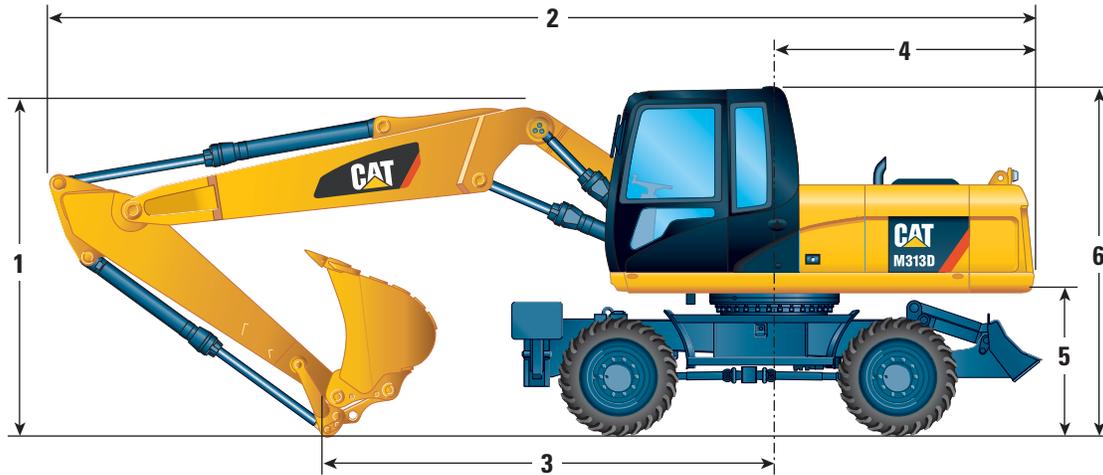
Cab/ROPS/FOGS

- 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.

M313D Wheel Excavator Specifications

Dimensions

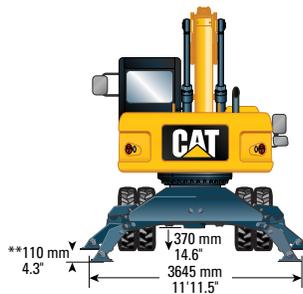
All dimensions are approximate.



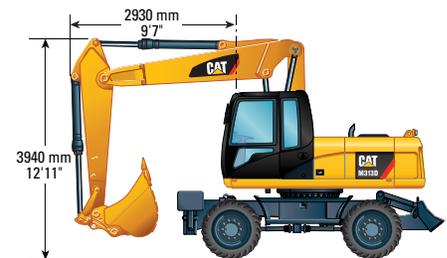
		VA Boom				One-Piece Boom				Offset Boom	
		2000	2300	2600	*2900	2000	2300	2600	*2900	2000	2300
Stick Length	mm (ft/in)	2000 (6'7")	2300 (7'7")	2600 (8'6")	*2900 (9'6")	2000 (6'7")	2300 (7'7")	2600 (8'6")	*2900 (9'6")	2000 (6'7")	2300 (7'7")
1 Shipping Height	mm (ft/in)	3120 (10'3")	3120 (10'3")	3120 (10'3")	3120 (10'3")	3120 (10'3")	3120 (10'3")	3120 (10'3")	3120 (10'3")	3120 (10'3")	3120 (10'3")
2 Shipping Length	mm (ft/in)	8310 (27'3")	8300 (27'3")	8290 (27'2")	8130 (26'8")	8090 (26'6")	8080 (26'6")	8090 (26'6")	7950 (26'1")	8300 (27'3")	8300 (27'3")
3 Support Point	mm (ft/in)	3820 (12'6")	3470 (11'5")	3320 (10'11")	3580 (11'9")	3480 (11'5")	3120 (10'3")	2950 (9'8")	3170 (10'5")	3820 (12'6")	3460 (11'4")
4 Tail Swing Radius	mm (ft/in)	2060 (6'9")				2060 (6'9")				2060 (6'9")	
5 Counterweight Clearance	mm (ft/in)	1230 (4'0")				1230 (4'0")				1230 (4'0")	
6 Cab Height	mm (ft/in)	3120 (10'3")				3120 (10'3")				3120 (10'3")	

* Industrial stick

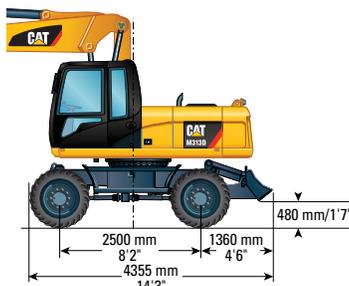
** Maximum tire clearance with outrigger fully down



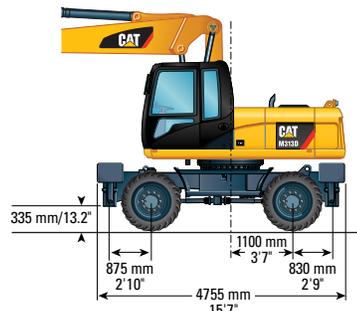
Roading position with 2300 mm (7'7") stick



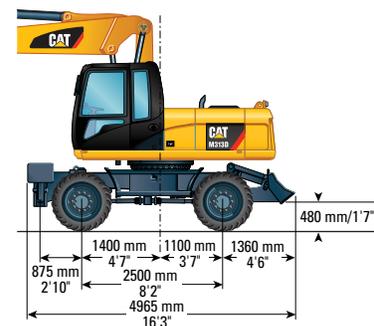
Undercarriage with dozer only



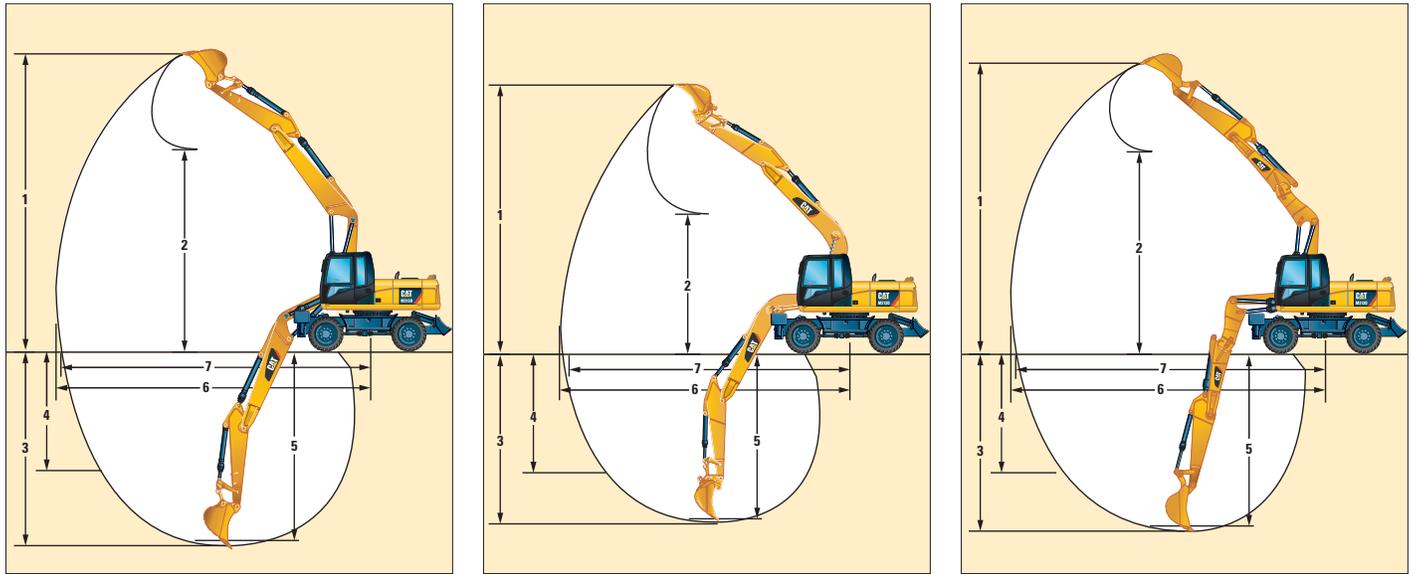
Undercarriage with 2 sets of outriggers



Undercarriage with 1 set of outriggers and dozer



Working Ranges



		VA Boom				One-Piece Boom				Offset Boom	
		2000 (6'7")	2300 (7'7")	2600 (8'6")	*2900 (9'6")	2000 (6'7")	2300 (7'7")	2600 (8'6")	*2900 (9'6")	2000 (6'7")	2300 (7'7")
Stick Length	mm (ft/in)										
1 Digging Height	mm (ft/in)	9670 (31'9")	9820 (32'3")	10 060 (33'0")	8500 (27'11")	8600 (28'3")	8620 (28'3")	8790 (28'10")	7140 (23'5")	9670 (31'9")	9820 (32'3")
2 Dump Height	mm (ft/in)	6900 (22'8")	7060 (23'2")	7290 (23'11")	4020 (13'2")	5910 (19'5")	5970 (19'7")	6140 (20'2")	3160 (10'4")	6900 (22'8")	7060 (23'2")
3 Digging Depth	mm (ft/in)	5160 (16'11")	5450 (17'11")	5750 (18'10")	4670 (15'4")	4990 (16'4")	5290 (17'4")	5590 (18'4")	4500 (14'9")	5160 (16'11")	5450 (17'11")
4 Vertical Wall Digging Depth	mm (ft/in)	3500 (11'6")	3600 (11'10")	3890 (12'9")	–	3410 (11'2")	3370 (11'1")	3670 (12'0")	–	3500 (11'6")	3600 (11'10")
5 Depth 2.5 m (8'3") Straight Clean-Up	mm (ft/in)	4920 (16'2")	5230 (17'2")	5550 (18'2")	–	4750 (15'7")	5070 (16'8")	5390 (17'8")	–	4920 (16'2")	5230 (17'2")
6 Reach	mm (ft/in)	8670 (28'5")	8920 (29'3")	9210 (30'3")	7910 (25'11")	8420 (27'7")	8660 (28'5")	8950 (29'4")	7610 (25'0")	8670 (28'5")	8920 (29'3")
7 Reach at Ground Level	mm (ft/in)	8490 (27'10")	8740 (28'8")	9030 (29'8")	7710 (25'4")	8230 (27'0")	8480 (27'10")	8770 (28'9")	7400 (24'3")	8490 (27'10")	8740 (28'8")
Bucket Forces (ISO 6015)	kN (lb)	93 (20,907)	93 (20,907)	93 (20,907)	–	93 (20,907)	93 (20,907)	93 (20,907)	–	93 (20,907)	93 (20,907)
Stick Forces (ISO 6015)	kN (lb)	73 (16,411)	67 (15,062)	62 (13,938)	–	73 (16,411)	67 (15,062)	62 (13,938)	–	73 (16,411)	67 (15,062)

* Industrial stick has no bucket linkage. All dimensions refer to sticknose.

Values 1-7 are calculated with bucket and quick coupler with a tip radius of 1400 mm (4'7").

Breakout force values are calculated with heavy lift on (no quick coupler) and a tip radius of 1236 mm (4'0").

M313D 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 5020 mm (16'6")												One-Piece Boom 4815 mm (15'10")												Offset Boom 5020 mm (16'6")					
		(1)				(2)				(3)				(1)				(2)				(3)				(1)		(2)		(3)	
		Stick Length (mm)		2000	2300	2600	2900	2000		2300	2600	2900	2000		2300	2600	2900	2000		2300	2600	2900	2000		2300	2600	2900	2000	2300	2000	2300
Stick Length (ft/in)		6'7"	7'7"	8'6"	9'6"	6'7"		7'7"	8'6"	9'6"	6'7"		7'7"	8'6"	9'6"	6'7"		7'7"	8'6"	9'6"	6'7"		7'7"	8'6"	9'6"	6'7"	7'7"	6'7"	7'7"	6'7"	7'7"
Hammers	H100, H100 S, H115 S																														
Hydraulic Shears (* boom mounted)	S320B*																														
	S325B*																														
Compactor	CVP75																														
(1) Dozer lowered (2) 2 sets of stabilizers lowered (3) Dozer and stabilizer lowered																															

 360° Working Range

Lift Capacities – Variable Adjustable Boom (5020 mm [16 ft 6 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)
  Load over front
  Load over rear
  Load over side
  Load point height

Short Stick
2000 mm
(6'7")

Load point height	Undercarriage configuration	3.0 m			4.5 m			6.0 m			Load point height			m		
																
6.0 m	Rear dozer up	kg			*5000	3900	3550				*3550	2550	2300	5.82		
	Rear dozer down	kg				*5000	4100					*3550	2650			
	Dozer and stabilizer down	kg				*5000	*5000					*3550	*3550			
	2 sets of stabilizers down	kg				*5000	*5000					*3550	*3550			
4.5 m	Rear dozer up	kg			*5450	3750	3400	3500	2400	2200	2900	2000	1800	6.71		
	Rear dozer down	kg				*5450	3950		*4500	2550		*3250	2100			
	Dozer and stabilizer down	kg				*5450	*5450		*4500	3850		*3250	3200			
	2 sets of stabilizers down	kg				*5450	*5450	*4500	*4500	4500	*3250	*3250	*3250			
3.0 m	Rear dozer up	kg			5250	3500	3200	3400	2300	2100	2600	1750	1600	7.16		
	Rear dozer down	kg				*6250	3700		*4750	2450		*3200	1850			
	Dozer and stabilizer down	kg				*6250	5850		*4750	3750		*3200	2850			
	2 sets of stabilizers down	kg				*6250	*6250	*4750	*4750	4400	*3200	*3200	*3200			
1.5 m	Rear dozer up	kg			5000	3300	2950	3300	2200	2000	2500	1700	1550	7.28		
	Rear dozer down	kg				*6750	3450		*4900	2350		*3300	1800			
	Dozer and stabilizer down	kg				*6750	5600		*4900	3650		*3300	2750			
	2 sets of stabilizers down	kg				*6750	*6750	*4900	*4900	4250	*3300	*3300	3200			
0.0 m	Rear dozer up	kg			4900	3200	2850	3250	2150	1950	2600	1750	1600	7.06		
	Rear dozer down	kg				*6500	3350		*4750	2250		*3600	1850			
	Dozer and stabilizer down	kg				*6500	5450		*4750	3600		*3600	2850			
	2 sets of stabilizers down	kg				*6500	*6500	*4750	*4750	4200	*3600	*3600	3350			
-1.5 m	Rear dozer up	kg	*6700	5950	5200	4900	3150	2850	3250	2150	1950	2950	1950	1800	6.48	
	Rear dozer down	kg					*5550	3350		*4000	2250		*3300	2050		
	Dozer and stabilizer down	kg		*6700	*6700			*5550	5450		*4000	3600		*3300		3250
	2 sets of stabilizers down	kg	*6700	*6700	*6700	*5550	*5550	*5550	*4000	*4000	*4000	*3300	*3300	*3300		

Short Stick
2000 mm
(6'7")

Load point height	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			Load point height			ft	
															
20.0 ft	Rear dozer up	lb			*10,900	8,400	7,700				*7,900	5,700	5,200	18.83	
	Rear dozer down	lb				*10,900	8,800					*7,900	6,000		
	Dozer and stabilizer down	lb				*10,900	*10,900					*7,900	*7,900		
	2 sets of stabilizers down	lb				*10,900	*10,900					*7,900	*7,900		
15.0 ft	Rear dozer up	lb			*11,800	8,100	7,400	7,500	5,200	4,700	6,500	4,400	4,000	21.88	
	Rear dozer down	lb				*11,800	8,500		*9,800	5,400		*7,200	4,700		
	Dozer and stabilizer down	lb				*11,800	*11,800		*9,800	8,300		*7,200	7,100		
	2 sets of stabilizers down	lb				*11,800	*11,800	*9,800	*9,800	9,700	*7,200	*7,200	*7,200		
10.0 ft	Rear dozer up	lb			11,300	7,600	6,900	7,300	5,000	4,600	5,700	3,900	3,500	23.46	
	Rear dozer down	lb				*13,500	8,000		*10,300	5,300		*7,000	4,100		
	Dozer and stabilizer down	lb				*13,500	12,600		*10,300	8,100		*7,000	6,300		
	2 sets of stabilizers down	lb				*13,500	*13,500	*13,500	*10,300	*10,300	9,400	*7,000	*7,000		
5.0 ft	Rear dozer up	lb			10,800	7,100	6,400	7,100	4,800	4,300	5,500	3,700	3,400	23.88	
	Rear dozer down	lb				*14,600	7,500		*10,700	5,000		*7,300	3,900		
	Dozer and stabilizer down	lb				*14,600	12,000		*10,700	7,900		*7,300	6,100		
	2 sets of stabilizers down	lb				*14,600	*14,600	14,300	*10,700	*10,700	9,200	*7,300	*7,300		
0.0 ft	Rear dozer up	lb			10,500	6,900	6,200	7,000	4,600	4,200	5,700	3,800	3,500	23.16	
	Rear dozer down	lb				*14,100	7,200		*10,300	4,900		*8,000	4,000		
	Dozer and stabilizer down	lb				*14,100	11,800		*10,300	7,700		*8,000	6,300		
	2 sets of stabilizers down	lb				*14,100	*14,100	14,000	*10,300	*10,300	9,100	*8,000	*8,000		
-5.0 ft	Rear dozer up	lb	*15,200	12,700	11,200	10,500	6,800	6,200	7,000	4,600	4,200	6,500	4,300	3,900	21.23
	Rear dozer down	lb		*15,200	13,400		*12,100	7,200		*8,500	4,900		*7,200	4,600	
	Dozer and stabilizer down	lb		*15,200	*15,200		*12,100	11,700		*8,500	7,700		*7,200	7,200	
	2 sets of stabilizers down	lb	*15,200	*15,200	*15,200	*12,100	*12,100	*12,100	*8,500	*8,500	*8,500	*7,200	*7,200	*7,200	

*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 – Variable Adjustable Boom (5020 mm [16 ft 6 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

Stick 2600 mm (8'6")	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			Load point height			m	
		Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load point height			
6.0 m	Rear dozer up	kg				*4000	*4000	3650	3600	2500	2250				*2500	2150	1950	6.49
	Rear dozer down	kg				*4000	*4000	*4000		*3650	2600					*2500	2250	
	Dozer and stabilizer down	kg				*4000	*4000	*4000		*3650	*3650					*2500	*2500	
	2 sets of stabilizers down	kg				*4000	*4000	*4000		*3650	*3650					*2500	*2500	
4.5 m	Rear dozer up	kg				*4500	3850	3500	3550	2450	2250				*2350	1750	1600	7.29
	Rear dozer down	kg				*4500	4000			*4200	2550					*2350	1850	
	Dozer and stabilizer down	kg				*4500	*4500	*4500		*4200	3900					*2350	*2350	
	2 sets of stabilizers down	kg				*4500	*4500	*4500		*4200	*4200					*2350	*2350	
3.0 m	Rear dozer up	kg				5300	3550	3250	3400	2350	2100	2450	1650	1500	2300	1550	1400	7.71
	Rear dozer down	kg					*5850	3750		*4500	2450		*3350	1750		*2350	1650	
	Dozer and stabilizer down	kg					*5850	*5850		*4500	3800		*3350	2700		*2350	*2350	
	2 sets of stabilizers down	kg				*5850	*5850	*5850	*4500	*4500	4400	*3350	*3350	3100	*2350	*2350	*2350	
1.5 m	Rear dozer up	kg				5050	3300	3000	3300	2200	2000	2400	1600	1450	2250	1500	1350	7.81
	Rear dozer down	kg					*6550	3500		*4800	2350		3750	1700		*2450	1600	
	Dozer and stabilizer down	kg					*6550	5600		*4800	3650		3750	2650		*2450	*2450	
	2 sets of stabilizers down	kg				*6550	*6550	*6550	*4800	*4800	4250	*3800	*3800	3050	*2450	*2450	*2450	
0.0 m	Rear dozer up	kg				4850	3150	2850	3200	2100	1900	2350	1550	1400	2300	1500	1400	7.61
	Rear dozer down	kg					*6650	3350		*4800	2250		*3550	1650		*2700	1600	
	Dozer and stabilizer down	kg					*6650	5450		*4800	3550		*3550	2600		*2700	2550	
	2 sets of stabilizers down	kg				*6650	*6650	6500	*4800	*4800	4150	*3550	*3550	3050	*2700	*2700	*2700	
-1.5 m	Rear dozer up	kg	*6400	5800	5050	4800	3100	2800	3150	2100	1900				2550	1700	1550	7.08
	Rear dozer down	kg		*6400	6100		*6000	3300		*4350	2200					*3150	1800	
	Dozer and stabilizer down	kg		*6400	*6400		*6000	5400		*4350	3500					*3150	2800	
	2 sets of stabilizers down	kg	*6400	*6400	*6400	*6000	*6000	*6000	*4350	*4350	4150				*3150	*3150	*3150	
-3.0 m	Rear dozer up	kg				*4550	3150	2850	*2900	2150	1950							
	Rear dozer down	kg					*4550	3350		*2900	2250							
	Dozer and stabilizer down	kg					*4550	*4550		*2900	*2900							
	2 sets of stabilizers down	kg				*4550	*4550	*4550	*2900	*2900	*2900							

Stick 2600 mm (8'6")	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft			Load point height			ft	
		Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load point height			
20.0 ft	Rear dozer up	lb				*8,800	8,600	7,800	*7,600	5,300	4,900				*5,600	4,800	4,400	21.06
	Rear dozer down	lb					*8,800	*8,800		*7,600	5,600					*5,600	5,100	
	Dozer and stabilizer down	lb					*8,800	*8,800		*7,600	*7,600					*5,600	*5,600	
	2 sets of stabilizers down	lb				*8,800	*8,800	*8,800	*7,600	*7,600	*7,600					*5,600	*5,600	
15.0 ft	Rear dozer up	lb				*9,800	8,300	7,500	7,600	5,200	4,800				*5,200	3,900	3,500	23.82
	Rear dozer down	lb					*9,800	8,700		*9,100	5,500					*5,200	4,100	
	Dozer and stabilizer down	lb					*9,800	*9,800		*9,100	8,400					*5,200	*5,200	
	2 sets of stabilizers down	lb				*9,800	*9,800	*9,800	*9,100	*9,100	*9,100					*5,200	*5,200	
10.0 ft	Rear dozer up	lb				11,500	7,700	7,000	7,400	5,000	4,600	5,200	3,500	3,200	5,100	3,400	3,100	25.26
	Rear dozer down	lb					*12,600	8,100		*9,800	5,300		*6,200	3,700		*5,200	3,600	
	Dozer and stabilizer down	lb					*12,600	*12,600		*9,800	8,100		*6,200	5,800		*5,200	*5,200	
	2 sets of stabilizers down	lb				*12,600	*12,600	*12,600	*9,800	*9,800	9,500	*6,200	*6,200	*6,200	*5,200	*5,200	*5,200	
5.0 ft	Rear dozer up	lb				10,800	7,100	6,400	7,100	4,800	4,300	5,100	3,400	3,100	4,900	3,300	3,000	25.62
	Rear dozer down	lb					*14,200	7,500		*10,400	5,000		*7,800	3,600		*5,400	3,500	
	Dozer and stabilizer down	lb					*14,200	12,100		*10,400	7,900		*7,800	5,700		*5,400	*5,400	
	2 sets of stabilizers down	lb				*14,200	*14,200	*14,200	*10,400	*10,400	9,200	*7,800	*7,800	6,600	*5,400	*5,400	*5,400	
0.0 ft	Rear dozer up	lb	*7,500	*7,500	*7,500	10,500	6,800	6,100	6,900	4,600	4,100				5,100	3,400	3,100	24.97
	Rear dozer down	lb		*7,500	*7,500		*14,400	7,200		*10,400	4,800					*5,900	3,600	
	Dozer and stabilizer down	lb		*7,500	*7,500		*14,400	11,700		*10,400	7,700					*5,900	5,600	
	2 sets of stabilizers down	lb	*7,500	*7,500	*7,500	*14,400	*14,400	13,900	*10,400	*10,400	9,000				*5,900	*5,900	*5,900	
-5.0 ft	Rear dozer up	lb	*14,600	12,400	10,900	10,300	6,700	6,000	6,800	4,500	4,100				5,600	3,700	3,400	23.20
	Rear dozer down	lb		*14,600	13,100		*13,000	7,100		*9,400	4,800					*7,000	3,900	
	Dozer and stabilizer down	lb		*14,600	*14,600		*13,000	11,600		*9,400	7,600					*7,000	6,200	
	2 sets of stabilizers down	lb	*14,600	*14,600	*14,600	*13,000	*13,000	*13,000	*9,400	*9,400	8,900				*7,000	*7,000	*7,000	
-10.0 ft	Rear dozer up	lb				*9,700	6,800	6,100										
	Rear dozer down	lb					*9,700	7,200										
	Dozer and stabilizer down	lb					*9,700	7,200										
	2 sets of stabilizers down	lb				*9,700	*9,700	*9,700										

*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.

M313D Wheel Excavator Specifications

Lift Capacities – Variable Adjustable Boom (5020 mm [16 ft 6 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

Industrial Stick 2900 mm (9'6")	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			Load point height				
		kg	kg	kg	kg	m												
6.0 m	Rear dozer up	kg			*4150	*4150	3850	3800	2700	2500				*3150	2300	2150	6.60	
	Rear dozer down	kg			*4150	*4150	*4150		*4000	2800					*3150	*3150		2400
	Dozer and stabilizer down	kg			*4150	*4150	*4150		*4000	*4000					*3150	*3150		*3150
	2 sets of stabilizers down	kg			*4150	*4150	*4150	*4000	*4000	*4000					*3150	*3150		*3150
4.5 m	Rear dozer up	kg			*4600	4050	3700	3750	2650	2450				2700	1900	1750	7.39	
	Rear dozer down	kg			*4600	*4600	4250		*4250	2750					*3100	2000		
	Dozer and stabilizer down	kg			*4600	*4600	*4600		*4250	4100					*3100	3000		
	2 sets of stabilizers down	kg			*4600	*4600	*4600	*4250	*4250	*4250					*3100	*3100		
3.0 m	Rear dozer up	kg			5550	3800	3500	3650	2550	2350	2600	1850	1700	2450	1700	1600	7.80	
	Rear dozer down	kg			*5850	*5850	4000		*4650	2650		*3800	1950		*3200	1800		
	Dozer and stabilizer down	kg			*5850	*5850	*5850		*4650	4000		*3800	2900		*3200	2700		
	2 sets of stabilizers down	kg			*5850	*5850	*5850	*4650	*4650	4600	*3800	*3800	3300	*3200	*3200	3100		
1.5 m	Rear dozer up	kg			5300	3550	3250	3500	2400	2200	2550	1800	1650	2400	1650	1500	7.90	
	Rear dozer down	kg			*6700	*6700	3750		*5000	2550		3900	1850		*3400	1750		
	Dozer and stabilizer down	kg			*6700	*6700	5850		*5000	3850		3950	2800		*3400	2600		
	2 sets of stabilizers down	kg			*6700	*6700	*6700	*5000	*5000	4500	*4000	*4000	3250	*3400	*3400	3000		
0.0 m	Rear dozer up	kg			5100	3400	3050	3400	2300	2150	2550	1750	1600	2450	1700	1550	7.71	
	Rear dozer down	kg			*6950	*6950	3550		*5100	2450		3850	1850		*3700	1750		
	Dozer and stabilizer down	kg			*6950	*6950	5700		*5100	3750		*3900	2800		*3700	2700		
	2 sets of stabilizers down	kg			*6950	*6950	6750	*5100	*5100	4400	*3900	*3900	3200	*3700	*3700	3100		
-1.5 m	Rear dozer up	kg	*7400	6050	5300	5050	3350	3000	3350	2300	2100				2650	1800	1650	
	Rear dozer down	kg	*7400	*7400	6350		*6450	3500		*4750	2400					*3600	1900	
	Dozer and stabilizer down	kg	*7400	*7400	*7400		*6450	5600		*4750	3700					*3600	2950	
	2 sets of stabilizers down	kg	*7400	*7400	*7400	*6450	*6450	*6450	*4750	*4750	4350					*3600	3400	
-3.0 m	Rear dozer up	kg	*6950	6150	5400	5050	3350	3050	3400	2300	2100				3200	2200	2000	
	Rear dozer down	kg	*6950	*6950	6450		*5150	3550		*3600	2450					*3300	2300	
	Dozer and stabilizer down	kg	*6950	*6950	*6950		*5150	*5150		*3600	*3600					*3300	*3300	
	2 sets of stabilizers down	kg	*6950	*6950	*6950	*5150	*5150	*5150	*3600	*3600	*3600					*3300	*3300	

Industrial Stick 2900 mm (9'6")	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft			Load point height			
		lb	lb	lb	lb	lb	ft										
20.0 ft	Rear dozer up	lb			*9,200	9,000	8,300	8,200	5,800	5,300				*7,000	5,200	4,800	21.42
	Rear dozer down	lb			*9,200	*9,200	*9,200		*8,500	6,000					*7,000	5,400	
	Dozer and stabilizer down	lb			*9,200	*9,200	*9,200		*8,500	*8,500					*7,000	*7,000	
	2 sets of stabilizers down	lb			*9,200	*9,200	*9,200	*8,500	*8,500	*8,500					*7,000	*7,000	
15.0 ft	Rear dozer up	lb			*10,100	8,800	8,000	8,100	5,700	5,200				6,000	4,200	3,900	24.15
	Rear dozer down	lb			*10,100	9,200		*9,300	6,000						*6,800	4,500	
	Dozer and stabilizer down	lb			*10,100	*10,100	*10,100		*9,300	8,800					*6,800	6,600	
	2 sets of stabilizers down	lb			*10,100	*10,100	*10,100	*9,300	*9,300	*9,300					*6,800	*6,800	
10.0 ft	Rear dozer up	lb			12,000	8,300	7,500	7,800	5,500	5,000	5,700	3,900	3,600	5,500	3,800	3,500	25.56
	Rear dozer down	lb			*12,700	*12,700	8,600		*10,000	5,700		*8,200	4,100		*7,000	4,000	
	Dozer and stabilizer down	lb			*12,700	*12,700	*12,700		*10,000	8,600		*8,200	6,200		*7,000	6,000	
	2 sets of stabilizers down	lb			*12,700	*12,700	*12,700	*10,000	*10,000	10,000	*8,200	*8,200	7,100	*7,000	*7,000	6,900	
5.0 ft	Rear dozer up	lb			11,400	7,700	7,000	7,600	5,200	4,800	5,500	3,800	3,500	5,300	3,600	3,400	25.95
	Rear dozer down	lb			*14,500	8,100		*10,800	5,500			*8,400	4,000		*7,500	3,800	
	Dozer and stabilizer down	lb			*14,500	12,700		*10,800	8,300			8,500	6,100		*7,500	5,800	
	2 sets of stabilizers down	lb			*14,500	*14,500	*14,500	*10,800	*10,800	9,700	*8,700	*8,700	7,000	*7,500	*7,500	6,700	
0.0 ft	Rear dozer up	lb			11,000	7,300	6,600	7,400	5,000	4,600	5,500	3,800	3,500	5,400	3,700	3,400	25.30
	Rear dozer down	lb			*15,000	7,700		*11,000	5,300			8,300	4,000		8,200	3,900	
	Dozer and stabilizer down	lb			*15,000	12,200		*11,000	8,100			*8,400	6,000		*8,200	5,900	
	2 sets of stabilizers down	lb			*15,000	*15,000	14,500	*11,000	*11,000	9,400	*8,400	*8,400	6,900	*8,200	*8,200	6,800	
-5.0 ft	Rear dozer up	lb	*16,900	13,000	11,400	10,800	7,200	6,500	7,300	4,900	4,500			5,900	4,000	3,700	23.52
	Rear dozer down	lb	*16,900	*16,900	13,700		*14,000	7,600		*10,200	5,200				*8,000	4,200	
	Dozer and stabilizer down	lb	*16,900	*16,900	*16,900		*14,000	12,100		*10,200	8,000				*8,000	6,500	
	2 sets of stabilizers down	lb	*16,900	*16,900	*16,900	*14,000	*14,000	*14,000	*10,200	*10,200	9,300				*8,000	*8,000	
-10.0 ft	Rear dozer up	lb	*14,900	13,200	11,600	10,900	7,200	6,500	7,300	5,000	4,600			7,200	4,900	4,500	20.37
	Rear dozer down	lb	*14,900	*14,900	13,900		*11,100	7,600		*7,600	5,300				*7,300	5,100	
	Dozer and stabilizer down	lb	*14,900	*14,900	*14,900		*11,100	*11,100		*7,600	*7,600				*7,300	*7,300	
	2 sets of stabilizers down	lb	*14,900	*14,900	*14,900	*11,100	*11,100	*11,100	*7,600	*7,600	*7,600				*7,300	*7,300	

*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 (4815 mm [15 ft 10 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)
  Load over front
  Load over rear
  Load over side
  Load point height

Short Stick
2000 mm
(6'7")

Load point height	Undercarriage configuration	3.0 m			4.5 m			6.0 m			Load point height			m	
															
4.5 m	Rear dozer up	kg			*5100	3800	3450	3500	2400	2250	*3000	2150	2000	6.44	
	Rear dozer down	kg				*5100	3950		*4450	2550		*3000	2250		
	Dozer and stabilizer down	kg				*5100	*5100		*4450	3850		*3000	*3000		
	2 sets of stabilizers down	kg				*5100	*5100	*4450	*4450	*4450	*3000	*3000	*3000		
3.0 m	Rear dozer up	kg			5300	3600	3250	3450	2350	2150	2750	1900	1750	6.91	
	Rear dozer down	kg				*6000	3750		*4700	2450		*2950	2000		
	Dozer and stabilizer down	kg				*6000	5900		*4700	3800		*2950	*2950		
	2 sets of stabilizers down	kg				*6000	*6000	*4700	*4700	4400	*2950	*2950	*2950		
1.5 m	Rear dozer up	kg			5050	3350	3050	3350	2250	2050	2650	1800	1650	7.03	
	Rear dozer down	kg				*6750	3550		*4950	2400		*3100	1900		
	Dozer and stabilizer down	kg				*6750	5650		*4950	3700		*3100	2900		
	2 sets of stabilizers down	kg				*6750	6700	*4950	*4950	4300	*3100	*3100	*3100		
0.0 m	Rear dozer up	kg			4950	3250	2950	3250	2200	2000	2750	1850	1700	6.80	
	Rear dozer down	kg				*6800	3450		*4950	2300		*3450	1950		
	Dozer and stabilizer down	kg				*6800	5500		*4950	3600		*3450	3050		
	2 sets of stabilizers down	kg				*6800	6550	*4950	*4950	4200	*3450	*3450	*3450		
-1.5 m	Rear dozer up	kg	*8300	6000	5300	4900	3250	2950	3250	2200	2000	3150	2100	1950	6.20
	Rear dozer down	kg		*8300	6350		*6100	3400		*4250	2300		*3900	2250	
	Dozer and stabilizer down	kg		*8300	*8300		*6100	5500		*4250	3600		*3900	3450	
	2 sets of stabilizers down	kg	*8300	*8300	*8300	*6100	*6100	*6100	*4250	*4250	4200	*3900	*3900	*3900	
-3.0 m	Rear dozer up	kg	*5800	*5800	5400	*4250	3300	3000				*3300	2850	2600	5.07
	Rear dozer down	kg		*5800	*5800		*4250	3500					*3300	3000	
	Dozer and stabilizer down	kg		*5800	*5800		*4250	*4250					*3300	*3300	
	2 sets of stabilizers down	kg	*5800	*5800	*5800	*4250	*4250	*4250					*3300	*3300	

Short Stick
2000 mm
(6'7")

Load point height	Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			Load point height			ft	
															
15.0 ft	Rear dozer up	lb			*11,100	8,200	7,500	7,500	5,200	4,800	*6,600	4,800	4,400	21.00	
	Rear dozer down	lb				*11,100	8,600		*9,700	5,500		*6,600	5,000		
	Dozer and stabilizer down	lb				*11,100	*11,100		*9,700	8,300		*6,600	*6,600		
	2 sets of stabilizers down	lb				*11,100	*11,100	*11,100	*9,700	*9,700	9,600	*6,600	*6,600		*6,600
10.0 ft	Rear dozer up	lb			11,400	7,700	7,000	7,400	5,100	4,600	6,100	4,200	3,800	22.64	
	Rear dozer down	lb				*13,000	8,100		*10,200	5,300		*6,500	4,400		
	Dozer and stabilizer down	lb				*13,000	12,700		*10,200	8,100		*6,500	*6,500		
	2 sets of stabilizers down	lb				*13,000	*13,000	*13,000	*10,200	*10,200	9,500	*6,500	*6,500		*6,500
5.0 ft	Rear dozer up	lb			10,900	7,300	6,600	7,200	4,900	4,500	5,800	4,000	3,600	23.06	
	Rear dozer down	lb				*14,600	7,600		*10,700	5,100		*6,800	4,200		
	Dozer and stabilizer down	lb				*14,600	12,100		*10,700	7,900		*6,800	6,400		
	2 sets of stabilizers down	lb				*14,600	*14,600	14,400	*10,700	*10,700	9,200	*6,800	*6,800		*6,800
0.0 ft	Rear dozer up	lb			10,600	7,000	6,400	7,000	4,700	4,300	6,100	4,100	3,800	22.31	
	Rear dozer down	lb				*14,700	7,400		*10,700	5,000		*7,600	4,300		
	Dozer and stabilizer down	lb				*14,700	11,900		*10,700	7,800		*7,600	6,700		
	2 sets of stabilizers down	lb				*14,700	*14,700	14,100	*10,700	*10,700	9,100	*7,600	*7,600		*7,600
-5.0 ft	Rear dozer up	lb	*18,000	12,900	11,400	10,600	7,000	6,300	7,100	4,800	4,300	6,900	4,700	4,300	20.31
	Rear dozer down	lb		*18,000	13,600		*13,200	7,400		*9,000	5,000		*8,600	4,900	
	Dozer and stabilizer down	lb		*18,000	*18,000		*13,200	11,800		*9,000	7,800		*8,600	7,700	
	2 sets of stabilizers down	lb	*18,000	*18,000	*18,000	*13,200	*13,200	*13,200	*9,000	*9,000	*9,000	*8,600	*8,600	*8,600	
-10.0 ft	Rear dozer up	lb	*12,500	*12,500	11,700	*8,900	7,200	6,500				*7,200	6,300	5,800	16.47
	Rear dozer down	lb		*12,500	*12,500		*8,900	7,600					*7,200	6,700	
	Dozer and stabilizer down	lb		*12,500	*12,500		*8,900	*8,900					*7,200	*7,200	
	2 sets of stabilizers down	lb	*12,500	*12,500	*12,500	*8,900	*8,900	*8,900					*7,200	*7,200	

*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 – One-Piece Boom (4815 mm [15 ft 10 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

Long Stick 2600 mm (8'6")	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration														
						3.0 m			4.5 m			6.0 m			7.5 m			m		
						kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
7.5 m	Rear dozer up	kg														*2750	*2750	*2750	4.69	
	Rear dozer down	kg														*2750	*2750	*2750		
	Dozer and stabilizer down	kg														*2750	*2750	*2750		
	2 sets of stabilizers down	kg														*2750	*2750	*2750		
6.0 m	Rear dozer up	kg							*2900	2450	2250					*2300	*2300	2150	6.17	
	Rear dozer down	kg							*2900	2600						*2300	*2300	*2300		
	Dozer and stabilizer down	kg							*2900	*2900						*2300	*2300	*2300		
	2 sets of stabilizers down	kg							*2900	*2900						*2300	*2300	*2300		
4.5 m	Rear dozer up	kg							3550	2450	2250					*2150	1900	1750	7.01	
	Rear dozer down	kg							*4050	2550						*2150	2000			
	Dozer and stabilizer down	kg							*4050	3900						*2150	*2150			
	2 sets of stabilizers down	kg							*4050	*4050						*2150	*2150			
3.0 m	Rear dozer up	kg				5350	3650	3300	3450	2350	2150					*2200	1700	1550	7.45	
	Rear dozer down	kg				*5500	3800		*4400	2500						*2200	1750			
	Dozer and stabilizer down	kg				*5500	*5500	*5500	*4400	3800						*2200	*2200			
	2 sets of stabilizers down	kg				*5500	*5500	*5500	*4400	*4400						*2200	*2200			
1.5 m	Rear dozer up	kg				5100	3400	3050	3350	2250	2050	2400	1600	1500		*2300	1600	1450	7.55	
	Rear dozer down	kg				*6450	3550		*4800	2400		*2650	1700			*2300	1700			
	Dozer and stabilizer down	kg				*6450	5650		*4800	3700		*2650	*2650			*2300	*2300			
	2 sets of stabilizers down	kg				*6450	*6450	*6450	*4800	*4800	4300	*2650	*2650	*2650		*2300	*2300			
0.0 m	Rear dozer up	kg	*4800	*4800	*4800	4900	3250	2900	3250	2150	2000					2450	1650	1500	7.35	
	Rear dozer down	kg	*4800	*4800	*4800	*6800	3400		*4950	2300						*2550	1750			
	Dozer and stabilizer down	kg	*4800	*4800	*4800	*6800	5500		*4950	3600						*2550	*2550			
	2 sets of stabilizers down	kg	*4800	*4800	*4800	*6800	*6800	6550	*4950	*4950	4200					*2550	*2550			
-1.5 m	Rear dozer up	kg	*8050	5900	5200	4850	3200	2850	3200	2150	1950					2700	1800	1650	6.79	
	Rear dozer down	kg	*8050	6200		*6400	3350		*4600	2250						*3100	1900			
	Dozer and stabilizer down	kg	*8050	*8050		*6400	5450		*4600	3550						*3100	3000			
	2 sets of stabilizers down	kg	*8050	*8050	*8050	*6400	*6400	*6400	*4600	*4600	4150					*3100	*3100			
-3.0 m	Rear dozer up	kg	*7200	6000	5250	4900	3200	2900								3400	2300	2100	5.79	
	Rear dozer down	kg	*7200	6300		*5100	3400									*3450	2400			
	Dozer and stabilizer down	kg	*7200	*7200		*5100	*5100									*3450	*3450			
	2 sets of stabilizers down	kg	*7200	*7200	*7200	*5100	*5100									*3450	*3450			

*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.

M313D Wheel Excavator Specifications

Lift Capacities – One-Piece Boom (4815 mm [15 ft 10 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

Long Stick 2600 mm (8'6")	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	Undercarriage configuration												ft
						10.0 ft			15.0 ft			20.0 ft			25.0 ft			
						lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	lb	
20.0 ft	Rear dozer up	lb													*5,100	*5,100	4,900	19.98
	Rear dozer down	lb													*5,100	*5,100	*5,100	
	Dozer and stabilizer down	lb													*5,100	*5,100	*5,100	
	2 sets of stabilizers down	lb													*5,100	*5,100	*5,100	
15.0 ft	Rear dozer up	lb							7,600	5,300	4,800				*4,800	4,200	3,800	22.90
	Rear dozer down	lb								*8,900	5,500				*4,800	*4,800	4,400	
	Dozer and stabilizer down	lb								*8,900	*8,900	8,400			*4,800	*4,800	*4,800	
	2 sets of stabilizers down	lb							*8,900	*8,900	*8,900				*4,800	*4,800	*4,800	
10.0 ft	Rear dozer up	lb	*18,000	14,600	13,000	11,500	7,800	7,100	7,400	5,100	4,700				*4,800	3,700	3,400	24.41
	Rear dozer down	lb		*18,000	15,300		*11,900	8,200		*9,600	5,400					*4,800	3,900	
	Dozer and stabilizer down	lb		*18,000	*18,000		*11,900	*11,900		*9,600	8,200					*4,800	*4,800	
	2 sets of stabilizers down	lb	*18,000	*18,000	*18,000	*11,900	*11,900		*9,600	*9,600	9,500				*4,800	*4,800	*4,800	
5.0 ft	Rear dozer up	lb				11,000	7,300	6,600	7,200	4,900	4,400				*5,100	3,500	3,200	24.77
	Rear dozer down	lb					*14,000	7,700		*10,400	5,100				*5,100	*5,100	3,700	
	Dozer and stabilizer down	lb					*14,000	12,200		*10,400	7,900				*5,100	*5,100	*5,100	
	2 sets of stabilizers down	lb				*14,000	*14,000	*14,000	*10,400	*10,400	9,200				*5,100	*5,100	*5,100	
0.0 ft	Rear dozer up	lb	*11,100	*11,100	*11,100	10,600	7,000	6,300	7,000	4,700	4,300				5,400	3,600	3,300	24.11
	Rear dozer down	lb		*11,100	*11,100		*14,700	7,300		*10,700	4,900					*5,600	3,800	
	Dozer and stabilizer down	lb		*11,100	*11,100		*14,700	11,800		*10,700	7,700					*5,600	*5,600	
	2 sets of stabilizers down	lb	*11,100	*11,100	*11,100	*14,700	*14,700	14,000	*10,700	*10,700	9,000				*5,600	*5,600	*5,600	
-5.0 ft	Rear dozer up	lb	*18,400	12,700	11,100	10,500	6,900	6,200	6,900	4,600	4,200				6,000	4,000	3,700	22.24
	Rear dozer down	lb		*18,400	13,300		*13,900	7,200		*9,900	4,900					*6,800	4,300	
	Dozer and stabilizer down	lb		*18,400	*18,400		*13,900	11,700		*9,900	7,700					*6,800	6,600	
	2 sets of stabilizers down	lb	*18,400	*18,400	*18,400	*13,900	*13,900	*13,900	*9,900	*9,900	9,000				*6,800	*6,800	*6,800	
-10.0 ft	Rear dozer up	lb	*15,500	12,900	11,400	10,600	6,900	6,300							*7,500	5,100	4,700	18.86
	Rear dozer down	lb		*15,500	13,600		*11,000	7,300								*7,500	5,400	
	Dozer and stabilizer down	lb		*15,500	*15,500		*11,000	*11,000								*7,500	*7,500	
	2 sets of stabilizers down	lb	*15,500	*15,500	*15,500	*11,000	*11,000								*7,500	*7,500	*7,500	

*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.

M313D Wheel Excavator Specifications

Lift Capacities – Offset Boom (5020 mm [16 ft 6 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

 Load at maximum reach (sticknose/bucket pin)
  Load over front
  Load over rear
  Load over side
  Load point height

Short Stick
2000 mm
(6'7")

Load point height	Undercarriage configuration		3.0 m			4.5 m			6.0 m			Load point height			m
															
6.0 m	Rear dozer up	kg				*4850	3850	3500				*3400	2400	2200	5.81
	Rear dozer down	kg					*4850	4050					*3400	2550	
	Dozer and stabilizer down	kg					*4850	*4850					*3400	*3400	
	2 sets of stabilizers down	kg					*4850	*4850					*3400	*3400	
4.5 m	Rear dozer up	kg				*5250	3650	3300	3400	2300	2050	2800	1850	1650	6.70
	Rear dozer down	kg					*5250	3850		*4300	2400		*3100	1950	
	Dozer and stabilizer down	kg					*5250	*5250		*4300	3750		*3100	3100	
	2 sets of stabilizers down	kg					*5250	*5250	*4300	*4300	*4300		*3100	*3100	
3.0 m	Rear dozer up	kg				5100	3300	3000	3250	2150	1950	2450	1600	1450	7.16
	Rear dozer down	kg					*6000	3500		*4550	2300		*3050	1700	
	Dozer and stabilizer down	kg					*6000	5700		*4550	3650		*3050	2750	
	2 sets of stabilizers down	kg					*6000	*6000	*4550	*4550	4250		*3050	*3050	
1.5 m	Rear dozer up	kg				4750	3000	2700	3100	2000	1800	2350	1500	1350	7.27
	Rear dozer down	kg					*6400	3200		*4650	2150		*3200	1600	
	Dozer and stabilizer down	kg					*6400	5350		*4650	3500		*3200	2600	
	2 sets of stabilizers down	kg					*6400	*6400	6400	*4650	*4650	4100	*3200	*3200	
0.0 m	Rear dozer up	kg				4600	2850	2550	3050	1950	1750	2450	1550	1400	7.05
	Rear dozer down	kg					*6150	3050		*4500	2050		*3450	1650	
	Dozer and stabilizer down	kg					*6150	5150		*4500	3400		*3450	2700	
	2 sets of stabilizers down	kg					*6150	*6150	*4500	*4500	4000		*3450	*3450	
-1.5 m	Rear dozer up	kg	*6400	5450	4700	4600	2850	2550	3050	1950	1750	2750	1750	1600	6.47
	Rear dozer down	kg					*5200	3050		*3700	2050		*3050	1900	
	Dozer and stabilizer down	kg		*6400	*6400		*5200	5150		*3700	3400		*3050	*3050	
	2 sets of stabilizers down	kg	*6400	*6400	*6400	*5200	*5200	*5200	*3700	*3700	*3700		*3050	*3050	

Short Stick
2000 mm
(6'7")

Load point height	Undercarriage configuration		10.0 ft			15.0 ft			20.0 ft			Load point height			ft
															
20.0 ft	Rear dozer up	lb				*10,600	8,300	7,500				*7,500	5,500	5,000	18.80
	Rear dozer down	lb					*10,600	8,700					*7,500	5,700	
	Dozer and stabilizer down	lb					*10,600	*10,600					*7,500	*7,500	
	2 sets of stabilizers down	lb					*10,600	*10,600					*7,500	*7,500	
15.0 ft	Rear dozer up	lb				*11,400	7,900	7,200	7,300	4,900	4,400	6,200	4,100	3,700	21.88
	Rear dozer down	lb					*11,400	8,300		*9,400	5,200		*6,900	4,400	
	Dozer and stabilizer down	lb					*11,400	*11,400		*9,400	8,100		*6,900	*6,900	
	2 sets of stabilizers down	lb					*11,400	*11,400	*9,400	*9,400	*9,400		*6,900	*6,900	
10.0 ft	Rear dozer up	lb				11,000	7,200	6,500	7,000	4,700	4,200	5,400	3,500	3,200	23.46
	Rear dozer down	lb					*12,900	7,600		*9,800	4,900		*6,800	3,800	
	Dozer and stabilizer down	lb					*12,900	12,200		*9,800	7,800		*6,800	6,000	
	2 sets of stabilizers down	lb					*12,900	*12,900	*9,800	*9,800	9,200		*6,800	*6,800	
5.0 ft	Rear dozer up	lb				10,200	6,500	5,800	6,700	4,400	3,900	5,200	3,300	3,000	23.85
	Rear dozer down	lb					*13,900	6,900		*10,100	4,600		*7,000	3,600	
	Dozer and stabilizer down	lb					*13,900	11,500		*10,100	7,500		*7,000	5,800	
	2 sets of stabilizers down	lb					*13,900	*13,900	13,700	*10,100	*10,100	8,800	*7,000	*7,000	
0.0 ft	Rear dozer up	lb				9,900	6,200	5,500	6,500	4,200	3,700	5,400	3,400	3,100	23.13
	Rear dozer down	lb					*13,300	6,600		*9,700	4,400		*7,600	3,700	
	Dozer and stabilizer down	lb					*13,300	11,100		*9,700	7,300		*7,600	6,000	
	2 sets of stabilizers down	lb					*13,300	*13,300	*9,700	*9,700	8,600		*7,600	*7,600	
-5.0 ft	Rear dozer up	lb	*14,000	11,700	10,100	9,900	6,200	5,500	6,500	4,200	3,800	6,100	3,900	3,500	21.19
	Rear dozer down	lb					*11,300	6,600		*7,900	4,500		*6,700	4,200	
	Dozer and stabilizer down	lb		*14,000	*14,000		*11,300	11,100		*7,900	7,300		*6,700	*6,700	
	2 sets of stabilizers down	lb	*14,000	*14,000	*14,000	*11,300	*11,300	*11,300	*7,900	*7,900	*7,900		*6,700	*6,700	

*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 – Offset Boom (5020 mm [16 ft 6 in])

All values are without bucket and without QC, with counterweight (3300 kg [7,275 lb]), heavy lift on.

Medium Stick 2300 mm (7'7")	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			
						Sticknose	Bucket pin	Quick coupler													
6.0 m	Rear dozer up	kg							*4600	3950	3550	*3350	2350	2150				*2800	2250	2050	6.12
	Rear dozer down	kg							*4600	4100		*3350	2450					*2800	*2800	2350	
	Dozer and stabilizer down	kg							*4600	*4600	*4600	*3350	*3350					*2800	*2800	*2800	
	2 sets of stabilizers down	kg							*4600	*4600	*4600	*3350	*3350					*2800	*2800	*2800	
4.5 m	Rear dozer up	kg							*5050	3750	3400	3450	2300	2100				*2650	1750	1600	6.97
	Rear dozer down	kg							*5050	3900		*4200	2450					*2650	1850		
	Dozer and stabilizer down	kg							*5050	*5050	*5050	*4200	3800					*2650	*2650	*2650	
	2 sets of stabilizers down	kg							*5050	*5050	*5050	*4200	*4200					*2650	*2650	*2650	
3.0 m	Rear dozer up	kg							5150	3400	3050	3300	2200	1950				2350	1500	1350	7.41
	Rear dozer down	kg							*5800	3550		*4450	2300					*2600	1600		
	Dozer and stabilizer down	kg							*5800	5750		*4450	3650					*2600	2600		
	2 sets of stabilizers down	kg							*5800	*5800	*5800	*4450	4300					*2600	*2600	*2600	
1.5 m	Rear dozer up	kg							4800	3050	2700	3150	2050	1850	2250	1450	1300	2250	1450	1300	7.52
	Rear dozer down	kg							*6350	3200		*4650	2150				*2900	1550			
	Dozer and stabilizer down	kg							*6350	5350		*4650	3500				*2900	2500			
	2 sets of stabilizers down	kg							*6350	*6350	*6350	*4650	4100	*2900	*2900	*2900	*2750	*2750	*2750		
0.0 m	Rear dozer up	kg							4600	2850	2550	3050	1950	1750				2300	1450	1300	7.31
	Rear dozer down	kg							*6250	3050		*4550	2050					*3050	1550		
	Dozer and stabilizer down	kg							*6250	5150		*4550	3400					*3050	2550		
	2 sets of stabilizers down	kg							*6250	6200	*4550	*4550	4000					*3050	*3050	3000	
-1.5 m	Rear dozer up	kg	*7000	5350	4650	4550	2850	2500	3000	1900	1700							2550	1650	1500	6.75
	Rear dozer down	kg		*7000	5650		*5450	3000		*3950	2050								*3100	1750	
	Dozer and stabilizer down	kg		*7000	*7000		*5450	5150		*3950	3350								*3100	2850	
	2 sets of stabilizers down	kg	*7000	*7000	*7000	*5450	*5450	*5450	*3950	*3950	*3950								*3100	*3100	
-3.0 m	Rear dozer up	kg					*3800	2950	2600												
	Rear dozer down	kg					*3800	3100													
	Dozer and stabilizer down	kg					*3800	*3800													
	2 sets of stabilizers down	kg					*3800	*3800													

Medium Stick 2300 mm (7'7")	Load at maximum reach (sticknose/bucket pin)	Load over front	Load over rear	Load over side	Load point height	10.0 ft			15.0 ft			20.0 ft			25.0 ft			ft			
						Sticknose	Bucket pin	Quick coupler													
20.0 ft	Rear dozer up	lb							*10,100	8,400	7,700							*6,200	5,100	4,600	19.85
	Rear dozer down	lb							*10,100	8,800								*6,200	*6,200	5,300	
	Dozer and stabilizer down	lb							*10,100	*10,100	*10,100							*6,200	*6,200	*6,200	
	2 sets of stabilizers down	lb							*10,100	*10,100	*10,100							*6,200	*6,200	*6,200	
15.0 ft	Rear dozer up	lb							*11,000	8,100	7,300	7,400	5,000	4,500				*5,800	3,900	3,500	22.77
	Rear dozer down	lb							*11,000	8,400		*9,100	5,200					*5,800	*5,800	4,100	
	Dozer and stabilizer down	lb							*11,000	*11,000	*11,000	*9,100	8,200					*5,800	*5,800	*5,800	
	2 sets of stabilizers down	lb							*11,000	*11,000	*11,000	*9,100	*9,100	*9,100				*5,800	*5,800	*5,800	
10.0 ft	Rear dozer up	lb							11,100	7,300	6,600	7,100	4,700	4,200				5,200	3,400	3,000	24.28
	Rear dozer down	lb							*12,600	7,700		*9,600	5,000					*5,800	*5,800	3,600	
	Dozer and stabilizer down	lb							*12,600	12,400		*9,600	7,900					*5,800	*5,800	5,700	
	2 sets of stabilizers down	lb							*12,600	*12,600	*12,600	*9,600	*9,600	9,200				*5,800	*5,800	*5,800	
5.0 ft	Rear dozer up	lb							10,300	6,600	5,900	6,800	4,400	3,900				4,900	3,200	2,800	24.67
	Rear dozer down	lb							*13,800	7,000		*10,000	4,600					*6,000	*6,000	3,400	
	Dozer and stabilizer down	lb							*13,800	11,600		*10,000	7,500					*6,000	*6,000	5,500	
	2 sets of stabilizers down	lb							*13,800	*13,800	*13,800	*10,000	*10,000	8,900				*6,000	*6,000	*6,000	
0.0 ft	Rear dozer up	lb							9,900	6,200	5,500	6,500	4,200	3,700				5,100	3,200	2,900	23.98
	Rear dozer down	lb							*13,500	6,600		*9,800	4,400					*6,700	*6,700	3,500	
	Dozer and stabilizer down	lb							*13,500	11,100		*9,800	7,300					*6,700	*6,700	5,600	
	2 sets of stabilizers down	lb							*13,500	*13,500	13,400	*9,800	*9,800	8,600				*6,700	*6,700	6,700	
-5.0 ft	Rear dozer up	lb	*15,500	11,500	10,000	9,800	6,100	5,400	6,500	4,100	3,700							5,700	3,600	3,300	22.11
	Rear dozer down	lb		*15,500	12,200		*11,800	6,500		*8,400	4,400								*6,800	3,900	
	Dozer and stabilizer down	lb		*15,500	*15,500		*11,800	11,100		*8,400	7,200								*6,800	6,300	
	2 sets of stabilizers down	lb	*15,500	*15,500	*15,500	*11,800	*11,800	*11,800	*8,400	*8,400	*8,400								*6,800	*6,800	
-10.0 ft	Rear dozer up	lb					*8,100	6,300	5,600												
	Rear dozer down	lb					*8,100	6,700													
	Dozer and stabilizer down	lb					*8,100	*8,100													
	2 sets of stabilizers down	lb					*8,100	*8,100													

*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.

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M313D Wheel Excavator Standard Equipment

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

Electrical

- Alternator, 75 A
- Backup alarm
- Lights
 - Boom working light
 - Cab interior light
 - Roading lights two front
 - Roading 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
 - U.S. Tier 3 compliant while meeting applicable engine emission standards (ADSD-N EPA/ARB Flexibility Engine)
- 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, 2900 kg (6,390 lb)
- Mirrors, frame and cab
- Product Link ready

M313D 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 HEES™ biodegradable hydraulic oil
Lowering control devices for boom and stick
SmartBoom™

Front Linkage

Booms
One-piece boom, 4815 mm (15 ft 10 in)
VA boom (two piece), 5020 mm (16 ft 6 in)
Offset boom, 5020 mm (16 ft 6 in)
Bucket linkage with diverter valve
Sticks
2000 mm (6 ft 7 in), 2300 mm (7 ft 7 in), 2600 mm (8 ft 6 in)
2900 mm (9 ft 6 in) industrial with drop nose

Electrical

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, 3300 kg (7,275 lb)
Mirrors heated, frame and cab
Ride Control
Tires (see pg. 15)
Tool box in upperframe, lockable

M313D Wheel Excavator

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

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

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