M322D

Wheel Excavator

Engine		
Engine Model	Cat® C6.6 with ACERT™ Technology	
Net power (ISO 9249) at 2,000 rpm	123 kW	165 hp
Weights		
Operating Weight	19 500 to 23 500 kg	42,990 to 51,809 lb

Bucket Specifications		
Bucket Capacities	0.44 to 1.57 m^3	0.57 to 2.05 yd^3
Working Ranges		
Maximum Reach at Ground Level	10 320 mm	33'10"
Maximum Digging Depth	6680 mm	21'11"
Drive		
Maximum Travel Speed	25 km/h	15.6 mph

Features

Engine
The EPA Tier 3 compliant C6.6 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 totally redesigned 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

The Cat® D Series incorporates innovations for improved performance and versatility.

Increased lifting capacity, improved 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® C6.6 engine with ACERT™ Technology introduces 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 EPA Tier 3 engine emission regulations. The Cat C6.6 engine in the M322D delivers a maximum gross power of 129 kW (173 hp) at a rated speed of 2,000 rpm.

Low Fuel Consumption

The C6.6 is electronically controlled and uses 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 C6.6 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.

Waste Handling Package

The Waste Handling Package has been specifically developed for Cat Wheel Excavators working in waste transfer stations or other extremely dusty applications. This option features the following:

- An automatic, hydraulic reversible fan that reverses airflow after a set interval, manually adjustable between 5 and 60 minutes with a switch located inside the cab.
- A special dense wire mesh cooling system hood further reduces radiator clogging.
- Two cyclone filters provide clean filtered air to the engine compartment, air cleaner, aftercooler and air conditioner condenser.

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. For precision work, one of four different levels of aggressiveness can be preselected.

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.
- A dedicated Hammer circuit is the best option for tools that require one-way flow only, and do not require the flexibility provided by the Multi-Combined Valve.
- The Medium Pressure Function Valve provides proportional flow that is ideal for tilting buckets or rotating tools.
- A new 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

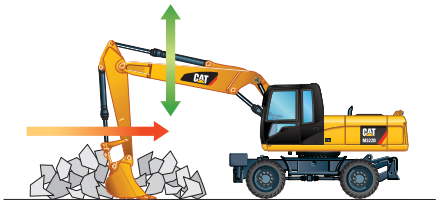
The machine can be optionally equipped with a dedicated hydraulic circuit to operate hydraulic quick couplers.

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.

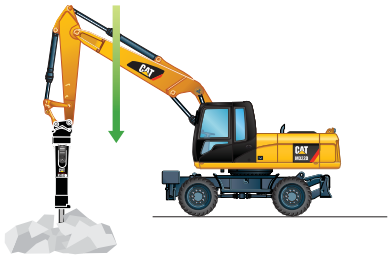
SmartBoom™

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



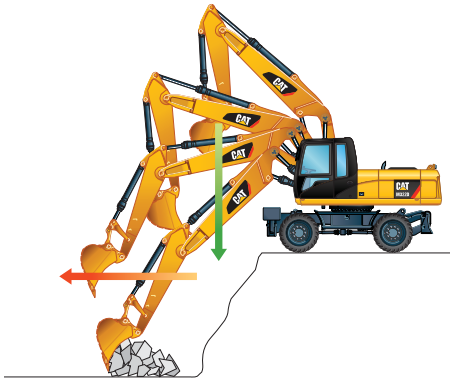
Rock Scraping

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 M322D 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 new Cat® C6.6 engine meets the EPA Tier 3 emissions regulations 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 new 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 is high impact resistant laminated glass.
- A large skylight provides superb upward visibility. The retractable sunscreen blocks direct sunlight.

Heated Mirrors

Another new feature is electrically heated mirrors, increasing 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.

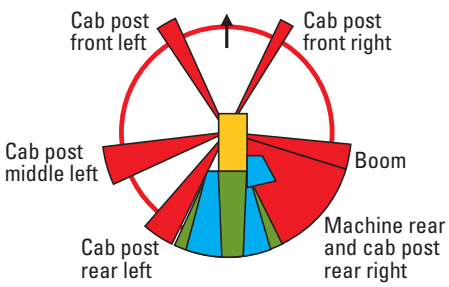
Foot Pedals

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.

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.

Heavy-Duty Axles and Stabilizers

The D Series Wheel Excavator 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 two 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 performance.

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.

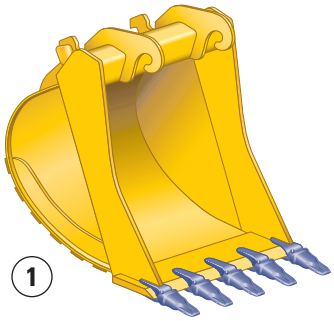
Sticks

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

- Short stick (2200 mm [7'3"]) for maximum breakout force and lifting capability.
- Medium stick (2500 mm [8'2"]) for greater crowd force and lift capacity.
- Long stick (2900 mm [9'6"]) for greater depth and reach requirements.

Work Tools

A wide variety of Work Tools help optimize machine performance.



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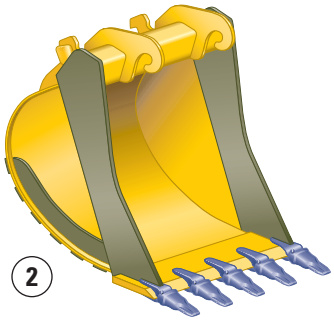

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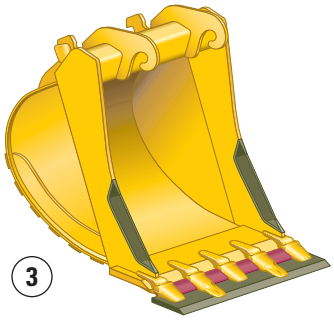

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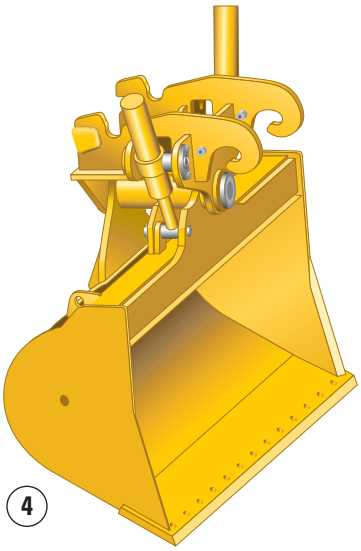

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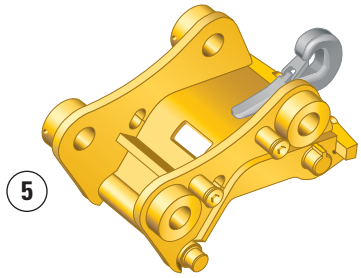

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Work Tools

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.

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.

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.

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℠ Scheduled 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™ 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 engine air 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.

Scheduled Oil Sampling

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

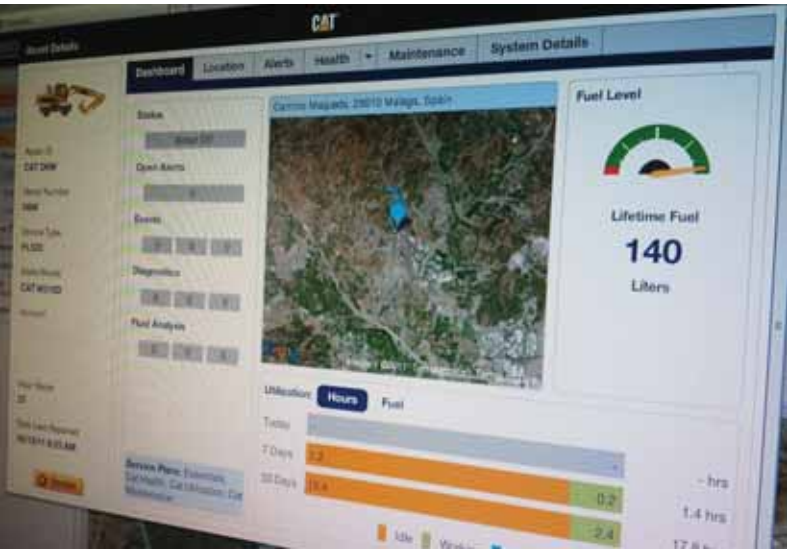
Large handrails and steps assist the operator in climbing on and off the machine.

LED Rear Lights

Standard Light Emitting Diode (LED) rear lights provide increased visibility on the job site, higher durability and longer life.

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.

Engine

Engine Model	Cat® C6.6 with ACERT™ Technology	
Ratings	2,000 rpm	
Gross Power	129 kW	173 hp
Net Power		
ISO 9249	123 kW	165 hp
80/1269/EEC	123 kW	165 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	6.6 L	403 in^3
Cylinders	6	
Maximum Torque at 1,400 rpm	750 N·m	553 lb ft

- EPA Tier 3 compliant.
- Full engine net power up to 3000 m (1.86 mi) altitude.

Hydraulic System

Tank Capacity	220 L	58 gal
System	350 L	92 gal
Maximum Pressure		
Implement Circuit		
Normal	350 bar	5,076 psi
Heavy Lift	375 bar	5,439 psi
Travel Circuit	350 bar	5,076 psi
Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	185 bar	2,683 psi
Swing Mechanism	340 bar	4,931 psi
Maximum Flow		
Implement/ Travel Circuit	350 L/min	92 gal/min
Auxiliary Circuit		
High Pressure	250 L/min	55 gal/min
Medium Pressure	50 L/min	13 gal/min
Swing Mechanism	112 L/min	30 gal/min

Weights

VA Boom*		
Rear Dozer Only	19 650 kg	43,321 lb
Rear Dozer, Front Outriggers	20 850 kg	45,966 lb
Front and Rear Outriggers	21 100 kg	46,518 lb
One-Piece Boom*		
Rear Dozer Only	19 000 kg	41,888 lb
Rear Dozer, Front Outriggers	20 200 kg	44,533 lb
Front and Rear Outriggers	20 450 kg	45,085 lb
Sticks		
Short – 2200 mm (7'3")	650 kg	1,433 lb
Medium – 2500 mm (8'2")	700 kg	1,543 lb
Long – 2900 mm (9'6")	780 kg	1,720 lb
Dozer Blade	920 kg	2,028 lb
Outriggers	1260 kg	2,778 lb
Counterweight		
Standard	3900 kg	8,598 lb
Optional	4400/ 5400 kg	9,700/ 11,905 lb

- Machine weight with medium stick, 4400 kg (9,700 lb) counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.

Transmission

Forward/Reverse		
1st Gear	7 km/h	4 mph
2nd Gear	25 km/h	16 mph
Creeper Speed		
1st Gear	3 km/h	2 mph
2nd Gear	12 km/h	7.5 mph
Drawbar Pull	112 kN	25,179 lb
Maximum Gradeability	60%	

Swing Mechanism

Swing Speed	9 rpm	
Swing Torque	56 kN·m	41,303 lb ft

Tires

Standard

- 11.00-20 (dual pneumatic)

Optional

- 10.00-20 (dual solid rubber)

Undercarriage

Ground Clearance	380 mm	15 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	± 9°	
Minimum Turning Radius		
Standard Axle		
Outside of Tire	6800 mm	22 ft 0 in
End of VA Boom	7800 mm	25 ft 6 in
End of One-Piece Boom	9300 mm	30 ft 6 in

Service Refill Capacities

Fuel Tank	385 L	102 gal
Cooling	37 L	9.8 gal
Engine Crankcase	15 L	4 gal
Rear Axle Housing (differential)	14 L	3.7 gal
Front Steering Axle (differential)	11 L	2.9 gal
Final Drive	2.5 L	0.7 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 103 dB(A).

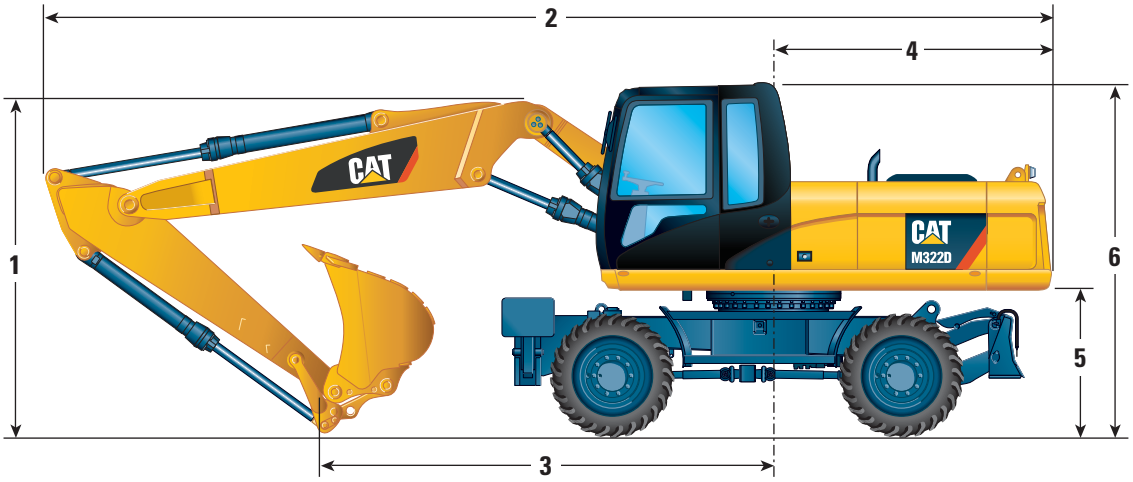
Cab/ROPS/FOGS

- 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.

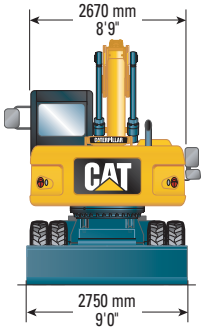
M322D Wheel Excavator Specifications

Dimensions

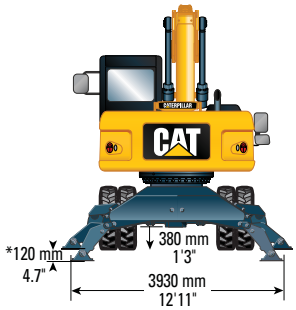
All dimensions are approximate.



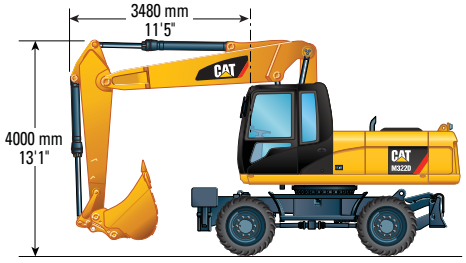
		VA Boom			One-Piece Boom		
Stick Length	mm (ft/in)	**2200 (7'3")**	**2500 (8'2")**	**2900 (9'6")**	**2200 (7'3")**	**2500 (8'2")**	**2900 (9'6")**
1 Shipping Height	mm (ft/in)	3260 (10'8")	3230 (10'7")	3250 (10'8")	3300 (10'10")	3250 (10'8")	3290 (10'10")
2 Shipping Length	mm (ft/in)	9430 (30'11")	9440 (31'0")	9430 (30'11")	9650 (31'8")	9640 (31'8")	9650 (31'8")
3 Support Point	mm (ft/in)	4160 (13'8")	3660 (12'0")	3420 (11'3")	4240 (13'11")	3720 (12'2")	3440 (11'3")
4 Tail Swing Radius	mm (ft/in)		2820 (9'3")			2820 (9'3")	
5 Counterweight Clearance	mm (ft/in)		1310 (4'4")			1310 (4'4")	
6 Cab Height	mm (ft/in)		3200 (10'6")			3200 (10'6")	
With 1200 mm (47") Fixed Cab Riser	mm (ft/in)		4400 (14'5")			4400 (14'5")	



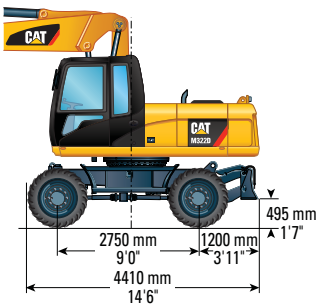
* Maximum tire clearance with outrigger fully down



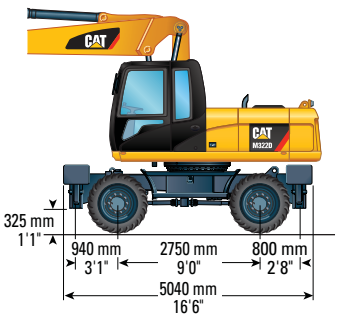
Roading position with 2500 mm (8'2") stick



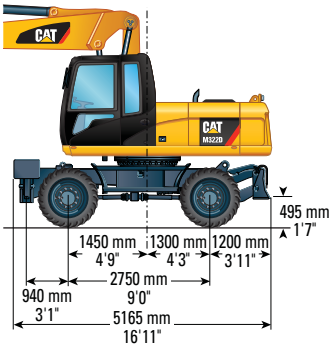
Undercarriage with dozer only



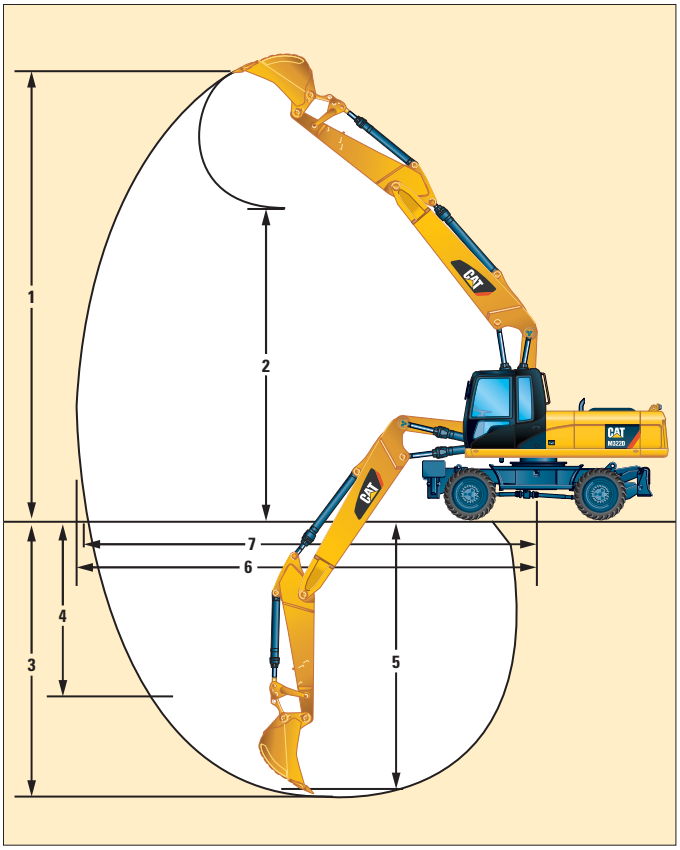
Undercarriage with 2 sets of outriggers

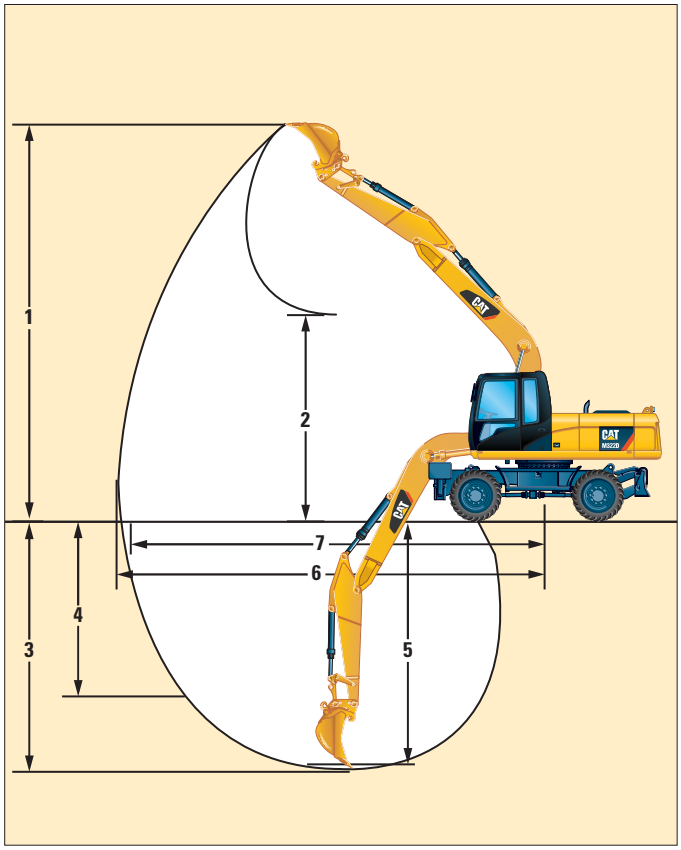


Undercarriage with 1 set of outriggers and dozer



Working Ranges





		VA Boom			One-Piece Boom		
Stick Length	mm (ft/in)	**2200 (7'3")**	**2500 (8'2")**	**2900 (9'6")**	**2200 (7'3")**	**2500 (8'2")**	**2900 (9'6")**
1 Digging Height	mm (ft/in)	10 560 (34'8")	10 620 (34'11")	10 930 (35'11")	9670 (31'9")	9540 (31'4")	9760 (32'1")
2 Dump Height	mm (ft/in)	6930 (22'9")	7170 (23'7")	7500 (24'8")	6300 (20'8")	6230 (20'5")	6450 (21'2")
3 Digging Depth	mm (ft/in)	5990 (19'8")	6280 (20'7")	6680 (21'11")	5770 (18'11")	6070 (19'11")	6470 (21'3")
4 Vertical Wall Digging Depth	mm (ft/in)	4420 (14'6")	4450 (14'7")	4830 (15'10")	4480 (14'9")	4780 (15'8")	5160 (16'11")
5 Depth 2.5 m (8'2") Straight Clean-Up	mm (ft/in)	5780 (20'0")	6090 (20'0")	6510 (21'5")	5570 (18'3")	5880 (19'4")	6300 (20'8")
6 Reach	mm (ft/in)	9770 (32'1")	10 000 (32'10")	10 390 (34'1")	9890 (32'6")	10 100 (33'2")	10 490 (34'5")
7 Reach at Ground Level	mm (ft/in)	9590 (31'6")	9830 (32'3")	10 230 (33'7")	9720 (31'11")	9930 (32'7")	10 320 (33'10")
Bucket Forces (ISO 6015)	kN (lbf)	140 (31,472)	140 (31,472)	140 (31,472)	140 (31,472)	140 (31,472)	140 (31,472)
Stick Forces (ISO 6015)	kN (lbf)	123 (27,650)	114 (25,627)	104 (23,379)	123 (27,650)	114 (25,627)	104 (23,379)

Values 1-7 are calculated with bucket and quick coupler with a tip radius of 1712 mm (5'7").

Breakout force values are calculated with heavy lift on (no quick coupler) and a tip radius of 1511 mm (4'11").

M322D Wheel Excavator Specifications

Bucket Specifications

Contact your Cat dealer for special bucket requirements.

Buckets without Quick Coupler							
	Width		Weight		Capacity (SAE)		
Bucket Type	mm	in	kg	lb	m^3	yd^3	No. of Teeth
General Purpose	610	24	600	1,324	0.57	0.74	3
	762	30	655	1,447	0.77	1.01	4
	914	36	738	1,630	0.95	1.24	5
	991	39	676	1,493	0.86	1.12	4
	1067	42	797	1,759	1.17	1.53	5
	1219	48	930	2,052	1.39	1.82	6
	1295	51	791	1,746	1.19	1.55	5
	1372	54	939	2,072	1.57	2.05	6
	1499	59	861	1,900	1.41	1.84	5
General Purpose Wide Tip	610	24	631	1,393	0.57	0.74	3
	762	30	689	1,522	0.77	1.01	4
	914	36	782	1,727	0.95	1.24	5
	1067	42	848	1,872	1.17	1.53	6
	1219	48	933	2,059	1.39	1.82	7
	1372	54	1007	2,223	1.57	2.05	8
Heavy Duty	610	24	694	1,533	0.54	0.7	3
	762	30	689	1,520	0.69	0.9	4
	914	36	790	1,743	0.84	1.1	5
	1067	42	848	1,872	1.07	1.4	5
	1219	48	943	2,082	1.22	1.6	6
	1372	54	1107	2,444	1.38	1.8	6
Heavy Duty Rock	610	24	695	1,535	0.54	0.7	3
	762	30	778	1,718	0.69	0.9	4
	914	36	858	1,893	0.84	1.1	5
	1067	42	925	2,043	1.07	1.4	5
	1245	49	800	1,766	1.13	1.48	4
	1295	51	830	1,832	1.18	1.54	5
	1397	55	867	1,914	1.29	1.68	5
Heavy Duty Power	914	36	799	1,764	0.84	1.1	5
	1067	42	842	1,858	0.99	1.3	5
	1219	48	914	2,017	1.15	1.5	6
Ditch Cleaning	1524	60	752	1,660	0.99	1.3	0
	1829	72	843	1,860	1.24	1.62	0
	2007	79	669	1,477	0.70	0.91	0
Ditch Cleaning Tilt	1524	60	861	1,900	0.86	1.12	0
	1829	72	951	2,100	0.96	1.25	0
	2007	79	539	1,190	0.57	0.75	0
	2311	91	560	1,237	0.62	0.81	0

- All bucket recommendations are subject to material density.
- All data is subject to change without notice.
- Contact your Cat dealer for bucket availability and 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 5440 mm (17'10")**									**One-Piece Boom 5650 mm (18'6")**								
			Dozer lowered			2 sets of stabilizers lowered			Dozer and stabilizer lowered			Dozer lowered			2 sets of stabilizers lowered			Dozer and stabilizer lowered		
Stick Length		mm (ft/in)	2200 (7'3")	2500 (8'2")	2900 (9'6")	2200 (7'3")	2500 (8'2")	2900 (9'6")	2200 (7'3")	2500 (8'2")	2900 (9'6")	2200 (7'3")	2500 (8'2")	2900 (9'6")	2200 (7'3")	2500 (8'2")	2900 (9'6")	2200 (7'3")	2500 (8'2")	2900 (9'6")
Hammers	H115 S, H120C S, H130 S																			
Multiprocessors	MP15	CC, CR																		
	MP15	PP																		
	MP15	PS																		
	MP15	S																		
	MP20	S																		
Hydraulic Shears (* boom mounted)	S320B																			
	S325B*																			
	S340B*																			
Compactor	CVP110																			
Orange Peel Grapples	GSH15B 4 tines	400 L (0.53 yd³)																		
		500 L (0.66 yd³)																		
		600 L (0.79 yd³)																		
		800 L (1.05 yd³)																		
	GSH20B 4 tines	600 L (0.79 yd³)																		
		800 L (1.05 yd³)																		
		1000 L (1.3 yd³)																		

360° Working Range

Over the front only

Maximum material density 3000 kg/m³ (5,000 lb/yd³)

Maximum material density 1800 kg/m³ (3,000 lb/yd³)

Maximum material density 1200 kg/m³ (2,000 lb/yd³)

M322D Wheel Excavator Specifications

Lift Capacities – Variable Adjustable Boom (5440 mm [17'10"])

All values are in kg, without bucket and without QC, with counterweight (4400 kg [9,700 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 2200 mm (7'3")

	Undercarriage configuration		3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up (std UC)	kg				*8000	7250	6050	5600	4500	3750				*4100	3550	2950	6.80
	Rear dozer down (std UC)	kg					*8000	6850		*7100	4250					*4100	3350	
	Dozer and stabilizer down (std UC)	kg					*8000	*8000		*7100	6250					*4100	*4100	
	2 sets of stabilizers down (std UC)	kg				*8000	*8000	*8000	*7100	*7100	*7100				*4100	*4100	*4100	
4.5 m	Rear dozer up (std UC)	kg				8650	6850	5650	5450	4350	3600	3750	2950	2450	3700	2900	2400	7.56
	Rear dozer down (std UC)	kg					*9250	6450		*7300	4150		*5050	2850		*3750	2800	
	Dozer and stabilizer down (std UC)	kg					*9250	*9250		*7300	6100		*5050	4250		*3750	*3750	
	2 sets of stabilizers down (std UC)	kg				*9250	*9250	*9250	*7300	*7300	*7300	*5050	*5050	5050	*3750	*3750	*3750	
3.0 m	Rear dozer up (std UC)	kg				8000	6250	5100	5200	4100	3400	3700	2900	2400	3350	2600	2150	7.96
	Rear dozer down (std UC)	kg					*10 950	5900		*7800	3900		6150	2750		*3650	2500	
	Dozer and stabilizer down (std UC)	kg					*10 950	9100		*7800	5850		*6200	4150		*3650	*3650	
	2 sets of stabilizers down (std UC)	kg				*10 950	*10 950	*10 950	*7800	*7800	7050	*6200	*6200	5000	*3650	*3650	*3650	
1.5 m	Rear dozer up (std UC)	kg				7500	5750	4650	4950	3850	3200	3600	2800	2300	3250	2500	2100	8.04
	Rear dozer down (std UC)	kg					*11 950	5450		*8500	3650		6050	2650		*3700	2400	
	Dozer and stabilizer down (std UC)	kg					*11 950	8600		*8500	5600		*6500	4050		*3700	3650	
	2 sets of stabilizers down (std UC)	kg				*11 950	*11 950	10 700	*8500	*8500	6800	*6500	6150	4900	*3700	*3700	*3700	
0.0 m	Rear dozer up (std UC)	kg				7300	5600	4500	4800	3700	3050	3550	2750	2250	3350	2600	2150	7.83
	Rear dozer down (std UC)	kg					*11 650	5250		8500	3550		5950	2600		*3900	2450	
	Dozer and stabilizer down (std UC)	kg					*11 650	8400		*8600	5450		*6500	4000		*3900	3800	
	2 sets of stabilizers down (std UC)	kg				*11 650	*11 650	10 500	*8600	8550	6650	*6500	6100	4800	*3900	*3900	*3900	
–1.5 m	Rear dozer up (std UC)	kg				7300	5600	4500	4800	3700	3000				3700	2900	2350	7.30
	Rear dozer down (std UC)	kg					*10 400	5250		*7800	3500					*4400	2750	
	Dozer and stabilizer down (std UC)	kg					*10 400	8400		*7800	5450					*4400	4200	
	2 sets of stabilizers down (std UC)	kg				*10 400	*10 400	*10 400	*7800	*7800	6600				*4400	*4400	*4400	

Short Stick 2200 mm (7'3")

	Undercarriage configuration		10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
20.0 ft	Rear dozer up (std UC)	lb				*17,400	15,600	13,000	12,000	9,600	8,100				*9,100	7,900	6,600	22.11
	Rear dozer down (std UC)	lb					*17,400	14,800		*15,500	9,200					*9,100	7,600	
	Dozer and stabilizer down (std UC)	lb					*17,400	*17,400		*15,500	13,500					*9,100	*9,100	
	2 sets of stabilizers down (std UC)	lb				*17,400	*17,400	*17,400	*15,500	*15,500	*15,500				*9,100	*9,100	*9,100	
15.0 ft	Rear dozer up (std UC)	lb				18,600	14,800	12,200	11,700	9,300	7,800				8,200	6,500	5,400	24.74
	Rear dozer down (std UC)	lb					*20,000	14,000		*15,800	8,900					*8,300	6,200	
	Dozer and stabilizer down (std UC)	lb					*20,000	*20,000		*15,800	13,200					*8,300	*8,300	
	2 sets of stabilizers down (std UC)	lb				*20,000	*20,000	*20,000	*15,800	*15,800	15,800				*8,300	*8,300	*8,300	
10.0 ft	Rear dozer up (std UC)	lb				17,300	13,500	11,000	11,200	8,800	7,300	8,000	6,200	5,200	7,400	5,800	4,800	26.08
	Rear dozer down (std UC)	lb					*23,600	12,700		*16,800	8,400		13,200	6,000		*8,000	5,500	
	Dozer and stabilizer down (std UC)	lb					*23,600	19,600		*16,800	12,600		*13,500	9,000		*8,000	*8,000	
	2 sets of stabilizers down (std UC)	lb				*23,600	*23,600	*23,600	*16,800	*16,800	15,200	*13,500	13,500	10,700	*8,000	*8,000	*8,000	
5.0 ft	Rear dozer up (std UC)	lb				16,200	12,500	10,000	10,700	8,300	6,900	7,800	6,000	5,000	7,200	5,600	4,600	26.38
	Rear dozer down (std UC)	lb					*25,900	11,700		*18,300	7,900		13,000	5,800		*8,100	5,300	
	Dozer and stabilizer down (std UC)	lb					*25,900	18,500		*18,300	12,100		*14,100	8,800		*8,100	8,100	
	2 sets of stabilizers down (std UC)	lb				*25,900	*25,900	23,000	*18,300	*18,300	14,700	*14,100	13,200	10,500	*8,100	*8,100	*8,100	
0.0 ft	Rear dozer up (std UC)	lb				15,800	12,000	9,700	10,400	8,000	6,600	7,600	5,900	4,900	7,400	5,700	4,700	25.69
	Rear dozer down (std UC)	lb					*25,300	11,300		18,300	7,600		12,800	5,600		*8,600	5,500	
	Dozer and stabilizer down (std UC)	lb					*25,300	18,100		*18,600	11,800		*14,000	8,600		*8,600	8,300	
	2 sets of stabilizers down (std UC)	lb				*25,300	*25,300	22,500	*18,600	18,400	14,300	*14,000	13,100	10,400	*8,600	*8,600	*8,600	
–5.0 ft	Rear dozer up (std UC)	lb				15,700	12,000	9,700	10,300	8,000	6,500				8,200	6,400	5,200	23.88
	Rear dozer down (std UC)	lb					*22,600	11,300		*16,900	7,600					*9,700	6,100	
	Dozer and stabilizer down (std UC)	lb					*22,600	18,000		*16,900	11,700					*9,700	9,300	
	2 sets of stabilizers down (std UC)	lb				*22,600	*22,600	22,500	*16,900	*16,900	14,300				*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.

Lift Capacities – Variable Adjustable Boom (5440 mm [17'10"])

All values are in kg, without bucket and without QC, with counterweight (4400 kg [9,700 lb]), heavy lift on.

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

Medium Stick 2500 mm (8'2")

Undercarriage configuration		3.0 m			4.5 m			6.0 m			7.5 m						m
Rear dozer up (std UC)	kg							5650	4500	3800				*3350	3350	2800	
Rear dozer down (std UC)	kg								*6800	4300					*3350	3200	
Dozer and stabilizer down (std UC)	kg								*6800	6300					*3350	*3350	
2 sets of stabilizers down (std UC)	kg							*6800	*6800	*6800				*3350	*3350	*3350	
Rear dozer up (std UC)	kg				8750	6950	5750	5500	4350	3650	3800	3000	2500	*3150	2750	2300	
Rear dozer down (std UC)	kg					*8800	6550		*7150	4150		*5800	2850		*3150	2650	
Dozer and stabilizer down (std UC)	kg					*8800	*8800		*7150	6150		*5800	4250		*3150	*3150	
2 sets of stabilizers down (std UC)	kg				*8800	*8800	*8800	*7150	*7150	*7150	*5800	*5800	5100	*3150	*3150	*3150	
Rear dozer up (std UC)	kg				8100	6350	5150	5250	4100	3400	3700	2900	2400	*3150	2500	2050	
Rear dozer down (std UC)	kg					*10 600	5950		*7600	3900		*6050	2750		*3150	2400	
Dozer and stabilizer down (std UC)	kg					*10 600	9200		*7600	5900		*6050	4150		*3150	*3150	
2 sets of stabilizers down (std UC)	kg				*10 600	*10 600	*10 600	*7600	*7600	7100	*6050	*6050	5000	*3150	*3150	*3150	
Rear dozer up (std UC)	kg				7550	5800	4700	5000	3850	3200	3600	2800	2300	3100	2400	1950	
Rear dozer down (std UC)	kg					*11 800	5450		*8300	3700		6050	2650		*3250	2300	
Dozer and stabilizer down (std UC)	kg					*11 800	8650		*8300	5650		*6350	4050		*3250	*3250	
2 sets of stabilizers down (std UC)	kg				*11 800	*11 800	10 750	*8300	*8300	6850	*6350	6150	4850	*3250	*3250	*3250	
Rear dozer up (std UC)	kg				7300	5600	4450	4800	3700	3050	3500	2700	2250	3200	2450	2000	
Rear dozer down (std UC)	kg					*11 800	5250		8500	3500		5950	2600		*3500	2350	
Dozer and stabilizer down (std UC)	kg					*11 800	8400		*8600	5450		*6600	3950		*3500	*3500	
2 sets of stabilizers down (std UC)	kg				*11 800	*11 800	10 500	*8600	8550	6650	*6600	6050	4800	*3500	*3500	*3500	
Rear dozer up (std UC)	kg	*10 000	*10 000	8350	7300	5550	4450	4750	3650	3000	3500	2700	2250	3500	2700	2200	
Rear dozer down (std UC)	kg		*10 000	*10 000		*10 750	5200		*8000	3450		*5200	2600		*4050	2550	
Dozer and stabilizer down (std UC)	kg		*10 000	*10 000		*10 750	8350		*8000	5400		*5200	4000		*4050	3950	
2 sets of stabilizers down (std UC)	kg	*10 000	*10 000	*10 000	*10 750	*10 750	10 450	*8000	*8000	6600	*5200	*5200	4800	*4050	*4050	*4050	
Rear dozer up (std UC)	kg				7400	5650	4550	4850	3750	3050							
Rear dozer down (std UC)	kg					*8650	5300		*6300	3550							
Dozer and stabilizer down (std UC)	kg					*8650	8450		*6300	5500							
2 sets of stabilizers down (std UC)	kg				*8650	*8650	*8650	*6300	*6300	*6300							

6.0 m	7.08
4.5 m	7.81
3.0 m	8.19
1.5 m	8.28
0.0 m	8.07
–1.5 m	7.55
–3.0 m	

Medium Stick 2500 mm (8'2")

Undercarriage configuration		10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
Rear dozer up (std UC)	lb							12,100	9,700	8,200				*7,500	7,400	6,200	
Rear dozer down (std UC)	lb								*14,900	9,300					*7,500	7,100	
Dozer and stabilizer down (std UC)	lb								*14,900	13,600					*7,500	*7,500	
2 sets of stabilizers down (std UC)	lb							*14,900	*14,900	*14,900				*7,500	*7,500	*7,500	
Rear dozer up (std UC)	lb				18,800	15,000	12,400	11,800	9,400	7,900	8,200	6,400	5,300	*7,000	6,100	5,100	
Rear dozer down (std UC)	lb					*19,100	14,100		*15,500	9,000		*10,800	6,100		*7,000	5,900	
Dozer and stabilizer down (std UC)	lb					*19,100	*19,100		*15,500	13,200		*10,800	9,100		*7,000	*7,000	
2 sets of stabilizers down (std UC)	lb				*19,100	*19,100	*19,100	*15,500	*15,500	*15,500	*10,800	*10,800	*10,800	*7,000	*7,000	*7,000	
Rear dozer up (std UC)	lb				17,500	13,700	11,200	11,300	8,900	7,400	8,000	6,200	5,200	*6,900	5,500	4,600	
Rear dozer down (std UC)	lb					*22,800	12,900		*16,500	8,500		*13,100	6,000		*6,900	5,300	
Dozer and stabilizer down (std UC)	lb					*22,800	19,800		*16,500	12,700		*13,100	9,000		*6,900	*6,900	
2 sets of stabilizers down (std UC)	lb				*22,800	*22,800	*22,800	*16,500	*16,500	15,300	*13,100	*13,100	10,700	*6,900	*6,900	*6,900	
Rear dozer up (std UC)	lb				16,300	12,600	10,100	10,700	8,400	6,900	7,700	6,000	5,000	6,800	5,300	4,300	
Rear dozer down (std UC)	lb					*25,600	11,800		*17,900	7,900		13,000	5,700		*7,200	5,000	
Dozer and stabilizer down (std UC)	lb					*25,600	18,600		*17,900	12,100		*13,700	8,700		*7,200	*7,200	
2 sets of stabilizers down (std UC)	lb				*25,600	*25,600	23,100	*17,900	*17,900	14,700	*13,700	13,200	10,500	*7,200	*7,200	*7,200	
Rear dozer up (std UC)	lb				15,700	12,000	9,600	10,400	8,000	6,500	7,600	5,900	4,800	7,000	5,400	4,400	
Rear dozer down (std UC)	lb					*25,600	11,300		18,200	7,600		12,800	5,600		*7,800	5,200	
Dozer and stabilizer down (std UC)	lb					*25,600	18,100		*18,700	11,800		*14,300	8,600		*7,800	*7,800	
2 sets of stabilizers down (std UC)	lb				*25,600	*25,600	22,500	*18,700	18,400	14,300	*14,300	13,000	10,300	*7,800	*7,800	*7,800	
Rear dozer up (std UC)	lb	*22,900	*22,900	17,900	15,700	11,900	9,600	10,300	7,900	6,400				7,700	6,000	4,900	
Rear dozer down (std UC)	lb		*22,900	21,500		*23,300	11,200		*17,300	7,500					*8,900	5,700	
Dozer and stabilizer down (std UC)	lb		*22,900	*22,900		*23,300	18,000		*17,300	11,600					*8,900	8,700	
2 sets of stabilizers down (std UC)	lb	*22,900	*22,900	*22,900	*23,300	*23,300	22,400	*17,300	*17,300	14,200				*8,900	*8,900	*8,900	
Rear dozer up (std UC)	lb				15,900	12,200	9,800	10,400	8,100	6,600							
Rear dozer down (std UC)	lb					*18,600	11,400		*13,300	7,700							
Dozer and stabilizer down (std UC)	lb					*18,600	18,200		*13,300	11,800							
2 sets of stabilizers down (std UC)	lb				*18,600	*18,600	*18,600	*13,300	*13,300	*13,300							

20.0 ft	23.03
15.0 ft	25.56
10.0 ft	26.87
5.0 ft	27.17
0.0 ft	26.48
–5.0 ft	24.74
–10.0 ft	

*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.

M322D Wheel Excavator Specifications

Lift Capacities – Variable Adjustable Boom (5440 mm [17'10"])

All values are in kg, without bucket and without QC, with counterweight (4400 kg [9,700 lb]), heavy lift on.

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

Long Stick 2900 mm (9'6")

Load point height	Undercarriage configuration		3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up (std UC)	kg							5700	4600	3850	*3150	3050	2550	*2800	*2800	2500	7.54
	Rear dozer down (std UC)	kg								*6350	4350		*3150	2900		*2800	*2800	
	Dozer and stabilizer down (std UC)	kg								*6350	*6350		*3150	*3150		*2800	*2800	
	2 sets of stabilizers down (std UC)	kg							*6350	*6350	*6350	*3150	*3150	*3150	*2800	*2800	*2800	
4.5 m	Rear dozer up (std UC)	kg				*7900	7050	5850	5550	4400	3700	3850	3000	2500	*2650	2550	2100	8.23
	Rear dozer down (std UC)	kg					*7900	6650		*6850	4200		*5700	2900		*2650	2400	
	Dozer and stabilizer down (std UC)	kg					*7900	*7900		*6850	6200		*5700	4300		*2650	*2650	
	2 sets of stabilizers down (std UC)	kg				*7900	*7900	*7900	*6850	*6850	*6850	*5700	*5700	5100	*2650	*2650	*2650	
3.0 m	Rear dozer up (std UC)	kg				8200	6450	5250	5250	4150	3450	3700	2900	2400	*2600	2300	1900	8.59
	Rear dozer down (std UC)	kg					*10 050	6050		*7350	3950		*5850	2800		*2600	2200	
	Dozer and stabilizer down (std UC)	kg					*10 050	9350		*7350	5900		*5850	4200		*2600	*2600	
	2 sets of stabilizers down (std UC)	kg				*10 050	*10 050	*10 050	*7350	*7350	7150	*5850	*5850	5000	*2600	*2600	*2600	
1.5 m	Rear dozer up (std UC)	kg				7600	5850	4750	5000	3900	3200	3600	2800	2300	*2700	2200	1800	8.67
	Rear dozer down (std UC)	kg					*11 550	5500		*8050	3700		6050	2650		*2700	2100	
	Dozer and stabilizer down (std UC)	kg					*11 550	8700		*8050	5650		*6150	4050		*2700	*2700	
	2 sets of stabilizers down (std UC)	kg				*11 550	*11 550	10 850	*8050	*8050	6850	*6150	6150	4850	*2700	*2700	*2700	
0.0 m	Rear dozer up (std UC)	kg				7300	5550	4450	4800	3700	3000	3500	2700	2200	*2900	2250	1850	8.47
	Rear dozer down (std UC)	kg					*11 850	5200		8500	3500		5900	2550		*2900	2150	
	Dozer and stabilizer down (std UC)	kg					*11 850	8350		*8600	5450		*6500	3950		*2900	*2900	
	2 sets of stabilizers down (std UC)	kg				*11 850	*11 850	10 450	*8600	8500	6600	*6500	6000	4750	*2900	*2900	*2900	
–1.5 m	Rear dozer up (std UC)	kg	*9450	*9450	8150	7200	5450	4350	4700	3600	2900	3450	2650	2150	3200	2450	2000	7.98
	Rear dozer down (std UC)	kg		*9450	*9450		*11 100	5150		*8200	3400		5850	2500		*3300	2350	
	Dozer and stabilizer down (std UC)	kg		*9450	*9450		*11 100	8300		*8200	5350		*6100	3900		*3300	*3300	
	2 sets of stabilizers down (std UC)	kg	*9450	*9450	*9450	*11 100	*11 100	10 350	*8200	*8200	6550	*6100	6000	4700	*3300	*3300	*3300	
–3.0 m	Rear dozer up (std UC)	kg				7250	5550	4400	4750	3650	2950							
	Rear dozer down (std UC)	kg					*9300	5200		*6850	3450							
	Dozer and stabilizer down (std UC)	kg					*9300	8350		*6850	5400							
	2 sets of stabilizers down (std UC)	kg				*9300	*9300	*9300	*6850	*6850	6550							

Long Stick 2900 mm (9'6")

Load point height	Undercarriage configuration		10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
20.0 ft	Rear dozer up (std UC)	lb							12,300	9,800	8,300				*6,200	*6,200	5,600	24.54
	Rear dozer down (std UC)	lb								*13,900	9,400					*6,200	*6,200	
	Dozer and stabilizer down (std UC)	lb								*13,900	13,700					*6,200	*6,200	
	2 sets of stabilizers down (std UC)	lb							*13,900	*13,900	*13,900				*6,200	*6,200	*6,200	
15.0 ft	Rear dozer up (std UC)	lb				*17,000	15,200	12,600	11,900	9,500	8,000	8,200	6,500	5,400	*5,800	5,600	4,600	26.90
	Rear dozer down (std UC)	lb					*17,000	14,400		*14,900	9,100		*12,300	6,200		*5,800	5,400	
	Dozer and stabilizer down (std UC)	lb					*17,000	*17,000		*14,900	13,300		*12,300	9,200		*5,800	*5,800	
	2 sets of stabilizers down (std UC)	lb				*17,000	*17,000	*17,000	*14,900	*14,900	*14,900	*12,300	*12,300	11,000	*5,800	*5,800	*5,800	
10.0 ft	Rear dozer up (std UC)	lb				17,700	13,900	11,400	11,300	8,900	7,400	8,000	6,300	5,200	*5,800	5,100	4,200	28.15
	Rear dozer down (std UC)	lb					*21,700	13,100		*15,900	8,500		*12,700	6,000		*5,800	4,800	
	Dozer and stabilizer down (std UC)	lb					*21,700	20,100		*15,900	12,800		*12,700	9,000		*5,800	*5,800	
	2 sets of stabilizers down (std UC)	lb				*21,700	*21,700	*21,700	*15,900	*15,900	15,400	*12,700	*12,700	10,800	*5,800	*5,800	*5,800	
5.0 ft	Rear dozer up (std UC)	lb				16,400	12,700	10,200	10,700	8,400	6,900	7,700	6,000	4,900	*5,900	4,900	4,000	28.44
	Rear dozer down (std UC)	lb					*24,900	11,900		*17,300	7,900		13,000	5,700		*5,900	4,600	
	Dozer and stabilizer down (std UC)	lb					*24,900	18,700		*17,300	12,100		*13,300	8,700		*5,900	*5,900	
	2 sets of stabilizers down (std UC)	lb				*24,900	*24,900	23,300	*17,300	*17,300	14,700	*13,300	13,200	10,500	*5,900	*5,900	*5,900	
0.0 ft	Rear dozer up (std UC)	lb				15,700	12,000	9,600	10,300	7,900	6,500	7,500	5,800	4,700	*6,400	5,000	4,000	27.79
	Rear dozer down (std UC)	lb					*25,700	11,300		18,200	7,500		12,700	5,500		*6,400	4,700	
	Dozer and stabilizer down (std UC)	lb					*25,700	18,000		*18,600	11,700		*14,100	8,500		*6,400	*6,400	
	2 sets of stabilizers down (std UC)	lb				*25,700	*25,700	22,500	*18,600	18,300	14,300	*14,100	13,000	10,200	*6,400	*6,400	*6,400	
–5.0 ft	Rear dozer up (std UC)	lb	*21,600	*21,600	17,500	15,500	11,800	9,400	10,100	7,800	6,300	7,400	5,700	4,700	7,000	5,400	4,400	26.15
	Rear dozer down (std UC)	lb		*21,600	21,100		*24,000	11,100		*17,700	7,400		12,600	5,400		*7,300	5,100	
	Dozer and stabilizer down (std UC)	lb		*21,600	*21,600		*24,000	17,800		*17,700	11,500		*13,000	8,400		*7,300	*7,300	
	2 sets of stabilizers down (std UC)	lb	*21,600	*21,600	*21,600	*24,000	*24,000	22,200	*17,700	*17,700	14,100	*13,000	12,900	10,200	*7,300	*7,300	*7,300	
–10.0 ft	Rear dozer up (std UC)	lb				15,600	11,900	9,500	10,200	7,900	6,400							
	Rear dozer down (std UC)	lb					*20,000	11,200		*14,600	7,400							
	Dozer and stabilizer down (std UC)	lb					*20,000	17,900		*14,600	11,600							
	2 sets of stabilizers down (std UC)	lb				*20,000	*20,000	*20,000	*14,600	*14,600	14,200							

*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 – One-Piece Boom (5650 mm [18'6"])

All values are in kg, without bucket and without QC, with counterweight (4400 kg [9,700 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 2200 mm (7'3")

	Undercarriage configuration		3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up (std UC)	kg							5550	4450	3750				*4050	3400	2900	6.96
	Rear dozer down (std UC)	kg								*6800	4250					*4050	3250	
	Dozer and stabilizer down (std UC)	kg								*6800	6200					*4050	*4050	
	2 sets of stabilizers down (std UC)	kg							*6800	*6800	*6800				*4050	*4050	*4050	
4.5 m	Rear dozer up (std UC)	kg				8500	6750	5600	5400	4300	3600	3800	3000	2500	3600	2850	2400	7.70
	Rear dozer down (std UC)	kg					*9000	6400		*7250	4100		6150	2850		*3800	2700	
	Dozer and stabilizer down (std UC)	kg					*9000	*9000		*7250	6050		*6300	4250		*3800	*3800	
	2 sets of stabilizers down (std UC)	kg				*9000	*9000	*9000	*7250	*7250	7250	*6300	6300	5050	*3800	*3800	*3800	
3.0 m	Rear dozer up (std UC)	kg				7900	6150	5050	5150	4050	3400	3700	2900	2450	3300	2550	2150	8.09
	Rear dozer down (std UC)	kg					*10 900	5850		*8000	3900		6050	2800		*3750	2450	
	Dozer and stabilizer down (std UC)	kg					*10 900	9000		*8000	5800		*6650	4150		*3750	3700	
	2 sets of stabilizers down (std UC)	kg				*10 900	*10 900	*10 900	*8000	*8000	7000	*6650	6200	4950	*3750	*3750	*3750	
1.5 m	Rear dozer up (std UC)	kg				7450	5750	4650	4950	3850	3200	3600	2800	2350	3150	2450	2050	8.17
	Rear dozer down (std UC)	kg					*12 050	5400		8550	3650		5950	2700		*3800	2350	
	Dozer and stabilizer down (std UC)	kg					*12 050	8500		*8600	5600		6700	4050		*3800	3550	
	2 sets of stabilizers down (std UC)	kg				*12 050	*12 050	10 600	*8600	8600	6750	*6850	6100	4850	*3800	*3800	*3800	
0.0 m	Rear dozer up (std UC)	kg				7300	5600	4500	4800	3700	3050	3550	2750	2250	3250	2550	2100	7.96
	Rear dozer down (std UC)	kg					*11 850	5250		8400	3550		5900	2600		*4100	2400	
	Dozer and stabilizer down (std UC)	kg					*11 850	8350		*8700	5450		6650	4000		*4100	3650	
	2 sets of stabilizers down (std UC)	kg				*11 850	*11 850	10 400	*8700	8450	6600	*6700	6000	4750	*4100	*4100	*4100	
–1.5 m	Rear dozer up (std UC)	kg	*8450	*8450	*8450	7300	5600	4500	4800	3700	3050				3600	2800	2300	7.44
	Rear dozer down (std UC)	kg		*8450	*8450		*10 800	5250		*8150	3500					*4650	2650	
	Dozer and stabilizer down (std UC)	kg		*8450	*8450		*10 800	8350		*8150	5400					*4650	4050	
	2 sets of stabilizers down (std UC)	kg	*8450	*8450	*8450	*10 800	*10 800	10 400	*8150	*8150	6550				*4650	*4650	*4650	
–3.0 m	Rear dozer up (std UC)	kg	*10 900	*10 900	8700	7400	5700	4600	4850	3800	3100				4400	3450	2850	6.51
	Rear dozer down (std UC)	kg		*10 900	10 400		*8800	5400		*6450	3600					*5200	3250	
	Dozer and stabilizer down (std UC)	kg		*10 900	*10 900		*8800	8500		*6450	5500					*5200	4950	
	2 sets of stabilizers down (std UC)	kg	*10 900	*10 900	*10 900	*8800	*8800	*8800	*6450	*6450	*6450				*5200	*5200	*5200	

Short Stick 2200 mm (7'3")

	Undercarriage configuration		10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
20.0 ft	Rear dozer up (std UC)	lb							12,000	9,600	8,100				*9,000	7,600	6,400	22.64
	Rear dozer down (std UC)	lb								*14,900	9,200					*9,000	7,300	
	Dozer and stabilizer down (std UC)	lb								*14,900	13,400					*9,000	*9,000	
	2 sets of stabilizers down (std UC)	lb							*14,900	*14,900	*14,900				*9,000	*9,000	*9,000	
15.0 ft	Rear dozer up (std UC)	lb				18,300	14,600	12,100	11,700	9,300	7,800	8,100	6,400	5,400	8,000	6,300	5,300	25.16
	Rear dozer down (std UC)	lb					*19,400	13,800		*15,800	8,900		*10,500	6,100		*8,400	6,000	
	Dozer and stabilizer down (std UC)	lb					*19,400	*19,400		*15,800	13,000		*10,500	9,100		*8,400	*8,400	
	2 sets of stabilizers down (std UC)	lb				*19,400	*19,400	*19,400	*15,800	*15,800	15,600	*10,500	*10,500	*10,500	*8,400	*8,400	*8,400	
10.0 ft	Rear dozer up (std UC)	lb				17,100	13,300	10,900	11,100	8,800	7,300	8,000	6,300	5,200	7,200	5,700	4,700	26.51
	Rear dozer down (std UC)	lb					*23,500	12,600		*17,400	8,400		13,100	6,000		*8,200	5,400	
	Dozer and stabilizer down (std UC)	lb					*23,500	19,400		*17,400	12,500		*14,500	8,900		*8,200	8,100	
	2 sets of stabilizers down (std UC)	lb				*23,500	*23,500	*23,500	*17,400	*17,400	15,000	*14,500	13,300	10,700	*8,200	*8,200	*8,200	
5.0 ft	Rear dozer up (std UC)	lb				16,100	12,400	10,100	10,700	8,300	6,900	7,800	6,000	5,000	7,000	5,400	4,500	26.80
	Rear dozer down (std UC)	lb					*26,000	11,700		18,300	7,900		12,800	5,800		*8,400	5,200	
	Dozer and stabilizer down (std UC)	lb					*26,000	18,300		*18,700	12,000		14,500	8,700		*8,400	7,900	
	2 sets of stabilizers down (std UC)	lb				*26,000	*26,000	22,700	*18,700	18,500	14,500	*14,800	13,100	10,400	*8,400	*8,400	*8,400	
0.0 ft	Rear dozer up (std UC)	lb				15,700	12,000	9,700	10,400	8,000	6,600	7,600	5,900	4,900	7,200	5,600	4,600	26.12
	Rear dozer down (std UC)	lb					*25,700	11,400		18,000	7,700		12,700	5,700		*9,000	5,300	
	Dozer and stabilizer down (std UC)	lb					*25,700	18,000		*18,900	11,700		14,300	8,600		*9,000	8,100	
	2 sets of stabilizers down (std UC)	lb				*25,700	*25,700	22,300	*18,900	18,200	14,200	*14,500	12,900	10,300	*9,000	*9,000	*9,000	
–5.0 ft	Rear dozer up (std UC)	lb	*19,400	*19,400	18,300	15,700	12,000	9,700	10,300	8,000	6,600				7,900	6,200	5,100	24.38
	Rear dozer down (std UC)	lb		*19,400	*19,400		*23,500	11,300		*17,600	7,600					*10,300	5,900	
	Dozer and stabilizer down (std UC)	lb		*19,400	*19,400		*23,500	18,000		*17,600	11,700					*10,300	8,900	
	2 sets of stabilizers down (std UC)	lb	*19,400	*19,400	*19,400	*23,500	*23,500	22,300	*17,600	*17,600	14,100				*10,300	*10,300	*10,300	
–10.0 ft	Rear dozer up (std UC)	lb	*23,700	*23,700	18,700	16,000	12,300	10,000	10,500	8,200	6,800				9,800	7,600	6,300	21.23
	Rear dozer down (std UC)	lb		*23,700	22,300		*19,000	11,600		*13,600	7,800					*11,400	7,300	
	Dozer and stabilizer down (std UC)	lb		*23,700	*23,700		*19,000	18,200		*13,600	11,900					*11,400	11,000	
	2 sets of stabilizers down (std UC)	lb	*23,700	*23,700	*23,700	*19,000	*19,000	*19,000	*13,600	*13,600	*13,600				*11,400	*11,400	*11,400	

*Limited by hydraulic rather than tipping load.

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

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

M322D Wheel Excavator Specifications

Lift Capacities – One-Piece Boom (5650 mm [18'6"])

All values are in kg, without bucket and without QC, with counterweight (4400 kg [9,700 lb]), heavy lift on.

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

Medium Stick 2500 mm (8'2")

	Undercarriage configuration		3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up (std UC)	kg							5600	4500	3800				*3350	3250	2750	7.21
	Rear dozer down (std UC)	kg								*6450	4300					*3350	3100	
	Dozer and stabilizer down (std UC)	kg								*6450	6250					*3350	*3350	
	2 sets of stabilizers down (std UC)	kg							*6450	*6450	*6450				*3350	*3350	*3350	
4.5 m	Rear dozer up (std UC)	kg							5450	4350	3650	3800	3000	2500	*3250	2700	2250	7.93
	Rear dozer down (std UC)	kg								*7000	4150		6200	2900		*3250	2600	
	Dozer and stabilizer down (std UC)	kg								*7000	6100		*6200	4250		*3250	*3250	
	2 sets of stabilizers down (std UC)	kg							*7000	*7000	*7000	*6200	*6200	5050	*3250	*3250	*3250	
3.0 m	Rear dozer up (std UC)	kg				8000	6250	5150	5200	4100	3400	3700	2900	2450	3150	2450	2050	8.30
	Rear dozer down (std UC)	kg					*10 500	5900		*7800	3900		6100	2800		*3250	2350	
	Dozer and stabilizer down (std UC)	kg					*10 500	9100		*7800	5850		*6500	4150		*3250	*3250	
	2 sets of stabilizers down (std UC)	kg				*10 500	*10 500	*10 500	*7800	*7800	7000	*6500	6200	4950	*3250	*3250	*3250	
1.5 m	Rear dozer up (std UC)	kg				7500	5800	4700	4950	3850	3200	3600	2800	2350	3050	2350	1950	8.39
	Rear dozer down (std UC)	kg					*11 850	5450		*8500	3700		5950	2650		*3400	2250	
	Dozer and stabilizer down (std UC)	kg					*11 850	8550		*8500	5600		6700	4050		*3400	*3400	
	2 sets of stabilizers down (std UC)	kg				*11 850	*11 850	10 650	*8500	*8500	6750	*6750	6100	4850	*3400	*3400	*3400	
0.0 m	Rear dozer up (std UC)	kg				7300	5600	4500	4800	3700	3050	3500	2700	2250	3100	2400	2000	8.18
	Rear dozer down (std UC)	kg					*11 950	5250		8350	3550		5850	2600		*3700	2300	
	Dozer and stabilizer down (std UC)	kg					*11 950	8350		*8700	5450		6600	3950		*3700	3500	
	2 sets of stabilizers down (std UC)	kg				*11 950	*11 950	10 400	*8700	8450	6600	*6750	6000	4750	*3700	*3700	*3700	
–1.5 m	Rear dozer up (std UC)	kg	*9750	*9750	8400	7250	5550	4500	4750	3650	3000	3500	2700	2250	3400	2650	2200	7.67
	Rear dozer down (std UC)	kg		*9750	*9750		*11 100	5250		*8300	3500		5850	2600		*4300	2500	
	Dozer and stabilizer down (std UC)	kg		*9750	*9750		*11 100	8300		*8300	5350		*6150	3950		*4300	3850	
	2 sets of stabilizers down (std UC)	kg	*9750	*9750	*9750	*11 100	*11 100	10 350	*8300	*8300	6550	*6150	5950	4750	*4300	*4300	*4300	
–3.0 m	Rear dozer up (std UC)	kg	*12 050	11 200	8550	7350	5650	4550	4800	3700	3050				4100	3200	2650	6.78
	Rear dozer down (std UC)	kg		*12 050	10 250		*9300	5300		*6900	3550					*5450	3050	
	Dozer and stabilizer down (std UC)	kg		*12 050	*12 050		*9300	8400		*6900	5450					*5450	4600	
	2 sets of stabilizers down (std UC)	kg	*12 050	*12 050	*12 050	*9300	*9300	*9300	*6900	*6900	6600				*5450	*5450	*5450	

Medium Stick 2500 mm (8'2")

	Undercarriage configuration		10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
20.0 ft	Rear dozer up (std UC)	lb							12,000	9,700	8,200				*7,500	7,200	6,100	23.46
	Rear dozer down (std UC)	lb								*14,200	9,200					*7,500	6,900	
	Dozer and stabilizer down (std UC)	lb								*14,200	13,400					*7,500	*7,500	
	2 sets of stabilizers down (std UC)	lb							*14,200	*14,200	*14,200				*7,500	*7,500	*7,500	
15.0 ft	Rear dozer up (std UC)	lb							11,700	9,300	7,900	8,200	6,400	5,400	*7,100	6,000	5,000	25.92
	Rear dozer down (std UC)	lb								*15,200	8,900		*12,100	6,200		*7,100	5,800	
	Dozer and stabilizer down (std UC)	lb								*15,200	13,100		*12,100	9,100		*7,100	*7,100	
	2 sets of stabilizers down (std UC)	lb							*15,200	*15,200	*15,200	*12,100	*12,100	10,900	*7,100	*7,100	*7,100	
10.0 ft	Rear dozer up (std UC)	lb				17,200	13,500	11,100	11,200	8,800	7,400	8,000	6,300	5,200	6,900	5,400	4,500	27.23
	Rear dozer down (std UC)	lb					*22,600	12,800		*16,900	8,400		13,100	6,000		*7,100	5,200	
	Dozer and stabilizer down (std UC)	lb					*22,600	19,600		*16,900	12,600		*14,100	8,900		*7,100	*7,100	
	2 sets of stabilizers down (std UC)	lb				*22,600	*22,600	*22,600	*16,900	*16,900	15,100	*14,100	13,300	10,700	*7,100	*7,100	*7,100	
5.0 ft	Rear dozer up (std UC)	lb				16,200	12,500	10,100	10,700	8,300	6,900	7,700	6,000	5,000	6,700	5,200	4,300	27.53
	Rear dozer down (std UC)	lb					*25,600	11,800		*18,400	7,900		12,800	5,800		*7,500	5,000	
	Dozer and stabilizer down (std UC)	lb					*25,600	18,500		*18,400	12,000		14,400	8,700		*7,500	*7,500	
	2 sets of stabilizers down (std UC)	lb				*25,600	*25,600	22,900	*18,400	*18,400	14,500	*14,700	13,100	10,400	*7,500	*7,500	*7,500	
0.0 ft	Rear dozer up (std UC)	lb				15,700	12,000	9,700	10,300	8,000	6,600	7,600	5,900	4,900	6,900	5,300	4,400	26.84
	Rear dozer down (std UC)	lb					*25,900	11,300		18,000	7,600		12,600	5,600		*8,200	5,100	
	Dozer and stabilizer down (std UC)	lb					*25,900	18,000		*18,900	11,700		14,200	8,500		*8,200	7,700	
	2 sets of stabilizers down (std UC)	lb				*25,900	*25,900	22,300	*18,900	18,100	14,200	*14,600	12,900	10,200	*8,200	*8,200	*8,200	
–5.0 ft	Rear dozer up (std UC)	lb	*22,200	*22,200	18,100	15,600	12,000	9,600	10,200	7,900	6,500	7,600	5,900	4,800	7,500	5,800	4,800	25.13
	Rear dozer down (std UC)	lb		*22,200	21,600		*24,100	11,300		17,800	7,500		*11,400	5,600		*9,500	5,600	
	Dozer and stabilizer down (std UC)	lb		*22,200	*22,200		*24,100	17,900		*17,900	11,600		*11,400	8,500		*9,500	8,500	
	2 sets of stabilizers down (std UC)	lb	*22,200	*22,200	*22,200	*24,100	*24,100	22,200	*17,900	*17,900	14,100	*11,400	*11,400	10,200	*9,500	*9,500	*9,500	
–10.0 ft	Rear dozer up (std UC)	lb	*26,100	24,000	18,400	15,800	12,100	9,800	10,400	8,000	6,600				9,100	7,100	5,900	22.15
	Rear dozer down (std UC)	lb		*26,100	22,000		*20,100	11,500		*14,800	7,600					*12,000	6,700	
	Dozer and stabilizer down (std UC)	lb		*26,100	*26,100		*20,100	18,100		*14,800	11,700					*12,000	10,200	
	2 sets of stabilizers down (std UC)	lb	*26,100	*26,100	*26,100	*20,100	*20,100	*20,100	*14,800	*14,800	14,200				*12,000	*12,000	*12,000	

*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 (5650 mm [18'6"])

All values are in kg, without bucket and without QC, with counterweight (4400 kg [9,700 lb]), heavy lift on.

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

Long Stick 2900 mm (9'6")

	Undercarriage configuration		3.0 m			4.5 m			6.0 m			7.5 m						m
6.0 m	Rear dozer up (std UC)	kg										*3850	3050	2550	*2800	*2800	2450	7.66
	Rear dozer down (std UC)	kg											*3850	2950		*2800	*2800	
	Dozer and stabilizer down (std UC)	kg											*3850	*3850		*2800	*2800	
	2 sets of stabilizers down (std UC)	kg										*3850	*3850	*3850	*2800	*2800	*2800	
4.5 m	Rear dozer up (std UC)	kg							5500	4350	3700	3800	3000	2550	*2700	2500	2050	8.34
	Rear dozer down (std UC)	kg								*6600	4150		*5900	2900		*2700	2400	
	Dozer and stabilizer down (std UC)	kg								*6600	6150		*5900	4250		*2700	*2700	
	2 sets of stabilizers down (std UC)	kg							*6600	*6600	*6600	*5900	*5900	5100	*2700	*2700	*2700	
3.0 m	Rear dozer up (std UC)	kg				8100	6350	5200	5200	4100	3450	3700	2900	2450	*2700	2250	1850	8.69
	Rear dozer down (std UC)	kg					*9900	6000		*7500	3900		6100	2800		*2700	2150	
	Dozer and stabilizer down (std UC)	kg					*9900	9200		*7500	5850		*6250	4150		*2700	*2700	
	2 sets of stabilizers down (std UC)	kg				*9900	*9900	*9900	*7500	*7500	7050	*6250	6200	4950	*2700	*2700	*2700	
1.5 m	Rear dozer up (std UC)	kg				7550	5800	4700	4950	3850	3200	3550	2800	2300	*2800	2150	1800	8.77
	Rear dozer down (std UC)	kg					*11 500	5500		*8250	3700		5950	2650		*2800	2100	
	Dozer and stabilizer down (std UC)	kg					*11 500	8600		*8250	5600		*6600	4000		*2800	*2800	
	2 sets of stabilizers down (std UC)	kg				*11 500	*11 500	10 700	*8250	*8250	6750	*6600	6050	4800	*2800	*2800	*2800	
0.0 m	Rear dozer up (std UC)	kg				7250	5550	4450	4750	3700	3000	3450	2700	2200	2850	2200	1800	8.58
	Rear dozer down (std UC)	kg					*11 950	5200		8350	3500		5800	2550		*3050	2100	
	Dozer and stabilizer down (std UC)	kg					*11 950	8300		*8650	5400		6600	3900		*3050	*3050	
	2 sets of stabilizers down (std UC)	kg				*11 950	*11 950	10 350	*8650	8400	6550	*6750	5950	4700	*3050	*3050	*3050	
–1.5 m	Rear dozer up (std UC)	kg	*9250	*9250	8200	7200	5450	4400	4700	3600	2950	3450	2650	2200	3100	2400	1950	8.10
	Rear dozer down (std UC)	kg		*9250	*9250		*11 400	5150		8250	3450		5800	2500		*3500	2300	
	Dozer and stabilizer down (std UC)	kg		*9250	*9250		*11 400	8250		*8400	5300		*6400	3900		*3500	*3500	
	2 sets of stabilizers down (std UC)	kg	*9250	*9250	*9250	*11 400	*11 400	10 300	*8400	8300	6450	*6400	5900	4650	*3500	*3500	*3500	
–3.0 m	Rear dozer up (std UC)	kg	*13 350	10 950	8400	7250	5550	4450	4700	3650	2950				3650	2850	2350	7.26
	Rear dozer down (std UC)	kg		*13 350	10 050		*9900	5200		*7350	3450					*4400	2700	
	Dozer and stabilizer down (std UC)	kg		*13 350	*13 350		*9900	8300		*7350	5350					*4400	4100	
	2 sets of stabilizers down (std UC)	kg	*13 350	*13 350	*13 350	*9900	*9900	*9900	*7350	*7350	6500				*4400	*4400	*4400	
–4.5 m	Rear dozer up (std UC)	kg				*7000	5750	4650										
	Rear dozer down (std UC)	kg					*7000	5400										
	Dozer and stabilizer down (std UC)	kg					*7000	*7000										
	2 sets of stabilizers down (std UC)	kg				*7000	*7000	*7000										

Long Stick 2900 mm (9'6")

	Undercarriage configuration		10.0 ft			15.0 ft			20.0 ft			25.0 ft						ft
20.0 ft	Rear dozer up (std UC)	lb													*6,200	*6,200	5,500	24.93
	Rear dozer down (std UC)	lb														*6,200	*6,200	
	Dozer and stabilizer down (std UC)	lb														*6,200	*6,200	
	2 sets of stabilizers down (std UC)	lb													*6,200	*6,200	*6,200	
15.0 ft	Rear dozer up (std UC)	lb							11,800	9,400	7,900	8,200	6,500	5,400	*5,900	5,500	4,600	27.26
	Rear dozer down (std UC)	lb								*14,400	9,000		*12,900	6,200		*5,900	5,300	
	Dozer and stabilizer down (std UC)	lb								*14,400	13,200		*12,900	9,200		*5,900	*5,900	
	2 sets of stabilizers down (std UC)	lb							*14,400	*14,400	*14,400	*12,900	*12,900	10,900	*5,900	*5,900	*5,900	
10.0 ft	Rear dozer up (std UC)	lb				17,500	13,700	11,300	11,200	8,900	7,400	8,000	6,200	5,200	*5,900	5,000	4,100	28.51
	Rear dozer down (std UC)	lb					*21,300	13,000		*16,200	8,500		13,100	6,000		*5,900	4,800	
	Dozer and stabilizer down (std UC)	lb					*21,300	19,800		*16,200	12,600		*13,600	8,900		*5,900	*5,900	
	2 sets of stabilizers down (std UC)	lb				*21,300	*21,300	*21,300	*16,200	*16,200	15,200	*13,600	13,400	10,700	*5,900	*5,900	*5,900	
5.0 ft	Rear dozer up (std UC)	lb				16,300	12,600	10,200	10,700	8,300	6,900	7,700	6,000	5,000	*6,200	4,800	4,000	28.77
	Rear dozer down (std UC)	lb					*24,900	11,900		*17,900	7,900		12,800	5,700		*6,200	4,600	
	Dozer and stabilizer down (std UC)	lb					*24,900	18,500		*17,900	12,000		*14,300	8,700		*6,200	*6,200	
	2 sets of stabilizers down (std UC)	lb				*24,900	*24,900	23,000	*17,900	*17,900	14,600	*14,300	13,000	10,400	*6,200	*6,200	*6,200	
0.0 ft	Rear dozer up (std UC)	lb				15,600	11,900	9,600	10,300	7,900	6,500	7,500	5,800	4,800	6,300	4,900	4,000	28.15
	Rear dozer down (std UC)	lb					*25,900	11,300		17,900	7,600		12,500	5,500		*6,700	4,700	
	Dozer and stabilizer down (std UC)	lb					*25,900	17,900		*18,700	11,600		14,200	8,400		*6,700	*6,700	
	2 sets of stabilizers down (std UC)	lb				*25,900	*25,900	22,300	*18,700	18,100	14,100	*14,600	12,800	10,200	*6,700	*6,700	*6,700	
–5.0 ft	Rear dozer up (std UC)	lb	*21,100	*21,100	17,600	15,400	11,800	9,500	10,100	7,800	6,400	7,400	5,700	4,700	6,900	5,300	4,400	26.51
	Rear dozer down (std UC)	lb		*21,100	*21,100		*24,700	11,100		17,700	7,400		12,400	5,400		*7,700	5,000	
	Dozer and stabilizer down (std UC)	lb		*21,100	*21,100		*24,700	17,700		*18,200	11,500		*13,700	8,400		*7,700	7,700	
	2 sets of stabilizers down (std UC)	lb	*21,100	*21,100	*21,100	*24,700	*24,700	22,100	*18,200	17,900	13,900	*13,700	12,700	10,100	*7,700	*7,700	*7,700	
–10.0 ft	Rear dozer up (std UC)	lb	*28,900	23,500	18,000	15,600	11,900	9,600	10,200	7,800	6,400				8,100	6,300	5,200	23.69
	Rear dozer down (std UC)	lb		*28,900	21,600		*21,300	11,200		*15,800	7,400					*9,800	6,000	
	Dozer and stabilizer down (std UC)	lb		*28,900	*28,900		*21,300	17,800		*15,800	11,500					*9,800	9,200	
	2 sets of stabilizers down (std UC)	lb	*28,900	*28,900	*28,900	*21,300	*21,300	*21,300	*15,800	*15,800	14,000				*9,800	*9,800	*9,800	
–15.0 ft	Rear dozer up (std UC)	lb				*14,700	12,400	10,000										
	Rear dozer down (std UC)	lb					*14,700	11,700										
	Dozer and stabilizer down (std UC)	lb					*14,700	*14,700										
	2 sets of stabilizers down (std UC)	lb				*14,700	*14,700	*14,700										

*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.

M322D 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
- Roading lights two front
- Roading lights two LED modules 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 C6.6 with ACERT Technology EPA Tier 3 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 mechanical 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, 11.00-20 16 PR, dual
Tool box in undercarriage
- Second tool box for undercarriage

Two-piece drive shaft

Other Equipment
Automatic swing brake
Counterweight, 3900 kg
Mirrors, frame and cab
Product Link ready
Tool box in upperframe, lockable

M322D 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:
- Single action
  - One-way, high pressure circuit, for hammering application
- 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
Generator with valve and priority function
Lowering control devices for boom and stick
SmartBoom™

Front Linkage

Booms
- One-piece boom, 5650 mm
- VA boom (two piece), 5440 mm

Bucket linkage with diverter valve
Sticks
- 2200, 2500, 2900 mm

Electrical

Back-up alarm
Heavy-duty maintenance free batteries
Refueling pump

Operator Station

Adjustable hydraulic sensitivity
CD/MP3 Radio (12V) at rear location including speakers and 12V converter
Falling objects guard
Joystick steering
Seat, adjustable high-back
- – air suspension (vertical)
- – deluxe with headrest, air suspension

Headrest
Travel speed lock
Vandalism guards
Visor for rain protection
Windshield
- One-piece high impact resistant
- 70/30 split, openable

Undercarriage

Dozer blade, rear mounted
Outriggers, front and/or rear mounted
Spacer rings for tires

Other Equipment

Auto-lube system (implements and swing gear)
Cat Machine Security System
Cat Product Link
Counterweight, 4400 or 5400 kg
Mirrors heated, frame and cab
Ride Control
Tires (see pg.15)
Waste Handling Package

M322D 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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