M318D MH

Wheel Material Handler

Engine		
Engine Model	Cat® C6.6 with ACERT™ Technology	
Net Power (ISO 9249)	124 kW	166 hp

Weights		
Operating Weight	19 000 to 22 700 kg	41,888 to 50,045 lb

Working Ranges		
Maximum Reach (stick pin)	11 000 mm	36'1"
Maximum Height (stick pin)	12 040 mm	39'6"

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 provides you with faster cycle times and increased productivity on any material handling job.

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

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

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

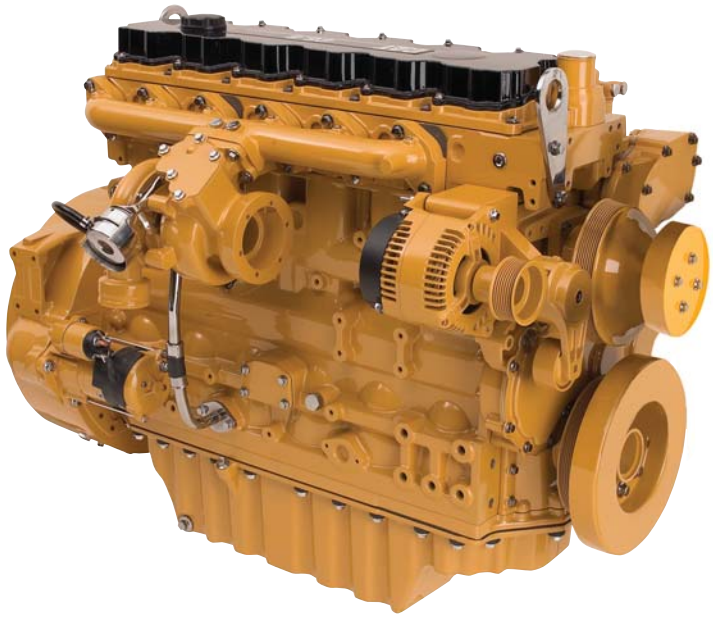
Contents

The Cat® D Series Material Handlers incorporate 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 M318D MH delivers a maximum gross power of 130 kW (174 hp).

Low Fuel Consumption

The Cat C6.6 engine 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 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 Material Handlers working in waste transfer stations or other dusty applications. This option features the following:

- An automatic, hydraulic reversible fan that reverses airflow after a set interval, manually adjustable between 2 and 60 minutes via the new monitor.
- 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

Fast cycle times and increased lift capacity combine to maximize your productivity in any job.

Implement Speed

D Series Material Handlers are able to offer fast stick and swing speeds, leading to more productivity.

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 material handler by 7%. Heavy loads can be easily moved in the full working range of the machine, maintaining excellent stability and speed.

Adjustable Hydraulic Sensitivity

Adjustable Hydraulic Sensitivity allows the operator to adjust the aggressiveness of the machine according to the application.

Proportional Auxiliary Hydraulics

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

- The Multi-Combined Valve is the core of the Tool Control System, allowing the operator to select up to ten preprogrammed work tools from the monitor. These preset hydraulic parameters support either one-way or two-way flow. The joystick sliding switches allow modulated control of the work tool.
- The Medium Pressure Function Valve provides proportional flow that is ideal for tilting buckets or rotating tools.
- A feature for the D Series Material Handlers 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.

Stick Regeneration Circuit

The Stick Regeneration Circuit increases efficiency and helps increase controllability for higher productivity and lower operating costs.

Hydraulic Snubbers

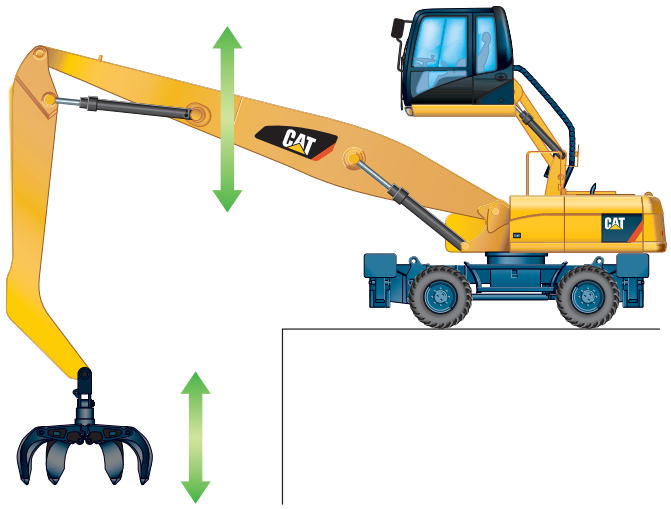
Caterpillar integrates its cylinder snubber technology into all Wheel Material Handler boom, stick and hydraulic cab riser cylinders. These snubbers help cushion shocks, reduce sound and increase cylinder life.

SmartBoom™

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

SmartBoom™

It allows the operator to fully concentrate on production. The unique Cat® SmartBoom™ significantly enhances operator comfort and job efficiency. Loading is more productive and more fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.



Environmentally Responsible Design

The D Series Material Handlers help build a better world and preserve the fragile environment.

Fuel Efficiency

The Material Handlers 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® C6.6 engine meets 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 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

Visibility and ergonomics are some of the many features of the D Series Material Handler Operator Station. The cab 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 the 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 features include a cigar lighter, ashtray, drink/bottle 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. Interior noise levels are substantially reduced due to the cab shell being attached to the frame with rubber mounts that limit vibration and sound transmitted from the frame.

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 windshields meet operator preference and application conditions.

- The fixed front windshield comes with high-impact resistant, laminated glass.
- The 70/30 split front windshield opens with the upper portion able to be stored out of the way above the operator. The lower front windshield features a rounded design to maximize downward visibility and improves wiper coverage. This windshield option also features the one-touch action release system.
- The roof of the cab provides an additional viewing pane with a skylight for added upward visibility. Direct sunlight is diverted with the retractable sunshield.

Heated Mirrors

Another 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 the local language that is easy to read and understand. Functions include the following:

- Two times 5 programmable “quick access” buttons for one-touch selection of favorite functions.
- Filter and oil change warnings displayed when the number of hours reaches the maintenance interval.
- Tool select functionality, allowing the operator to select up to ten pre-defined hydraulic work tools.
- Travel motor retarder selection to choose between three levels of aggressiveness in braking once the travel pedal is released.
- Rear camera viewing capabilities from the standard camera mounted on the counterweight.

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.

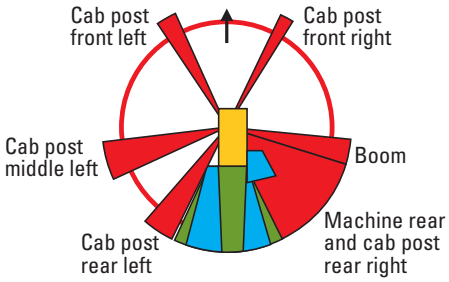
Cat Standard Rearview Camera

The rearview camera displays on the operator monitor. Together with best-in-class visibility to the front, up, left and right, the rearview camera ensures the safe operation of the machine.

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

Elevated Cab

Hydraulic cab riser is available to maximize viewing to all sides of the machine.

Hydraulic Cab Riser

The Hydraulic Cab Riser (HCR) design provides the most suitable solution when high flexibility in cab height is needed. Main features of the hydraulic riser include the following:

- **Stability** – The lift arms on the HCR are a wide and deep box-sectioned design with improved top and bottom links for greater cab stability. Further stability is achieved with the help of the retractable hydraulic cylinders used to raise the cab.
- **Speed** – Two heavy-duty hydraulic cylinders provide quick and controlled up and down travel.
- **Comfort** – The parallelogram design of the linkage allows the cab to remain level at all ranges of motion. HCR movement is also slowed as the cab reaches the end of the riser stroke, eliminating the effects of a sudden start/stop.
- **Safety** – In the event of a hydraulic malfunction, the cab can be lowered using either a lever inside the cab or one on the frame at ground level.

Bottom Position (1)

The bottom position is used for shipping and travel, allowing for safer transporting.

Top Position (2)

The top position raises the cab by 2400 mm (94.5 in). This provides optimal viewing for all material handling jobs.

Undercarriage and Drive Line

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

Undercarriage Options

Effective hydraulic line routing, transmission protection and heavy-duty axles make the Cat undercarriages perfect for material handler applications. The D Series M318D MH comes with the option of three different undercarriages in order to provide the greatest stability while performing your material handler jobs.

- Material Handling – The Material Handling undercarriage with four welded outriggers is ideal for the extra stability needed, especially when using a Hydraulic Cab Riser.
- Material Handling with Dozer Blade – An optional expansion to the Material Handling Undercarriage described above with an additional Dozer Blade mounted ahead of the front stabilizers to be used to push material commonly encountered in waste and millyard applications.
- The standard undercarriage allows for different kinds of stabilizers to be attached to the front and rear of the machine.

Heavy-Duty Axles

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.

Drive Line Concept

The M318D MH driveline design effectively utilizes the engine torque and power to provide a comfortable ride with improved smoothness, hydraulic retarding, and gear shifting commonly used during travel between material handling jobs.

Ground Clearance

A compact undercarriage design provides the M318D MH with optimum ground clearance during travel.

Booms and Sticks

Improved strength and kinematics help to bring higher production and efficiency to all jobs.

MH Booms and Sticks

The MH booms have been designed to handle increased lifting capacities. The stick range offers leading side plates to maximize the protection of hydraulic lines. The lines are fitted in between the two side plates offering protection from damage. Multiple boom and stick options allow you to pick the best match for your job.

MH Booms

A specially designed MH boom is available to meet the functionality requirements demanded in material handling applications. The boom arrangements include high pressure hydraulic lines for opening and closing functionality and medium pressure lines for implement rotation.

M318D MH Sticks

Two options of MH sticks are available for the M318D MH, all equipped with high and medium pressure auxiliary lines. The 4900 mm (193 in) Drop Nose Stick offers the reaching and lifting capabilities required for typical MH applications, while the 4200 mm (165 in) Straight Stick is the best solution for when additional work tool functionality is needed.

Special Applications

The M318D MH can be further outfitted with additional boom and stick options (see Optional Equipment), offering the ability to combine the material handler's hydraulic cab riser with traditional excavator functionality. This combination has been proven in transfer station, mining, and millyard applications.

Versatility

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

Tool Control

Ten hydraulic pump flow and pressure settings can be preset within the monitor, eliminating the need to adjust the hydraulics each time a tool is changed.

Orange Peel Grapple

The most common tool for material handling applications, this grapple is available in a range of sizes and provides a solution for a variety of material types.

Magnet Generator

The solid state generator set system is being introduced to enable the M318D MH to power scrap magnets up to 1448 mm (57 in) diameter as well as work with the popular orange peel grapples used in scrap handling. The versatility to work with either a magnet or grapple enables customers to use these machines in any part of their scrap yard application. The patented Caterpillar system provides unmatched performance, reliability, and versatility compared to competitors' equipment, keeping customer recycling operations more productive and profitable.

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 Modes

Two selectable working modes are available to choose from in order to get the best power output from the engine and hydraulics and maintain optimum fuel efficiency.

- **Economy Mode** – for precise material handling and loading with the added benefit of reduced fuel consumption.
- **Power Mode** – for applications requiring fast volume loading and material casting.

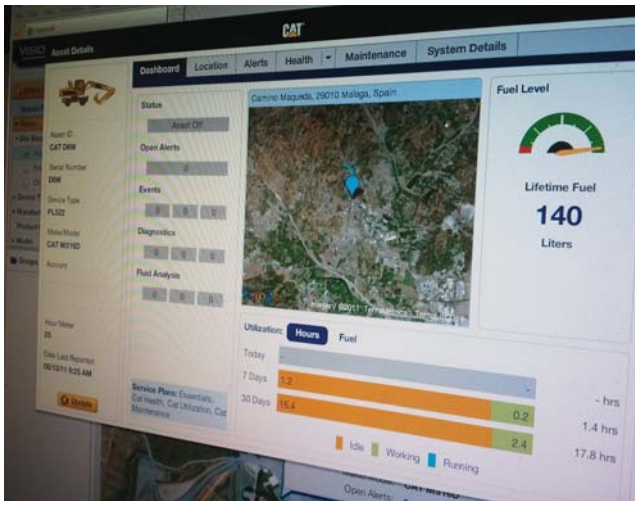
Automatic Travel Mode

Automatically engaged when the travel pedal is depressed this mode provides maximum speed, drawbar pull and best in class fuel efficiency.

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.



Serviceability and Complete Customer Support

Ground Level Maintenance

Caterpillar designed its D Series Material Handlers 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 Material Handler 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 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.

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, remote greasing blocks for the swing bearing and front-end-attachments have been provided to reduce maintenance time. For the undercarriage, two remote blocks provide easy access for greasing the oscillating axle and, as an option, the dozer blade.

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.

M318D MH Wheel Material Handler Specifications

Engine

Engine Model	Cat® C6.6 with ACERT™ Technology	
Ratings	1,800 rpm	
Gross Power	130 kW	174 hp
Net Power		
ISO 9249	124 kW	166 hp
EEC/80/1269	124 kW	166 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	6.6 L	403 in^3
Cylinders	6	
Maximum Torque at 1,400 rpm	805 N·m	594 lb ft

- EPA Tier 3 compliant.
- Full engine net power up to 3000 m (9,843 ft) altitude.

Hydraulic System

Tank Capacity	170 L	45 gal
System	255 L	67 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	200 bar	2,901 psi
Swing Mechanism	310 bar	4,496 psi
Maximum Flow		
Implement/ Travel Circuit	290 L/min	77 gal/min
Auxiliary Circuit		
High Pressure	250 L/min	66 gal/min
Medium Pressure	50 L/min	13 gal/min
Swing Mechanism	112 L/min	30 gal/min

Cab/FOGS

- Cab with Falling Object Guard Structure (FOGS) meets ISO 10262.

Weights

MH Boom		
Rear Dozer Only	19 150 kg	42,218 lb
Rear Dozer, Front Outriggers	20 350 kg	44,864 lb
Front and Rear Outriggers	20 600 kg	45,415 lb
With MH Undercarriage	21 650 kg	47,730 lb
With MH Undercarriage and Push Blade	22 350 kg	49,273 lb
VA Boom		
Rear Dozer Only	19 500 kg	42,990 lb
Rear Dozer, Front Outriggers	20 700 kg	45,636 lb
Front and Rear Outriggers	20 950 kg	46,187 lb
With MH Undercarriage	22 000 kg	48,502 lb
With MH Undercarriage and Push Blade	22 700 kg	50,045 lb
One-Piece Boom		
Rear Dozer Only	18 950 kg	41,778 lb
Rear Dozer, Front Outriggers	20 150 kg	44,423 lb
Front and Rear Outriggers	20 400 kg	44,974 lb
With MH Undercarriage	21 450 kg	47,289 lb
With MH Undercarriage and Push Blade	22 150 kg	48,832 lb
Sticks		
MH Straight	950 kg	2,094 lb
MH Drop Nose Short	840 kg	1,852 lb
Digging Short	550 kg	1,213 lb
Digging Medium	580 kg	1,277 lb
Digging Long	600 kg	1,323 lb
Industrial	520 kg	1,146 lb
MH Push Blade (with MH Undercarriage)	675 kg	1,488 lb
Dozer Blade	770 kg	1,698 lb
Outriggers	1030 kg	2,271 lb
Counterweights		
Standard	4000 kg	8,818 lb

- M318D HCR – Machine weight with Hydraulic Cab Riser, medium stick, 4000 kg (8,818 lb) counterweight, with operator and full fuel tank, without work tool. Weight varies depending on configuration.

Swing Mechanism

Swing Speed	10 rpm	
Swing Torque	48 kN·m	35,403 lb ft

Transmission

Forward/Reverse		
1st Gear	8 km/h	5 mph
2nd Gear	25 km/h	16 mph
Creeper Speed		
1st Gear	3 km/h	2 mph
2nd Gear	13 km/h	8 mph
Drawbar Pull	103 kN	23,155 lb
Maximum Gradeability	47%	

Tire Options

- 10.00-20 (dual solid rubber)
- 11.00-20 (dual pneumatic)

Undercarriage

Ground Clearance	380 mm	15 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	± 6°	
Minimum Turning Radius		
Standard Axle		
Outside of Tire	6800 mm	22 ft 4 in
End of VA Boom	7100 mm	23 ft 4 in
End of One-Piece Boom	8500 mm	27 ft 11 in

Service Refill Capacities

Fuel Tank Capacity	385 L	102 gal
Cooling	36 L	9.5 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

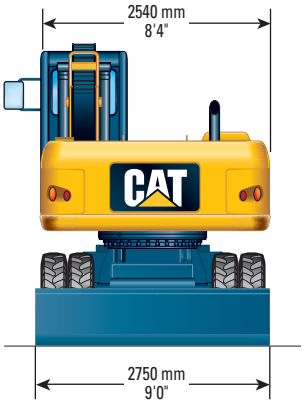
Sound Levels

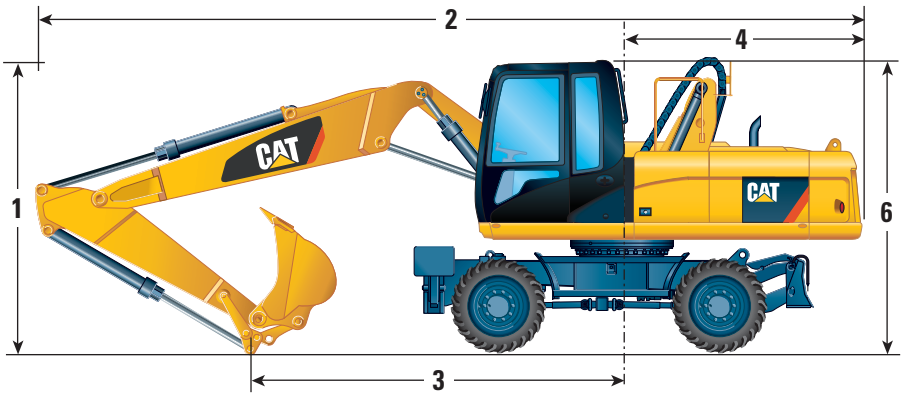
Exterior Sound

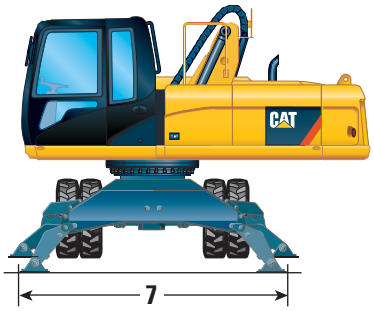
- The labeled spectator sound power level measured according to the test procedures and conditions specified in 2000/14/EC is 103 dB(A).

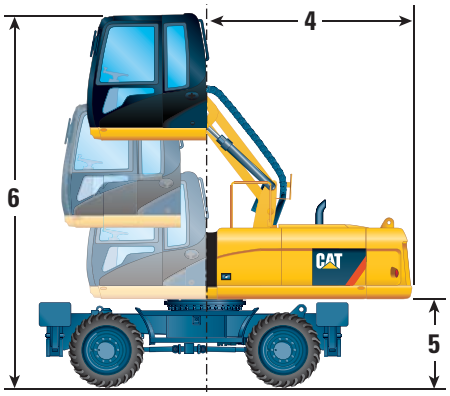
Dimensions with Standard Undercarriage

All dimensions are approximate.



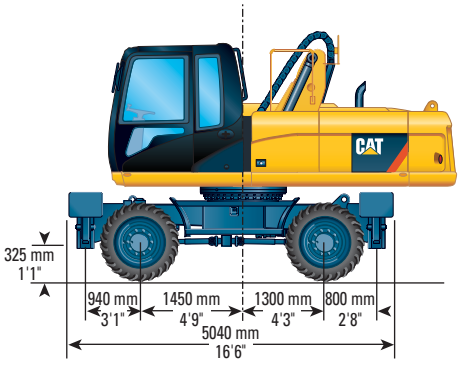




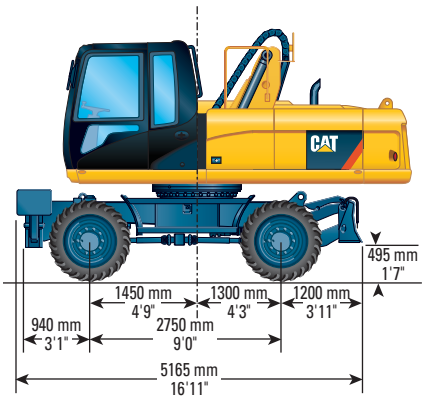


	VA Boom		One-Piece Boom	
	mm	ft/in	mm	ft/in
1 Shipping Height				
2200 mm (7'3") Stick	3320	10'11"	3320	10'11"
2500 mm (8'2") Stick	3320	10'11"	3320	10'11"
2800 mm (9'2") Stick	3320	10'11"	3320	10'11"
2 Shipping Length				
2200 mm (7'3") Stick	8870	29'1"	8970	29'5"
2500 mm (8'2") Stick	8850	29'0"	8960	29'5"
2800 mm (9'2") Stick	8820	28'11"	8950	29'4"
3 Support Point				
2200 mm (7'3") Stick	3960	13'0"	3830	12'7"
2500 mm (8'2") Stick	3640	11'11"	3500	11'6"
2800 mm (9'2") Stick	3510	11'6"	3330	10'11"
4 Tail Swing Radius	2565	8'5"	2565	8'5"
5 Counterweight Clearance	1310	4'4"	1310	4'4"
6 Cab Height				
With Hydraulic Cab Riser (Lowered)	3240	10'8"	3240	10'8"
With Hydraulic Cab Riser (Raised)	5640	18'6"	5640	18'6"
7 Stabilizer Width on Ground	3930	12'11"	3930	12'11"

Undercarriage with 2 sets of outriggers



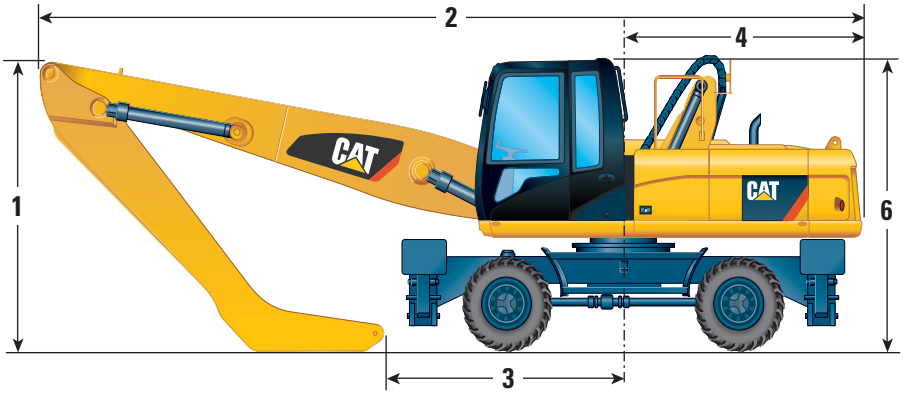
Undercarriage with 1 set of outriggers and dozer

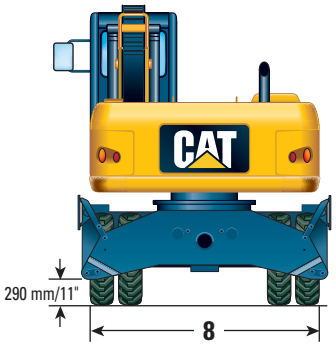


M318D MH Wheel Material Handler Specifications

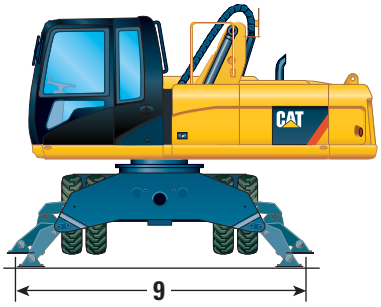
Dimensions with MH Undercarriage

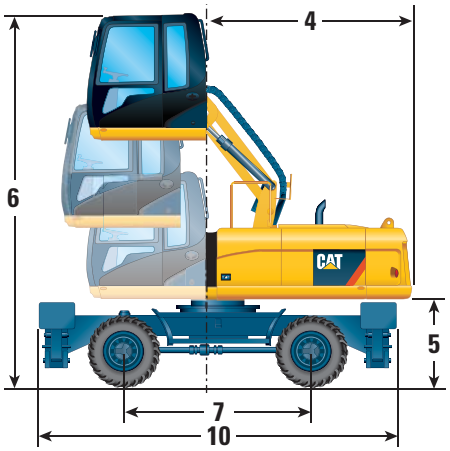
All dimensions are approximate.



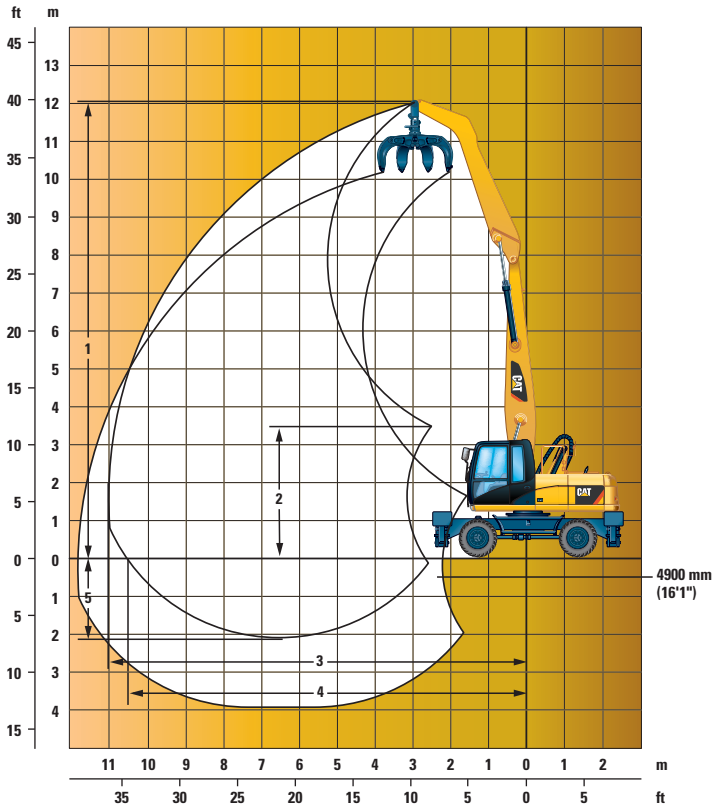


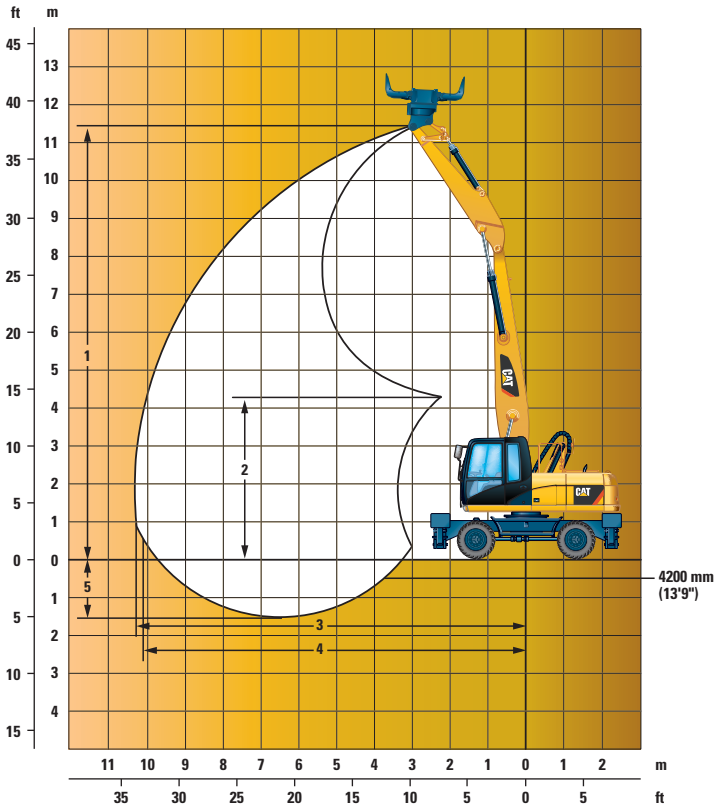
		mm	ft/in
1	Shipping Height		
	4200 mm (13'9") Straight Stick	3400	11'2"
	4900 mm (16'1") Drop Nose Stick	3400	11'2"
2	Shipping Length		
	4200 mm (13'9") Straight Stick	9060	29'9"
	4900 mm (16'1") Drop Nose Stick	9060	29'9"
3	Support Point		
	4200 mm (13'9") Straight Stick	3160	10'4"
	4900 mm (16'1") Drop Nose Stick	2720	8'11"
4	Tail Swing Radius	2565	8'5"
5	Counterweight Clearance	1310	4'4"
6	Cab Height		
	With Hydraulic Cab Riser (Lowered)	3240	10'8"
	With Hydraulic Cab Riser (Raised)	5640	18'6"
7	Wheel Base	2750	9'0"
8	Undercarriage Width	2990	9'10"
9	Stabilizer Width on Ground	4360	14'4"
10	Undercarriage Length	5250	17'3"





Working Ranges





Undercarriage Material Handling

	MH Drop Nose 4900 mm (16'1")		MH Straight Stick 4200 mm (13'9")	
Boom Length	6200 mm	20'4"	6200 mm	20'4"
1 Maximum Height	12 040 mm	39'6"	11 490 mm	37'9"
2 Minimum Dump Height	3690 mm	12'1"	4330 mm	14'3"
3 Maximum Reach	11 000 mm	36'1"	10 350 mm	34'0"
4 Maximum Reach at Ground Level	10 620 mm	34'10"	10 180 mm	33'5"
5 Maximum Depth	2190 mm	7'2"	1480 mm	4'10"

M318D MH Wheel Material Handler Specifications

Work Tools Matching Guide

Without Quick Coupler	Boom		6200 mm (20'4")			
	Undercarriage		MH		Standard	
	Stick Length		4900 mm (16'1")	4200 mm (13'9")	4900 mm (16'1")	4200 mm (13'9")
360° Rotatable Shears*	S325B, S340B					
Multi-Grapples	G315B	D, R	×		×	
Orange Peel Grapples (5 tines)	GSH15B	400 L, 500 L, 600 L (0.53 yd³, 0.66 yd³, 0.79 yd³)				
		800 L (1.05 yd³)				
	GSH20B	600 L (0.79 yd³)				
		800 L (1.05 yd³)				×
		1000 L (1.3 yd³)			×	×
Orange Peel Grapples (4 tines)	GSH15B	400 L, 500 L, 600 L (0.53 yd³, 0.66 yd³, 0.79 yd³)				
		800 L (1.05 yd³)				
	GSH20B	600 L (0.79 yd³)				
		800 L (1.05 yd³)				
		1000 L (1.3 yd³)	×		×	

* Boom Mounted

360° Working Range

× Not Compatible

Maximum Material Density 1800 kg/m³ (3,000 lb/yd³)

Maximum Material Density 1200 kg/m³ (2,000 lb/yd³)

Lift Capacities

All values are in kg, without bucket and without QC, with counterweight (4000 kg/8,818 lb), heavy lift on.

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

Undercarriage
Standard

Boom
6200 mm (20'4")

Stick
4900 mm (16'1")

Metric Units

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			9.0 m			10.5 m						m
10.5 m	2 sets stab down							*6500	*6500	*6500										*5250	*5250	*5250	6.70
	Rear dozer up							5800	4700	3950										4800	3850	3250	
	Rear dozer down								*6500	4450											*5250	3700	
	Dozer and stab down								*6500	6450											*5250	*5250	
9.0 m	2 sets stab down							*7850	*7850	7800	*6300	*6300	5400							*4700	*4700	4500	8.32
	Rear dozer up							5900	4800	4100	4100	3300	2800							3450	2750	2300	
	Rear dozer down								*7850	4600		*6300	3150								*4700	2600	
	Dozer and stab down								*7850	6600		*6300	4550								*4700	3850	
7.5 m	2 sets stab down							*8200	*8200	7800	*7100	6700	5400	*5500	4950	4000				*4400	*4400	3700	9.42
	Rear dozer up							5900	4800	4100	4150	3300	2850	3050	2400	2050				2800	2200	1850	
	Rear dozer down								*8200	4600		6600	3200		4800	2300					*4400	2100	
	Dozer and stab down								*8200	6600		*7100	4600		5400	3400					*4400	3150	
6.0 m	2 sets stab down							*8450	*8450	7700	*7200	6600	5350	5650	4950	4000				*4300	4050	3250	10.18
	Rear dozer up							5800	4700	3950	4050	3250	2750	3050	2400	2050				2450	1900	1600	
	Rear dozer down								*8450	4450		6500	3150		4800	2300					3900	1850	
	Dozer and stab down								*8450	6450		*7200	4550		5400	3400					*4300	2750	
4.5 m	2 sets stab down				*11 200	*11 200	*11 200	*8900	*8900	7450	*7400	6500	5250	5550	4850	3950	4350	3800	3100	4250	3700	3000	10.68
	Rear dozer up				8850	7100	5900	5600	4500	3800	3950	3150	2650	2950	2350	1950	2300	1800	1500	2250	1750	1450	
	Rear dozer down					*11 200	6700		*8900	4250		6400	3000		4750	2250		3700	1700		3600	1650	
	Dozer and stab down					*11 200	10 000		*8900	6250		7150	4400		5350	3350		4200	2600		4050	2500	
3.0 m	2 sets stab down	*18 650	*18 650	*18 650	*12 400	*12 400	11 500	*9400	9050	7150	7300	6300	5050	5450	4800	3850	4300	3800	3050	4050	3550	2850	10.94
	Rear dozer up	16 850	12 800	9950	8250	6500	5350	5300	4200	3500	3800	3000	2500	2900	2250	1900	2250	1750	1450	2150	1650	1350	
	Rear dozer down		*18 650	11 750		*12 400	6150		9000	4000		6200	2850		4650	2150		3650	1700		3400	1550	
	Dozer and stab down		*18 650	*18 650		*12 400	9350		*9400	5950		6950	4250		5250	3250		4150	2550		3900	2400	
1.5 m	2 sets stab down				*13 100	*13 100	10 800	*9650	8700	6800	7100	6150	4900	5350	4700	3750	4250	3750	3000	3950	3500	2800	11.00
	Rear dozer up				7600	5900	4800	5000	3900	3250	3650	2850	2350	2800	2150	1800	2250	1700	1400	2100	1600	1300	
	Rear dozer down					*13 100	5550		8650	3700		6000	2700		4550	2100		3600	1650		3350	1550	
	Dozer and stab down					*13 100	8700		*9650	5650		6800	4100		5150	3150		4100	2500		3800	2350	
0.0 m	2 sets stab down	*3500	*3500	*3500	*12 200	*12 200	10 300	*9250	8400	6550	6950	6000	4750	5250	4600	3650	*4100	3700	2950				
	Rear dozer up	*3500	*3500	*3500	7200	5450	4400	4750	3650	3000	3500	2700	2250	2700	2100	1750	2200	1700	1400				
	Rear dozer down		*3500	*3500		*12 200	5150		8350	3500		5850	2600		4450	2000		3550	1600				
	Dozer and stab down		*3500	*3500		*12 200	8250		*9250	5400		6600	3950		5050	3050		4050	2500				
–1.5 m	2 sets stab down				*9600	*9600	*9600	*8100	*8100	6400	*6300	5900	4650	*4750	4550	3600							
	Rear dozer up				7000	5300	4200	4600	3550	2900	3400	2600	2150	2650	2050	1700							
	Rear dozer down					*9600	4950		*8100	3350		5750	2500		4400	1950							
	Dozer and stab down					*9600	8050		*8100	5250		*6300	3850		*4750	3000							

Undercarriage
Special Application

Boom
6200 mm (20'4")

Stick
4900 mm (16'1")

	Undercarriage configuration	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
10.5 m	All stabilizers up					5750	4350							4800	3650	6.70
	All stabilizers down					*6500	*6500							*5250	*5250	
9.0 m	All stabilizers up					5900	4500	4100	3100					3450	2600	8.32
	All stabilizers down					*7850	*7850	*6300	*6300					*4700	*4700	
7.5 m	All stabilizers up					5900	4500	4150	3150	3050	2300			2800	2100	9.42
	All stabilizers down					*8200	*8200	*7100	6450	*5500	4800			*4400	*4400	
6.0 m	All stabilizers up					5800	4400	4100	3100	3050	2300			2450	1800	10.18
	All stabilizers down					*8450	*8450	*7200	6400	5850	4750			*4300	3900	
4.5 m	All stabilizers up			8750	6500	5550	4200	3950	2950	3000	2200	2350	1700	2250	1650	10.68
	All stabilizers down			*11 200	*11 200	*8900	*8900	*7400	6250	5800	4700	4550	3700	*4300	3600	
3.0 m	All stabilizers up	16 300	11 000	8150	5950	5300	3900	3800	2850	2900	2150	2300	1700	2150	1550	10.94
	All stabilizers down	*18 650	*18 650	*12 400	*12 400	*9400	8650	*7600	6100	5700	4600	4500	3650	4250	3450	
1.5 m	All stabilizers up			7550	5350	5000	3650	3650	2650	2800	2050	2250	1650	2100	1500	11.00
	All stabilizers down			*13 100	*13 100	*9650	8300	7400	5900	5600	4500	4450	3600	*4150	3400	
0.0 m	All stabilizers up	*3500	*3500	7100	4950	4750	3400	3500	2550	2750	2000	2200	1600			
	All stabilizers down	*3500	*3500	*12 200	*12 200	*9250	8050	*7200	5750	5500	4450	*4100	3600			
–1.5 m	All stabilizers up			6900	4800	4600	3300	3400	2450	2700	1950					
	All stabilizers down			*9600	*9600	*8100	7900	*6300	5650	*4750	4400					

*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.

M318D MH Wheel Material Handler Specifications

Lift Capacities

All values are in lb, without bucket and without QC, with counterweight (4000 kg/8,818 lb), heavy lift on.

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

Undercarriage
Standard

Boom
6200 mm (20'4")

Stick
4900 mm (16'1")

English Units

Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft			30.0 ft			35.0 ft						ft
35.0 ft	2 sets stab down						*13,400	*13,400	*13,400										*11,800	*11,800	*11,800	21.23
	Rear dozer up						12,400	10,000	8,500										11,200	9,000	7,600	
	Rear dozer down							*13,400	9,500											*11,800	8,600	
	Dozer and stab down							*13,400	*13,400											*11,800	*11,800	
30.0 ft	2 sets stab down						*17,000	*17,000	16,800	*13,100	*13,100	11,500							*10,400	*10,400	10,200	26.87
	Rear dozer up						12,700	10,300	8,800	8,800	7,100	6,000							7,800	6,200	5,200	
	Rear dozer down							*17,000	9,800		*13,100	6,800								*10,400	5,900	
	Dozer and stab down							*17,000	14,200		*13,100	9,800								*10,400	8,700	
25.0 ft	2 sets stab down						*17,900	*17,900	16,800	*15,500	14,400	11,600	*11,000	10,600	8,600				*9,800	*9,800	8,300	30.64
	Rear dozer up						12,700	10,300	8,800	8,900	7,100	6,100	6,500	5,200	4,400				6,300	4,900	4,200	
	Rear dozer down							*17,900	9,900		14,100	6,800		10,300	4,900					*9,800	4,700	
	Dozer and stab down							*17,900	14,200		*15,500	9,900		*11,000	7,300					*9,800	7,000	
20.0 ft	2 sets stab down						*18,400	*18,400	16,500	*15,700	14,200	11,500	12,100	10,600	8,600				*9,500	8,900	7,200	33.27
	Rear dozer up						12,500	10,100	8,600	8,800	7,000	6,000	6,500	5,200	4,400				5,400	4,300	3,600	
	Rear dozer down							*18,400	9,600		14,000	6,700		10,300	4,900					8,700	4,100	
	Dozer and stab down							*18,400	13,900		15,700	9,800		11,600	7,300					*9,500	6,100	
15.0 ft	2 sets stab down				*24,300	*24,300	*24,300	*19,400	*19,400	16,000	16,100	14,000	11,300	12,000	10,500	8,500				9,300	8,200	6,600	34.97
	Rear dozer up				19,100	15,300	12,700	12,000	9,700	8,100	8,500	6,800	5,700	6,400	5,000	4,200				5,000	3,900	3,200	
	Rear dozer down					*24,300	14,500		*19,400	9,200		13,700	6,500		10,200	4,800					7,900	3,700	
	Dozer and stab down					*24,300	21,500		*19,400	13,500		15,400	9,500		11,500	7,200					9,000	5,600	
10.0 ft	2 sets stab down	*40,200	*40,200	*40,200	*26,900	*26,900	24,700	*20,400	19,400	15,400	15,700	13,600	10,900	11,800	10,300	8,300	9,300	8,100	6,500	8,900	7,800	6,300	35.89
	Rear dozer up	36,200	27,500	21,500	17,800	14,000	11,600	11,400	9,100	7,600	8,200	6,500	5,400	6,200	4,900	4,100	4,900	3,800	3,100	4,700	3,600	3,000	
	Rear dozer down		*40,200	25,300		*26,900	13,300		19,300	8,600		13,300	6,200		10,000	4,700		7,900	3,600		7,600	3,500	
	Dozer and stab down		*40,200	*40,200		*26,900	20,200		*20,400	12,800		15,000	9,200		11,300	7,000		8,900	5,500		8,600	5,300	
5.0 ft	2 sets stab down				*28,400	*28,400	23,200	*20,900	18,700	14,700	15,300	13,200	10,500	11,500	10,100	8,100	9,200	8,000	6,500	8,800	7,700	6,200	36.09
	Rear dozer up				16,400	12,700	10,300	10,800	8,400	7,000	7,800	6,100	5,100	6,000	4,700	3,900	4,800	3,700	3,100	4,600	3,500	2,900	
	Rear dozer down					*28,400	12,000		18,500	8,000		12,900	5,800		9,800	4,500		7,800	3,500		7,400	3,400	
	Dozer and stab down					*28,400	18,700		20,800	12,200		14,600	8,800		11,100	6,800		8,800	5,400		8,400	5,200	
0.0 ft	2 sets stab down	*8,000	*8,000	*8,000	*27,000	*27,000	22,100	*20,100	18,100	14,100	14,900	12,900	10,200	11,400	9,900	7,900							
	Rear dozer up	*8,000	*8,000	*8,000	15,500	11,800	9,500	10,300	7,900	6,500	7,500	5,800	4,800	5,900	4,500	3,700							
	Rear dozer down		*8,000	*8,000		*27,000	11,100		17,900	7,500		12,600	5,600		9,600	4,300							
	Dozer and stab down		*8,000	*8,000		*27,000	17,700		*20,100	11,600		14,300	8,500		10,900	6,600							
–5.0 ft	2 sets stab down				*22,200	*22,200	21,600	*17,500	*17,500	13,800	*13,500	12,700	10,000										
	Rear dozer up				15,000	11,400	9,100	10,000	7,600	6,200	7,400	5,700	4,600										
	Rear dozer down					*22,200	10,700		*17,500	7,200		12,400	5,400										
	Dozer and stab down					*22,200	17,300		*17,500	11,300		*13,500	8,300										

Undercarriage
Special Application

Boom
6200 mm (20'4")

Stick
4900 mm (16'1")

Undercarriage configuration	10.0 ft		15.0 ft		20.0 ft		25.0 ft		30.0 ft		35.0 ft				ft
35.0 ft	All stabilizers up				12,300	9,300							11,200	8,400	21.23
	All stabilizers down				*13,400	*13,400							*11,800	*11,800	
30.0 ft	All stabilizers up				12,700	9,600	8,800	6,700					7,800	5,900	26.87
	All stabilizers down				*17,000	*17,000	*13,100	*13,100					*10,400	*10,400	
25.0 ft	All stabilizers up				12,700	9,600	8,900	6,700	6,500	4,900			6,300	4,700	30.64
	All stabilizers down				*17,900	*17,900	*15,500	13,900	*11,000	10,300			*9,800	*9,800	
20.0 ft	All stabilizers up				12,500	9,400	8,800	6,600	6,500	4,900			5,500	4,100	33.27
	All stabilizers down				*18,400	*18,400	*15,700	13,700	12,600	10,300			*9,500	8,700	
15.0 ft	All stabilizers up			18,900	14,000	12,000	9,000	8,500	6,400	6,400	4,800			5,000	3,700	34.97
	All stabilizers down			*24,300	*24,300	*19,400	19,300	*16,100	13,500	12,500	10,100			*9,500	8,000	
10.0 ft	All stabilizers up	35,000	23,700	17,600	12,800	11,400	8,500	8,200	6,100	6,300	4,600	4,900	3,600	4,700	3,400	35.89
	All stabilizers down	*40,200	*40,200	*26,900	*26,900	*20,400	18,600	16,300	13,100	12,300	9,900	9,700	7,900	9,300	7,600	
5.0 ft	All stabilizers up			16,300	11,600	10,800	7,900	7,900	5,800	6,100	4,400	4,800	3,500	4,600	3,400	36.09
	All stabilizers down			*28,400	*28,400	*20,900	17,900	15,900	12,700	12,100	9,700	9,600	7,800	9,200	7,500	
0.0 ft	All stabilizers up	*8,000	*8,000	15,300	10,700	10,300	7,400	7,600	5,500	5,900	4,300					
	All stabilizers down	*8,000	*8,000	*27,000	*27,000	*20,100	17,300	*15,600	12,400	11,900	9,600					
–5.0 ft	All stabilizers up			14,900	10,300	10,000	7,100	7,400	5,300							
	All stabilizers down			*22,200	*22,200	*17,500	17,000	*13,500	12,200							

*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

All values are in kg, without bucket and without QC, with counterweight (4000 kg/8,818 lb), heavy lift on.

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

Undercarriage
Standard

Boom
6200 mm (20'4")

Stick
4200 mm (13'9")

Metric Units

	Undercarriage configuration	3.0 m			4.5 m			6.0 m			7.5 m			9.0 m			10.5 m						m
9.0 m	2 sets stab down							*8100	*8100	7350										*5300	*5300	5050	7.42
	Rear dozer up							5500	4350	3650										3750	2950	2450	
	Rear dozer down								*8100	4150											*5300	2800	
	Dozer and stab down								*8100	6150											*5300	4200	
7.5 m	2 sets stab down							*8300	*8300	7400	*7050	6300	5000							*4950	4900	3900	8.64
	Rear dozer up							5500	4400	3650	3750	2950	2450							2850	2200	1800	
	Rear dozer down								*8300	4150		6200	2800								4750	2100	
	Dozer and stab down								*8300	6150		6950	4200								*4950	3250	
6.0 m	2 sets stab down				*10 650	*10 650	*10 650	*8550	*8550	7250	*7100	6250	4950	5250	4550	3650				*4800	4150	3300	9.46
	Rear dozer up				8750	7000	5750	5400	4250	3550	3700	2900	2400	2650	2050	1650				2400	1850	1500	
	Rear dozer down					*10 650	6600		*8550	4050		6150	2750		4450	1950					4050	1750	
	Dozer and stab down					*10 650	9900		*8550	6050		6900	4150		5050	3000					4600	2750	
4.5 m	2 sets stab down	*14 500	*14 500	*14 500	*11 600	*11 600	*11 600	*8900	*8900	7000	7100	6100	4850	5200	4500	3600				4350	3800	3000	10.00
	Rear dozer up	*14 500	13 450	10 500	8300	6550	5350	5150	4050	3350	3600	2800	2300	2600	2000	1600				2150	1600	1300	
	Rear dozer down		*14 500	12 350		*11 600	6150		8900	3850		6000	2650		4400	1900					3650	1550	
	Dozer and stab down		*14 500	*14 500		*11 600	9450		*8900	5800		6750	4050		5000	2950					4150	2450	
3.0 m	2 sets stab down				*12 500	*12 500	10 850	*9250	8600	6700	6900	5950	4700	5100	4450	3500				4100	3550	2800	10.28
	Rear dozer up				7650	5900	4800	4850	3750	3100	3450	2650	2150	2550	1900	1550				2000	1500	1200	
	Rear dozer down					*12 500	5550		8550	3550		5800	2500		4300	1800					3450	1400	
	Dozer and stab down					*12 500	8750		*9250	5500		6600	3900		4900	2900					3950	2300	
1.5 m	2 sets stab down				*12 600	*12 600	10 200	*9200	8250	6400	6750	5750	4550	5050	4350	3400				*4000	3500	2750	10.34
	Rear dozer up				7050	5350	4250	4600	3500	2800	3250	2500	2000	2450	1850	1500				1950	1450	1150	
	Rear dozer down					*12 600	5000		8200	3300		5650	2350		4200	1750					3400	1350	
	Dozer and stab down					*12 600	8150		*9200	5200		6400	3750		4800	2800					3850	2250	
0.0 m	2 sets stab down				*9450	*9450	*9450	*8450	8000	6150	*6500	5650	4400	*4850	4300	3350							
	Rear dozer up				6700	5000	3950	4350	3300	2650	3150	2350	1900	2400	1800	1400							
	Rear dozer down					*9450	4700		7950	3100		5500	2250		4150	1700							
	Dozer and stab down					*9450	7750		*8450	5000		6250	3600		4750	2750							

Undercarriage
Special Application

Boom
6200 mm (20'4")

Stick
4200 mm (13'9")

	Undercarriage configuration	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m				m
9.0 m	All stabilizers up					5450	4050							3750	2750	7.42
	All stabilizers down					*8100	*8100							*5300	*5300	
7.5 m	All stabilizers up					5500	4100	3750	2750					2900	2100	8.64
	All stabilizers down					*8300	*8300	*7050	6050					*4950	4700	
6.0 m	All stabilizers up			8650	6350	5350	3950	3700	2700	2700	1900			2450	1700	9.46
	All stabilizers down			*10 650	*10 650	*8550	*8550	*7100	6000	5500	4400			*4800	4050	
4.5 m	All stabilizers up	*14 500	11 550	8200	5950	5150	3750	3600	2600	2650	1850			2200	1500	10.00
	All stabilizers down	*14 500	*14 500	*11 600	*11 600	*8900	8550	*7250	5900	5450	4350			4550	3650	
3.0 m	All stabilizers up			7600	5350	4850	3500	3450	2450	2550	1800			2050	1400	10.28
	All stabilizers down			*12 500	*12 500	*9250	8200	7200	5700	5350	4250			4300	3450	
1.5 m	All stabilizers up			7000	4850	4550	3250	3300	2300	2500	1750			2000	1350	10.34
	All stabilizers down			*12 600	*12 600	*9200	7900	7050	5550	5250	4200			*4000	3400	
0.0 m	All stabilizers up			6650	4500	4350	3050	3150	2200	2400	1650					
	All stabilizers down			*9450	*9450	*8450	7650	*6500	5400	*4850	4100					

*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.

M318D MH Wheel Material Handler Specifications

Lift Capacities

All values are in lb, without bucket and without QC, with counterweight (4000 kg/8,818 lb), heavy lift on.

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

Undercarriage
Standard

Boom
6200 mm (20'4")

Stick
4200 mm (13'9")

English Units

Undercarriage configuration	10.0 ft			15.0 ft			20.0 ft			25.0 ft			30.0 ft			35.0 ft						ft
30.0 ft	2 sets stab down						*17,200	*17,200	15,800										*11,800	*11,800	11,500	23.85
	Rear dozer up						11,800	9,300	7,800										8,500	6,700	5,600	
	Rear dozer down							*17,200	8,900											*11,800	6,400	
	Dozer and stab down							*17,200	13,200											*11,800	9,600	
25.0 ft	2 sets stab down						*18,100	*18,100	15,800	*15,400	13,500	10,800							*10,900	*10,900	8,700	28.08
	Rear dozer up						11,800	9,400	7,900	8,000	6,300	5,200							6,400	5,000	4,100	
	Rear dozer down							*18,100	9,000		13,200	6,000								10,700	4,700	
	Dozer and stab down							*18,100	13,300		14,900	9,000								*10,900	7,300	
20.0 ft	2 sets stab down				*23,100	*23,100	*23,100	*18,500	*18,500	15,600	*15,400	13,400	10,700	11,300	9,800	7,800				*10,600	9,300	7,400	30.91
	Rear dozer up				18,900	15,000	12,400	11,600	9,200	7,700	7,900	6,200	5,100	5,700	4,300	3,500				5,400	4,100	3,300	
	Rear dozer down					*23,100	14,200		*18,500	8,700		13,200	5,900		9,500	4,100					9,000	3,900	
	Dozer and stab down					*23,100	21,300		*18,500	13,000		14,800	8,900		10,800	6,500					10,200	6,100	
15.0 ft	2 sets stab down	*31,100	*31,100	*31,100	*25,100	*25,100	24,900	*19,300	19,200	15,100	15,200	13,100	10,400	11,200	9,700	7,700				9,600	8,400	6,600	32.74
	Rear dozer up	*31,100	29,000	22,700	17,900	14,100	11,600	11,100	8,700	7,200	7,700	6,000	4,900	5,600	4,300	3,500				4,800	3,600	2,900	
	Rear dozer down		*31,100	26,600		*25,100	13,300		19,100	8,300		12,900	5,700		9,400	4,100					8,100	3,400	
	Dozer and stab down		*31,100	*31,100		*25,100	20,300		*19,300	12,500		14,500	8,700		10,700	6,400					9,200	5,500	
10.0 ft	2 sets stab down				*27,100	*27,100	23,400	*20,100	18,500	14,400	14,900	12,800	10,100	11,000	9,500	7,500				9,100	7,900	6,200	33.73
	Rear dozer up				16,500	12,800	10,300	10,500	8,100	6,700	7,400	5,700	4,600	5,500	4,100	3,300				4,500	3,300	2,600	
	Rear dozer down					*27,100	12,000		18,300	7,700		12,500	5,400		9,200	3,900					7,600	3,100	
	Dozer and stab down					*27,100	18,900		*20,100	11,900		14,200	8,400		10,500	6,200					8,700	5,100	
5.0 ft	2 sets stab down				*27,300	*27,300	21,900	*20,000	17,700	13,700	14,500	12,400	9,700	10,800	9,300	7,400				*8,900	7,700	6,100	33.92
	Rear dozer up				15,200	11,500	9,200	9,900	7,500	6,100	7,100	5,300	4,300	5,300	4,000	3,200				4,300	3,200	2,500	
	Rear dozer down					*27,300	10,800		17,600	7,100		12,100	5,100		9,100	3,800					7,400	3,000	
	Dozer and stab down					*27,300	17,500		19,900	11,300		13,800	8,000		10,300	6,100					8,500	5,000	
0.0 ft	2 sets stab down				*22,200	*22,200	21,000	*18,400	17,200	13,300	*14,000	12,100	9,500	*10,400	9,200	7,200							
	Rear dozer up				14,400	10,800	8,500	9,400	7,100	5,700	6,800	5,100	4,100	5,200	3,800	3,000							
	Rear dozer down					*22,200	10,100		17,000	6,700		11,800	4,800		8,900	3,600							
	Dozer and stab down					*22,200	16,700		*18,400	10,800		13,500	7,800		10,200	5,900							

Undercarriage
Special Application

Boom
6200 mm (20'4")

Stick
4200 mm (13'9")

Undercarriage configuration	10.0 ft		15.0 ft		20.0 ft		25.0 ft		30.0 ft		35.0 ft				ft
30.0 ft	All stabilizers up				11,700	8,700							8,600	6,300	23.85
	All stabilizers down				*17,200	*17,200							*11,800	*11,800	
25.0 ft	All stabilizers up				11,800	8,800	8,000	5,900					6,500	4,700	28.08
	All stabilizers down				*18,100	*18,100	*15,400	13,000					*10,900	10,600	
20.0 ft	All stabilizers up		18,600	13,700	11,500	8,500	7,900	5,800	5,700	4,100			5,400	3,800	30.91
	All stabilizers down		*23,100	*23,100	*18,500	*18,500	*15,400	12,900	11,800	9,400			*10,600	9,000	
15.0 ft	All stabilizers up	*31,100	17,700	12,800	11,100	8,100	7,700	5,600	5,700	4,000			4,800	3,400	32.74
	All stabilizers down	*31,100	*25,100	*25,100	*19,300	18,400	*15,700	12,600	11,700	9,400			10,100	8,100	
10.0 ft	All stabilizers up		16,300	11,600	10,500	7,500	7,400	5,300	5,500	3,900			4,500	3,100	33.73
	All stabilizers down		*27,100	*27,100	*20,100	17,700	15,500	12,300	11,500	9,200			9,500	7,600	
5.0 ft	All stabilizers up		15,100	10,400	9,900	7,000	7,100	5,000	5,300	3,700			4,400	3,000	33.92
	All stabilizers down		*27,300	*27,300	*20,000	17,000	15,100	11,900	11,300	9,000			*8,900	7,500	
0.0 ft	All stabilizers up		14,300	9,800	9,400	6,500	6,800	4,700	5,200	3,600					
	All stabilizers down		*22,200	*22,200	*18,400	16,400	*14,000	11,700	*10,400	8,900					

*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.

M318D MH Wheel Material Handler 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
High ambient cooling 52° C

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

Operator Station
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,
- covering 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
MH undercarriage
- with four welded outriggers

Heavy-duty axles, advanced travel motor,
- adjustable braking force

Oscillating front axle with remote greasing
Tires, 10.00-20 16 PR, solid rubber
Tool box in undercarriage
- Second tool box for undercarriage

Two-piece drive shaft
Two-speed transmission

Other Equipment
Automatic swing brake
Counterweight, 4000 kg (8,818 lb)
Mirrors, frame and cab
Product Link ready

M318D MH Wheel Material Handler 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™

Booms and Sticks

Material Handling boom (6200 mm/20'4")
Straight MH stick (4200 mm/13'9")
Drop nose MH stick (4900 mm/16'1")
One-piece boom (5350 mm/17'7")
VA boom (5260 mm/17'4")
Sticks
- – 2200 mm/7'3"
- – 2500 mm/8'3"
- – 2800 mm/9'3"

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 12 V converter
Falling objects guard
Joystick steering
Seat, adjustable high-back
- – air suspension (vertical)
- – deluxe with headrest, air suspension (horizontal and vertical), two-step seat heater, automatic weight adjustments, ventilated seat cushions, pneumatically adjustable lumbar support
- Headrest

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

Undercarriage

MH undercarriage with four welded outriggers and front mounted blade
Standard 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
Mirrors heated, frame and cab
Tires (see pg. 14)
Waste Handling Package

Notes

Notes

M318D MH Wheel Material Handler

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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