



M325C MH
M325C LMH
Wheeled
Material Handlers



	M325C MH	M325C LMH
Cat® 3126B ATAAC Diesel Engine		
Gross power	140 kW/189 hp	151 kW/202 hp
Net power	128 kW/173 hp	140 kW/189 hp
Operating Weight	30 500 to 31 500 kg	35 500 to 37 000 kg
Maximum Reach	14 330/15 650 mm	14 330/15 650 mm
Maximum Height	15 980/17 140 mm	16 600/17 800 mm

M325C MH and M325C LMH Wheeled Material Handlers

The C Series incorporates innovations for improved performance and versatility.

Engine

Cat 3126B ATAAC diesel engine is built for performance, durability, excellent fuel economy, low sound levels and it meets the European Union emission regulations through 2005. This innovative engine features Caterpillar's exclusive Advanced Diesel Engine Management 2000 (ADEM™-III) electronic control module for advanced troubleshooting and diagnostic capabilities. **pg. 4**

Operator Comfort

The new operator station design maximizes operator comfort and visibility. A new comfort seat with air suspension (optional), ergonomic joysticks, a new soft switch panel and the Multipro monitor are some of the features that help allow the operator to work free of fatigue and so remain attentive to the job in hand. **pg. 6**

Ease of Operation

On the new Multipro monitor panel (WEX Multipro for Wheeled Excavators), a variety of easy-to-read, language-based data is displayed. At all times, the operator can check the machine status allowing for continuous production optimization. **pg. 6**

Hydraulics

The hydraulic system provides maximum power, efficiency and exceptional controllability leading to high performance in material handling applications. **pg. 5**

Elevated Cab

The M325C MH/LMH is equipped with a Hydraulic Cab Riser to maximize viewing to all sides of the machine. This HCR offers infinitely variable heights up to 2400 mm of additional height. **pg. 8**

SmartBoom™

The M325C MH/LMH can be equipped with the Caterpillar exclusive Smart Boom feature. It eases the operations by smoothening the movements and accelerating return cycle speed. **pg. 10**

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



Booms and Sticks

Material Handling front parts are built for performance and long service life. Caterpillar booms and sticks are large, welded box-section structures with thick, multi-plate fabrications that resist high stress. All booms and sticks are tension relieved, thanks to a heat treatment, to improve structures fatigue strength significantly. Stick options allow you to pick the best match for your material handling job. **pg. 10**

Upper Frame and Counterweight

The heavy-duty upper frame guarantees durability and resistance to handle increased loads and movements generated by the demanding material handling application. A heavier counterweight balances the swing bearing and provides enhanced stability.

Undercarriages

Two different undercarriages with stabilizers provide maximum stability for Material Handling applications. Heavy-duty cylinder protection and box section design help provide excellent durability. Hydraulic hose routing inside the carbody prevents hose damage. An additional toolbox can be mounted between the steps. **pg. 9**

Work Tools

Grapples and generators provide a total solution package to the end user. Built for performance and durability these tools deliver high productivity, long service life, and excellent value. **pg. 11**

Maintenance and Reliability

All daily maintenance points, such as oil level or greasing ports, are accessible from ground level. A centralized greasing port is located on the boom, and allows the operator to grease the front linkage and swing bearing without climbing onto the machine. **pg. 12**

Environmental Considerations

The hydraulic system can be operated with biodegradable oil. Longer filter change intervals and more fuel efficiency also help reduce impact on our environment. **pg. 14**

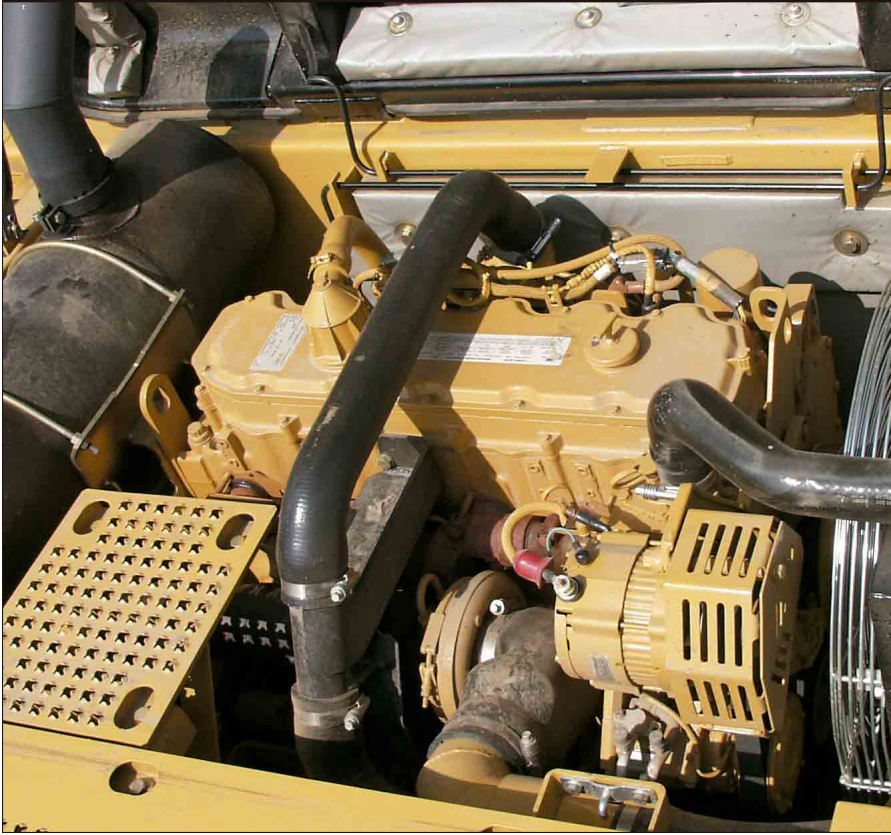
Complete Customer Service

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement. **pg. 15**



3126B ATAAC Engine

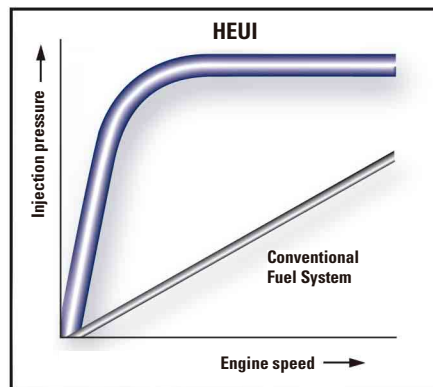
The six-cylinder, HEUI, turbocharged and air-to-air aftercooled engine is built for power, reliability, low maintenance, excellent fuel economy and low emissions.



Powerful performance. The 3126B ATAAC engine delivers, at the rated speed of 1800 rpm, a net power of 128 kW (M325C MH) or 140 kW (M325C LMH), and meets all current worldwide emissions standards.

HEUI Fuel System. In the traditional common rail fuel system, the entire fuel line is under high pressure. With the HEUI system, fuel remains at low pressure until it is injected into the cylinder. Fuel pressure is created hydraulically in response to a signal from the Electronic Control Module (ECM).

HEUI controls injection pressure electronically. This unique capability means the regulation of injection pressure is completely independent of crankshaft speed. Peak injection pressure can be achieved under acceleration and lug conditions, providing better fuel economy, better response and reduced smoke.



Injection pressure in a HEUI fuel system is independent of engine speed.

Turbocharged and Air-to-air aftercooled.

Turbocharger packs more dense air into the cylinders for more complete combustion and lower emissions improving performance and engine efficiency. These benefits are especially useful at high altitudes. Air-to-air aftercooler reduces smoke and emissions by providing a cooler inlet air for more efficient combustion. This also extends the life of the piston rings and bore.

Three valves. Three valves per cylinder allow for good air flow enhancing fuel efficiency and heat rejection.

Cooling system. The M325C MH/LMH features unique side by side radiators. In order to ease cleaning of water and hydraulic oil radiators, these are separated. Since they are protected by a fine mesh screen and not stacked on each other, cleaning of plugged radiators is much easier and therefore reduces the risk of overheating. While engine coolant radiator fan is run by a belt, the hydraulic oil cooler is driven by an independent hydraulic pump.

Engine oil. Caterpillar engine oil is formulated to optimize engine life and performance and is strongly recommended for use in Cat diesel engines. The engine oil change interval is increased to 500 hours.

Crankshaft. The crankshaft is forged and induction hardened for long-term durability. Seven main journals and eight counterweights are dynamically balanced for smooth operation. The crankshaft is regrindable. Connecting rods can be removed through the tops of the cylinders for servicing.

Factory remanufactured parts. A large choice of factory remanufactured parts and dealer proposed repair options increase machine availability and reduce total repair costs.

Hydraulics

Fast cycle times, increased lift capacity, and superior stability combine to maximize your productivity in any material handling job.

Automatic Engine Control.

Automatic Engine Control (AEC) reduces engine rpm if no operation is performed, maximizing fuel efficiency and reducing sound levels.

Caterpillar's XT-6 ES Hoses.

To meet the critical flexibility and strength demands of wheeled material handler applications, XT-6 ES hoses are installed in the high pressure hydraulic system. XT-6 ES hoses are made of four overlapping insulated wire spiral wraps bonded together for high abrasion resistance, excellent flexibility and easy installation. Hose routings are designed to protect from damage in this way reducing hose failure downtime. O-ring face seal couplings provide positive sealing for reliable and leak-free connections.

Hydraulic Cylinder Snubbers.

The hydraulic cylinder snubbers at the rod end of boom cylinders and both ends of stick cylinders, reduce sound and increase cylinder life, keeping the machine working longer.

Caterpillar Hydraulic Oil. Maximum protection against mechanical and corrosive wear in all hydraulic systems. Its high zinc content reduces wear, and extends pump life. Provided certain requirements are met (e.g. S•O•Ssm analysis every 500 hours), the hydraulic oil change interval is extended from 2000 hours to 4000 hours.



Controllability. The hydraulic system offers precise control of the M325C MH/LMH, reducing operator fatigue, improving operator effectiveness and efficiency, which ultimately results in enhanced performance.

Stick Regeneration Circuit. Stick regeneration circuits increase efficiency and help increase controllability for higher productivity and lower operating costs.

SmartBoom. The unique Cat SmartBoom attachment significantly enhances operator efficiency in applications such as scrap handling and port handling.

Medium Pressure Circuit. The medium pressure rotate circuit is included in the M325C MH/LMH for the use of rotating grapples and clamshells. The rotation of the grapple is activated by an on/off button on the joystick and the open/close function is activated by the right-left movement of the joystick handle allowing for modulated operation.

Hydraulic Generator. The optional generator control circuit allows the installation of a hydraulic generator and a magnet.

All-day operator comfort

The M325C MH and M325C LMH interior layout maximizes operator space, provides exceptional comfort, and reduces operator fatigue.



Ease of Operation

Designed for simple, easy operation, the M325C MH and M325C LMH allow the operator to focus on production.



WEX Multipro. New, compact Multipro enhances viewing while displaying a variety of easy-to-read and understandable information in various languages.

Languages. 14 different languages are available on the M325C MH/LMH monitor.

Pre-start WEX Multipro System. The Pre-start Multipro system alerts the operator of low coolant, engine oil or hydraulic oil levels, before starting the engine. When the engine key remains in the "ON" position for more than 2 seconds, a warning indicator and message are displayed if actual fluid levels are lower than required.

Filter and Oil Change Warnings. The filter and oil change warnings are displayed when the number of hours used reaches the maintenance interval.



Interior Operator Station. The M325C MH/LMH operator work station has low noise levels. The controls have been conveniently placed for easy adjustment and ease of operation. The seat design is ergonomic and adjustable and the ventilation system directs air where it is needed most.

Seat. The new seat for wheeled material handlers with two-tone color design offers adjustable back rest, lumbar support, cushion length and cushion angle. Independently adjustable armrests and pilot controls allow tailored ergonomics to suit operator preference. Optional Comfort seat provides air suspension, seat heating, horizontal suspension and automatic adjustment for the operator's weight to help maximize comfort.

Consoles. Designed for simplicity and functionality, the left side console is tiltable for excellent access to the cab. Stabilizer controls as well as the radio-off switch are located on the left console.

Automatic Climate Control. Fully automatic climate control adjusts temperature and air flow.

Greater Control Convenience. Each of the controls is positioned within easy reach of the operator. Joysticks control all implements and swing functions. Via the rocker switch, the operator controls the oscillating axle, power modes, parking brake, automatic engine speed control, and other hydraulic functions are in an easy-to-read environment.



Cab Mounts. The cab shell is attached to the frame with resilient mounts, reducing vibration and sound.

Wipers. Designed to maximize visibility in poor weather conditions. The parallel wiper system covers almost the complete front window without leaving unwiped areas in the immediate line of sight of the operator.

Large Storage Compartment. Located behind the seat, provides sufficient room for a cooling box. An optional cover is available to close off the storage space if preferred.

Easy Access. Conveniently located grab irons and large steps mounted to the undercarriage, together with the tiltable steering column and the tiltable left side console, provide easy access to the cab.

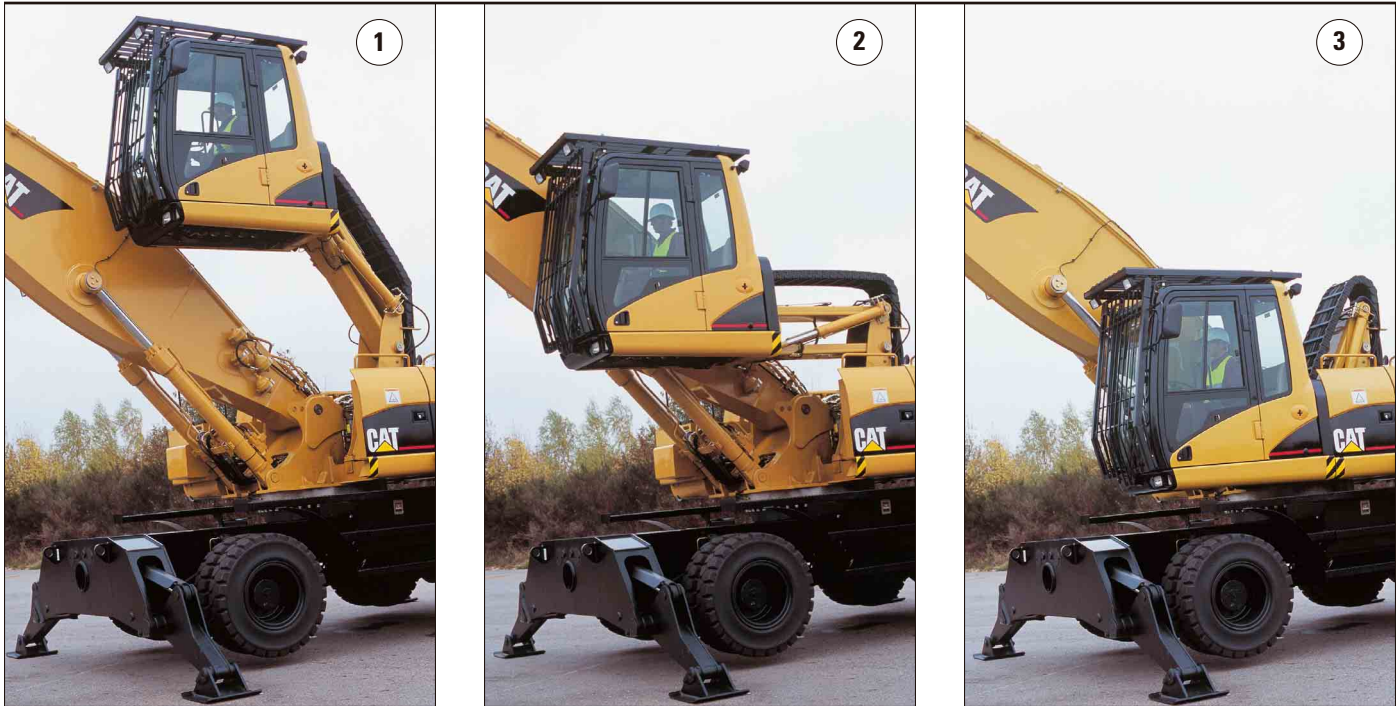


Skylight. A unique large polycarbonate skylight provides excellent upward visibility.

Viewing Area. There is excellent viewing area through wide windows. The lower of the two-piece window can be opened separately for better air ventilation or be slid into the upper window to completely open the front bay. An optional one-piece window is available.

Elevated Cab

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



Hydraulic Cab Riser. The hydraulic cab riser design provides the most suitable solution when high flexibility in cab height is needed. The lift arms on the hydraulic cab riser are box-section designed for greater cab stability. Two heavy-duty hydraulic cylinders provide quick and controlled up and down travel. With the cab in topmost position, the cylinders are retracted to ensure excellent stability. 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. The linkage is a parallelogram design, which keeps the cab level in all positions.

- 1 Top Position.** The top position raises the cab by 2400 mm. This provides optimal viewing to all sides in different applications such as scrap handling and port handling. The cab can be positioned at any level between lowest and highest positions.
- 2 Medium Position.** The medium position places the cab forward by 500 mm more than in the travel position, for increased visibility.
- 3 Bottom Position.** The bottom position is used for shipping and travel.

Undercarriage

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



Wheeled undercarriage equipped with 4 dual solid tires and stabilizers.

Tires on M325C MH. It includes 4 dual 12.00-20 solid rubber tires. Optional 11.00-20 air/pneumatic dual tires are also available.



Heavy duty wheeled undercarriage equipped with 4 single solid tires and stabilizers.

Tires on M325C LMH. It includes 4 solid single rubber tires (16.00-25). Optional 23.5-R25 air/pneumatic tires are also available.

Strong and Stable Undercarriages. The M325C MH/LMH wheeled undercarriages provide maximum rigidity and long service life. This 4 dual/single wheels undercarriage provides the stability needed for Material Handling applications, and is well suited for use with a hydraulic cab riser. The hydraulic lines are routed through the frame, and the cylinders have heavy-duty guards to provide protection from damage.

Heavy Duty Axles. The front axles on the M325C MH and the rear axles on the M325C LMH offer great oscillating and steering angles.

Stabilizers. Recommended for maximum operating stability, the four stabilizers can be individually controlled to level the machine on slopes. The four weld-on stabilizers offer larger cylinders, heavy-duty cylinder guards, optimized kinematics and increased spread.

Tool Box. A large sealed and lockable toolbox is mounted on the undercarriage between the steps on the machine's left side. A second optional toolbox is available for the right side.



Boom and Sticks

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



Material Handling Front Parts. Like all Cat booms and sticks, Caterpillar Material Handling front parts are built for performance and long service life:

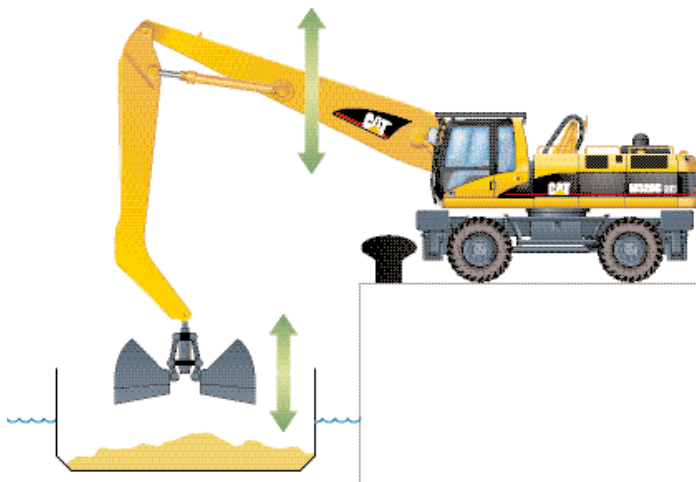
- Finite elements analysis: analyses the design structural stresses and enables optimization of durability and performance.
- Castings and forgings are used at high stress areas such as boom nose, boom foot, boom cylinder and stick foot.
- Internal baffle plates give the structures extra strength and durability to withstand torsional loads.
- Large welded box section structures with thick, multi-plate fabrication are used in high-stress areas.
- M325C LMH boom and sticks are stress relieved, thanks to heat treatment, to maximize material strength and durability while minimizing weight for improved performance.
- The M325C MH/LMH new material handling front parts offer leading side plates to maximize protection of the hydraulic lines. The lines are fitted in between the two side plates offering protection from damage.

Boom and Sticks. The M325C MH/LMH can be equipped with two different material handling configurations to offer the right combination of reach and lifting capacities for all material handling jobs.

- The 14 330 mm maximum reach configuration includes the 8850 mm MH boom and a 6000 mm MH stick, whereas the 15 650 mm MH configuration includes the 8850 mm MH boom and a 7420 mm MH stick.

SmartBoom. Unloading barges has become easier thanks to the SmartBoom:

- It avoids excessive force being put on the barge floor, allowing the operator to fully concentrate on production.
- The operations are more productive and efficient due to improved return speed.



Work Tools – Attachments

A variety of grapples and clamshells are available to maximize machine performance in material handling applications.

Cat Orange Peel Grapples. The GSH Orange Peel Grapples are constructed with four or five wear-resistant steel tines and fully replaceable tips for excellent service life. Hydraulic cylinders are enclosed within each tine for maximum protection. Mechanical stops prevent the cylinders from bottoming-out and hydraulic cushioning provides additional protection. The grapple's tines penetrate deep into piles and close tightly to retain maximum payload. The various scrap materials that can be handled and its superior productivity make these grapples ideal work tools in scrap material handling applications.



Clamshell Buckets. The GOS Clamshell buckets are purpose built for loading and unloading different kinds of bulk materials in large quantities. They are designed and built to deliver reliable performance every day in some of the most demanding conditions. Whether it is to handle light material or to tackle heavy weights, these clamshell buckets can do the job.

Work tools have been calculated with machine in stability position; over-the-side and at maximum horizontal reach at approximately 2 meters above ground level. When choosing a work tool please consider work tool application, productivity requirements and durability. Refer to work tool specifications for application recommendations and productivity information. Check with your Cat dealer for more details on specifications, sizes and other work tool types.

- Max. material density 3000 kg/m³
- Max. material density 1800 kg/m³
- Max. material density 1200 kg/m³
- Not recommended

			M325C MH		M325C LMH	
			Boom length (mm)		8850	
			Stick length (mm)		6000	7420
Clamshell Buckets Rehandling	GOS-35	0.62 m ³				
		0.70 m ³				
		0.78 m ³				
		1.05 m ³				
		1.26 m ³		N		
		1.46 m ³		N		
		1.67 m ³		N		N
	GOS-45	0.97 m ³				
		1.12 m ³		N		
		1.27 m ³		N		
		1.58 m ³		N		N
		1.71 m ³	N	N		N
		2.02 m ³	N	N		N
		2.34 m ³	N	N	N	N
Orange Peel Grapples (5 tines)	GSH-20	0.6 m ³				
		0.8 m ³		N		
		1.0 m ³		N		
	GSH-22	0.6 m ³		N		N
		0.8 m ³	N	N		N
		1.0 m ³	N	N		N
		1.2 m ³	N	N		N
		1.4 m ³	N	N		N
Orange Peel Grapples (4 tines)	GSH-20	0.6 m ³				
		0.8 m ³		N		
		1.0 m ³		N		
	GSH-22	0.6 m ³		N		
		0.8 m ³		N		
		1.0 m ³		N		N
		1.2 m ³	N	N		N
		1.4 m ³	N	N		N

Maximum Uptime – Service and Maintenance

Extended service intervals and easy access reduce operating costs.



Extended Service Intervals. M325C MH/LMH service and maintenance intervals have been extended to reduce machine service time, increase machine availability and reduce operating costs. Using S•O•S hydraulic oil change intervals can be extended from 2000 hours to 4000 hours. Engine coolant change intervals are up to 6000 hours when Cat Extended Life Coolant/ Anti-Freeze is used.

Easy to Clean Coolers. Flat fins on all coolers reduce clogging and make it easier to remove debris.

Maintenance Level. The design and layout of the M325C MH/LMH was made with the service technician in mind. The fuel water separator, engine oil filter, battery, radiator fluid level, fuel filter, engine oil gauge, hydraulic oil level, air cleaner and pilot system filter are all easily accessible by ascending to the maintenance steps.

Fuel Tank Drain. Located at the bottom of the upper frame, the fuel tank drain with a hose connection allows simple, spill free fluid draining.

Air Filter. Caterpillar Radial Seal air filters do not require tools to service them, thus reducing maintenance time. The air filter features a double-element construction and built-in precleaner for superior cleaning efficiency. When the air cleaner plugs, a warning is displayed on the monitor screen inside the cab.

Capsule Filter. The hydraulic return filter, a capsule filter, is situated inside the hydraulic tank. This filter prevents contaminants from entering the system when hydraulic oil is changed and keeps the operation clean.

Engine Inspection. The engine can be accessed from both the upper walkways and from the top of the upper structure. The engine and pump compartment are separated by a steel wall.

Water Separator. The water separator removes water from fuel even when under pressure and is located in the oil cooler compartment.

Greasing Points. A concentrated remote greasing block on the boom delivers grease to hard-to-reach locations.

Hydraulic Tank Drain. The hydraulic tank drain enables simple, spill-free fluid changes.

Handrails and Steps. Well-sized handrails and steps assist the operator in climbing on and off of the machine.

Diagnostics and Monitoring.

The M325C MH/LMH is equipped with S•O•S sampling ports for the hydraulic system and engine oil. A connection for the Electronic Technician (ET) is conveniently located in the cab.

Anti-Skid “Punched-Star” Plate.

An anti-skid punched-star plate covers the top of the steps and the upper structure to prevent slipping during maintenance.

Caterpillar Braided Harnesses.

Designed and manufactured to resist the most severe conditions. Harnesses are made of large gauge, colored and number-coded wires, with the complete harness being protected by an abrasion resistant braiding. Harnesses are properly routed and securely clamped to ensure their reliability and life.

XT-6 ES Hoses. Premium quality rubber, precision 4-ply wire reinforcement and couplings are all unique features of Cat hoses which deliver top performance and long life. O-Ring face seals provide positive sealing for reliable and leak-free connections.

Caterpillar Batteries. Caterpillar maintenance-free, high output batteries are designed for high cranking power and maximum protection against vibration.

Fuel Filters. Cat high efficiency fuel filters with a Stay-Clean Valve™ feature cellulose/synthetic blend media that remove more than 98 percent of particles that are two microns or larger, increasing fuel injector life.

Electronic Technician (ET).

The electronic engine and machine controllers provide detailed diagnostic possibility for service technicians. The ability to store both active and intermittent indicators simplifies problem diagnosis and reduces total repair time, resulting in improved machine availability and lower operating cost. ET can be used to...

- access data stored in the engine and transmission controls via the Cat Data Link System
- display the status of parameters such as engine speed, gear engaged, control switch position, etc.
- view active and non-active diagnostic codes and clear them after repair
- perform diagnostic tests and calibrations of electro-hydraulic components
- view current configuration and change parameter settings
- flash new Caterpillar software into the Electronic Control Modules

A customer version of ET is also available for your fleet of Caterpillar equipment. Contact your Caterpillar dealer.



Scheduled Oil Sampling (S•O•S) Analysis.

Caterpillar has specially developed S•O•S to help ensure better performance, longer life and increased customer satisfaction. It is a thorough and reliable early warning system which detects traces of metals, dirt and other contaminants in your engine, axle and hydraulic oil. It can predict potential trouble early, thus avoiding costly failures. Your Caterpillar dealer can give you results and specific recommendations shortly after receiving your sample. Each S•O•S test can provide specific types of diagnosis:

- **Oil condition analysis** identifies loss of lubricating properties by quantifying combustion products such as soot, sulfur, oxidation and nitrates.
- **Wear analysis** monitors component wear by detecting, identifying and assessing the amount and type of metal wear elements found in the oil.
- **Chemical and physical test** detects the physical presence of unwanted fluids (water, fuel, antifreeze).

Lower Operating Costs.

Improvements in operating costs provide a long-term investment.

Fuel Consumption. The new EU Stage II, electronically controlled engine, new Cat HEUI fuel injection system and new ATAAC combine to provide outstanding fuel consumption during both production and traveling. The Automatic Engine Speed Control reduces idle speed when the implements are not active to further improve fuel consumption.

Filter Change Intervals. 2000 hours hydraulic oil and 500 hours engine oil filter change intervals save time and money.

Environmentally Responsible Design

Caterpillar machines not only help you build a better world, they help maintain and preserve the fragile environment.



More Performance. The M325C MH/LMH is designed to provide more performance yet use less fuel than ever before. This means more work done in a day, less fuel consumed and minimal impact on our environment.

Low Exhaust Emissions. The Cat 3126B ATAAC diesel engine is a low emission engine designed to meet EU Stage II Off-Highway and emission regulations.

Ozone Protection. To help protect the earth's ozone layer, the M325C MH/LMH's air conditioning unit uses only R-134a refrigerant which does not contain harmful chlorofluorocarbons (CFC's).

Fewer Leaks and Spills. Lubricant fillers and drains are designed to minimize spills. Cat O-Ring Face Seals, 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.

Biodegradable Hydraulic Oil.

Available as an option, Caterpillar Biodegradable Hydraulic Oil (HEES) is formulated from a fully saturated Hydraulic Environmental with Ester Synthetic base stock and selected additives. It has excellent high-pressure and high-temperature characteristics and is fully compatible with our hydraulic components and allows operation over a broad temperature range. Cat's HEES is fully decomposed by soil or water microorganisms, providing a more environmentally-sound alternative to mineral-based oils. This is available as an attachment.

Complete Customer Support

Cat dealer services help you operate longer with lower costs.

Services. Customer Service is critical today in every business. That's why so many people buy Cat equipment. They know they are getting quality reliability and performance backed-up with the best Customer Service. Your Caterpillar dealer offers a wide range of services that can be set up under a Customer Support Agreement. The dealer will help you choose a plan that can cover the whole machine including work tools, to help you to get the best out of your investment.

Product Support. You will find a solution for your parts requirements at your dealer. Cat dealers utilize a worldwide network to find in-stock parts to minimize downtime. In addition your dealer can offer alternative solutions like Reman, Classic Parts and quality used parts to save money on original Caterpillar components.

Service Capability. Whether in the dealer's fully equipped shop or in the field, you will get highly trained service technicians using the latest technology and tools.

Maintenance. More and more equipment buyers are planning for effective maintenance before buying equipment. Choose from your dealer's wide range of maintenance services at the time you purchase your machine. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S•O•S Fluid Analysis and Technical Analysis help you avoid unscheduled repairs.



Selection. Make detailed comparisons of the machines you are considering before you buy. How long do components last? What is the cost of preventive maintenance? Your Cat dealer can give you precise answers to these questions to make sure you operate your machines at the lowest cost.

Purchase. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment and owning and operating costs over the long run.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has training material and ideas to help you increase productivity.

Replacement. Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

Engine

	M325C MH	M325C LMH
Cat 3126B ATAAC diesel engine		
Ratings	1800 rpm	1800 rpm
Gross power	140 kW/189 hp	151 kW/204 hp
Net power		
ISO 9249	128 kW/173 hp	140 kW/189 hp
EEC 80/1269	128 kW/173 hp	140 kW/189 hp
Bore	110 mm	110 mm
Stroke	127 mm	127 mm
Displacement	7.2 liters	7.2 liters
Cylinders	6	6
Maximum torque at 1400 rpm	852 Nm	852 Nm

- Meets EU directive 97/68/EC Stage II emission requirements.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- No engine derating is required below 3000 m altitude.

Service Refill Capacities

	Liter
Fuel tank capacity	500
Cooling	30
Engine crankcase	34
Rear axle housing (differential)	19
Front steering axle (differential)	24
Final drive	2.5
Powershift transmission	2.9

Weights

	M325C MH	M325C LMH
Boom	kg	kg
8850 mm	3610	3925
Stick		
6000 mm	1290	1390
7420 mm	1510	1650
Upperframe	8250	8250
Undercarriage	11 080	13 240
Counterweight	5600	7700
Operating weights		
6000 mm stick		
with solid tires	29 800	34 540
with air tires	28 700	33 660
7420 mm stick		
with solid tires	30 000	34 800
with air tires	28 900	33 920

Hydraulic System

Tank capacity	250 liters
System	350 liters
Maximum pressure	
Implements	350 bar
Travel	350 bar
Maximum flow	2 x 235 l/min
Pilot system	
Maximum pressure	41 bar

Transmission

	M325C MH	M325C LMH
Maximum travel speed	20 km/h	18 km/h
Drawbar pull	158.7 kN	158.7 kN

Swing Mechanism

Swing speed	10.2 rpm
Swing torque	82.2 kNm
Maximum flow	235 l/min
Maximum pressure	250 bar

Tires

	M325C MH	M325C LMH
Standard	Dual	Single
Solid Rubber	12.00-20	16.00-25
Optional	Dual	Single
Pneumatic	11.00-20	23.5-R25

Sound

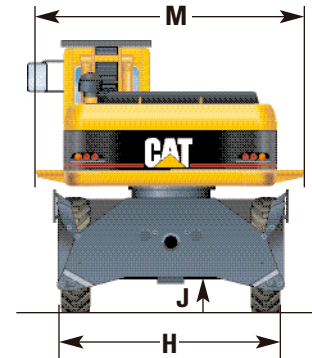
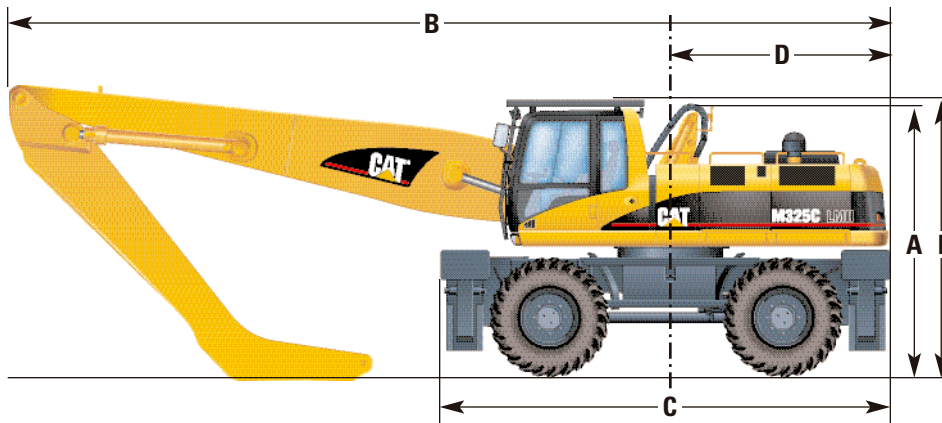
The dynamic exterior sound power level meets EU directive 2000/14/EC.

Cab

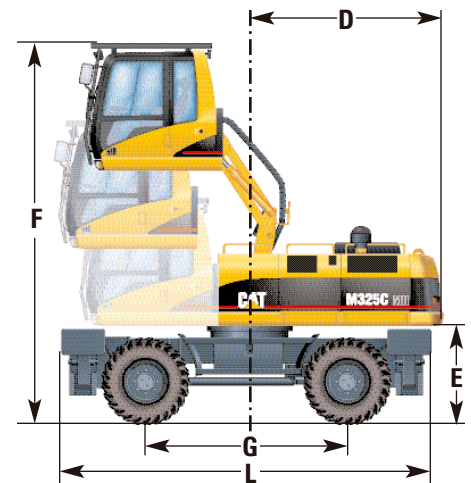
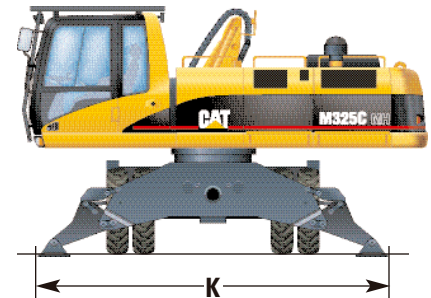
Cab/FOGS meets ISO 10262.

Dimensions

All dimensions are approximate – measured in mm.

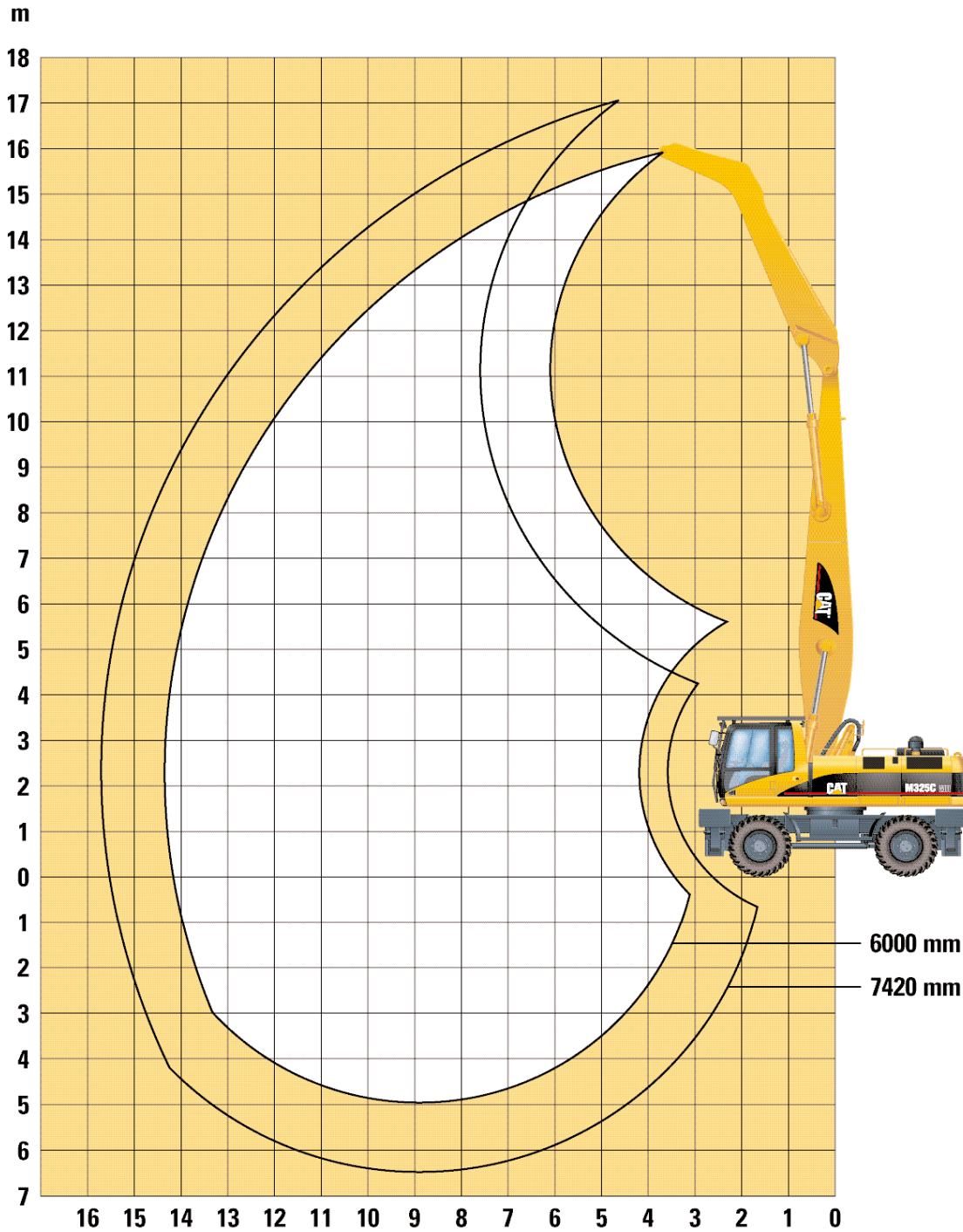


	M325C MH	M325C LMH
	mm	mm
Boom length	8850	8850
Stick length	6000/7420	6000/7420
Maximum reach		
with 6000 mm stick	14 300	14 300
with 7420 mm stick	15 650	15 650
A Shipping height		
without stick (at Hydraulic Cab Riser)	3550	3785
with boom and 6000 mm stick	3550	3785
with boom and 7420 mm stick	5096	4750
B Shipping length		
with boom, without stick	12 160	12 160
with boom and 6000 mm stick	12 126	12 155
with boom and 7420 mm stick	11 780	11 970
C Machine length	5910	6230
D Tail swing radius	3055	3055
E Counterweight ground clearance	1470	1710
F Cab height	3400	3635
with FOG	3530	3765
with Hydraulic Cab Riser without FOG	5805	6045
with Hydraulic Cab Riser and FOG	5935	6175
G Wheel base	3000	3200
H Shipping width	2990	2990
outside tires	2950	3020
outside stabs	3275	3235
J Ground clearance	250	270
K Width with stabilizers on ground	4865	5240
L Undercarriage length	5805	6230
M Body width		
including steps	3700	3700
without steps	2950	2950



M325C MH – Working Ranges

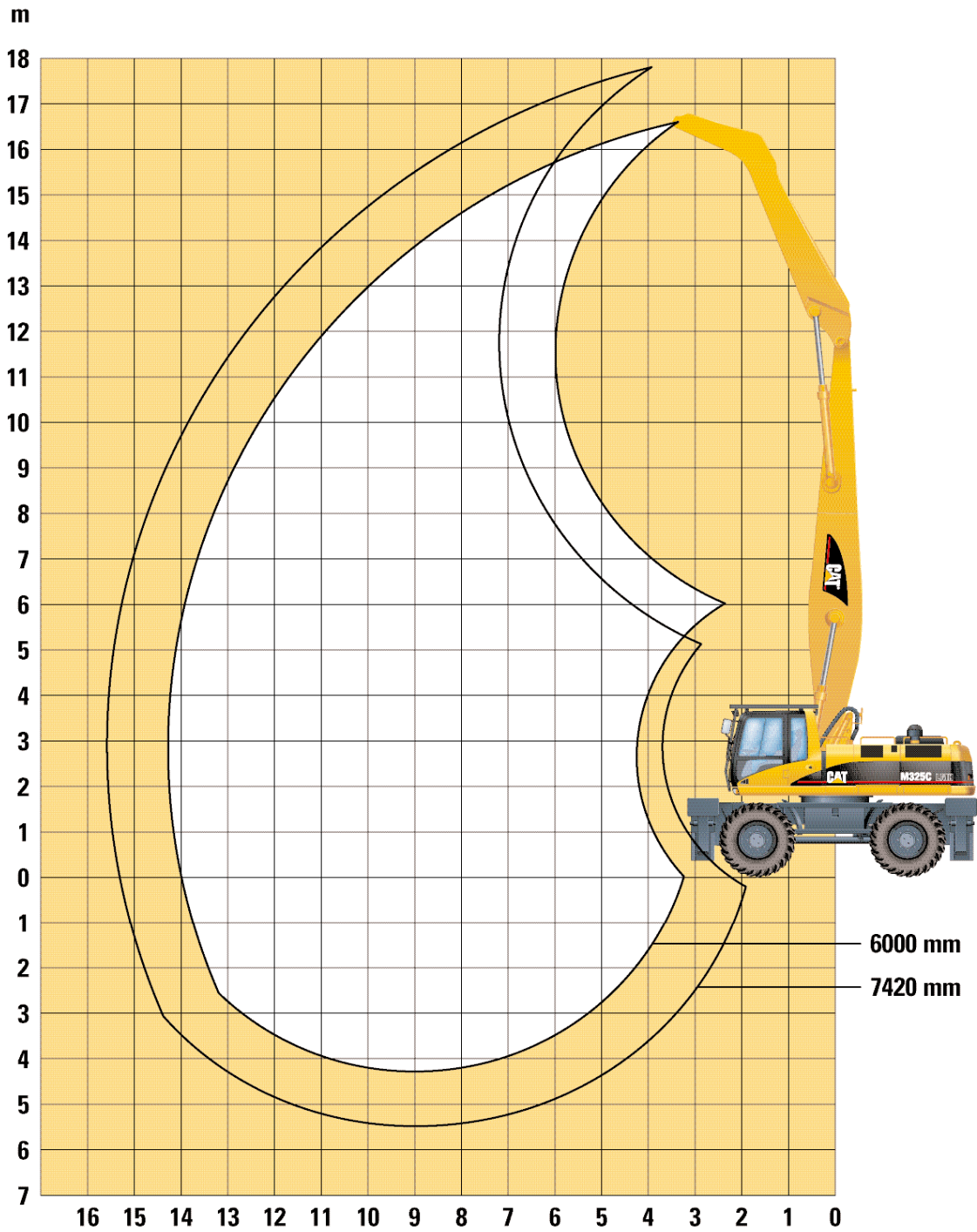
With 6000 mm and 7420 mm sticks.



Boom length	8850 mm
Stick length	6000 mm
Maximum reach	14 330 mm
Maximum height	15 980 mm
Maximum depth	5000 mm
Stick length	7420 mm
Maximum reach	15 650 mm
Maximum height	17 140 mm
Maximum depth	6400 mm

M325C LMH – Working Ranges

With 6000 mm and 7420 mm sticks.
























Boom length	8850 mm
Stick length	6000 mm
Maximum reach	14 330 mm
Maximum height	16 600 mm
Maximum depth	4100 mm
Stick length	7420 mm
Maximum reach	15 650 mm
Maximum height	17 800 mm
Maximum depth	5500 mm






















M325C MH – Lift Capacities

With 6000 mm and 7420 mm sticks. All weights are in kg.

Boom: 8850 mm – **Stick:** 6000 mm – **Maximum Reach / Height / Depth:** 14 330 / 15 980 / 5000 mm

	Undercarriage configuration	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m				m		
																								
15.0 m	Stabilizers up					*5710	*5710														*5090	*5090	6.48	
	Stabilizers down					*5900	*5900															*4990	*4990	6.74
13.5 m	Stabilizers up					*7050	*7050	*5980	5400													*4300	3980	8.87
	Stabilizers down					*7120	*7120	*6100	*6100	*4330	*4330											*4250	*4250	9.04
12.0 m	Stabilizers up							*7030	5530	5210	4040	3920	2990									3910	2980	10.52
	Stabilizers down							*7110	*7110	*6060	*6060	*4180	*4180									*3900	*3900	10.65
10.5 m	Stabilizers up							7080	5540	5240	4070	4000	3060									3220	2420	11.75
	Stabilizers down							*7430	*7430	*6640	*6640	*5790	*5790									*3700	*3700	11.85
9.0 m	Stabilizers up					*8700	7770	6970	5430	5180	4010	3980	3050	3120	2340							2790	*2070	12.68
	Stabilizers down					*8730	*8730	*7570	*7570	*6710	*6710	*6030	*6030	*5080	4970							*3600	*3600	12.75
7.5 m	Stabilizers up					*9190	7460	6760	5230	5040	3880	3900	2970	3090	2310							2500	1830	13.38
	Stabilizers down					*9240	*9240	*7870	*7870	*6880	*6880	*6110	*6110	*5460	4930							*3560	*3560	13.43
6.0 m	Stabilizers up																							
	Stabilizers down																							
4.5 m	Stabilizers up																							
	Stabilizers down																							
3.0 m	Stabilizers up																							
	Stabilizers down																							
1.5 m	Stabilizers up																							
	Stabilizers down																							
0.0 m	Stabilizers up																							
	Stabilizers down																							
-1.5 m	Stabilizers up																							
	Stabilizers down																							
-3.0 m	Stabilizers up																							
	Stabilizers down																							
-4.5 m	Stabilizers up																							
	Stabilizers down																							

Boom: 8850 mm – **Stick:** 7420 mm – **Maximum Reach / Height / Depth:** 15 650 / 17 140 / 6400 mm

	Undercarriage configuration	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m				m	
																							
16.5 m	Stabilizers up					*4770	*4770																
	Stabilizers down					*4920	*4920																
15.0 m	Stabilizers up							*4960	*4960	*3660	*3660												
	Stabilizers down							*5050	*5050	*3830	*3830												
13.5 m	Stabilizers up							*5670	*5670	*4910	4230	*3690	3130										
	Stabilizers down							*5720	*5720	*4980	*4980	*3810	*3810										
12.0 m	Stabilizers up									5500	4320	4180	3230	3220	2430								
	Stabilizers down									*5620	*5620	*4830	*4830	*3490	*3490								
10.5 m	Stabilizers up									5510	4320	4200	3250	3270	2480								
	Stabilizers down									*6030	*6030	*5520	*5520	*4510	*4510								
9.0 m	Stabilizers up							*6750	5790	5430	4250	4160	3210	3250	2470	2570	1900						
	Stabilizers down							*6770	*6770	*6120	*6120	*5570	*5570	*5100	*5100	*3840	*3840						
7.5 m	Stabilizers up							*7040	5590	5290	4110	4060	3120	3190	2410	2540	1870						
	Stabilizers down							*7080	*7080	*6310	*6310	*5680	*5680	*5150	5060	*4640	4120						
6.0 m	Stabilizers up					*8170	7590	6830	5290	5070	3900	3920	2980	3100	2320	2490	1820	2010	1420				
	Stabilizers down					*8320	*8320	*7520	*7520	*6570	*6570	*5830	*5830	*5230	4950	*4700	4060	*3290	*3290	*2730	*2730		
4.5 m	Stabilizers up																						
	Stabilizers down																						
3.0 m	Stabilizers up																						
	Stabilizers down																						
1.5 m	Stabilizers up																						
	Stabilizers down																						
0.0 m	Stabilizers up																						
	Stabilizers down																						
-1.5 m	Stabilizers up																						
	Stabilizers down																						
-3.0 m	Stabilizers up																						
	Stabilizers down																						
-4.5 m	Stabilizers up																						
	Stabilizers down																						
-6.0 m	Stabilizers up																						
	Stabilizers down																						

M325C LMH – Lift Capacities

With 6000 mm and 7420 mm sticks. All weights are in kg.

Boom: 8850 mm – **Stick:** 6000 mm – **Maximum Reach / Height / Depth:** 14 330 / 16 600 / 4100 mm

Stick	Undercarriage configuration	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m					
		Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Reach			
16.5 m	Stabilizers up Stabilizers down																					*7910 *7910	3.69		
15.0 m	Stabilizers up Stabilizers down					*7120 *7450	*7120 *7450																*5930 *5730	6.87 7.33	
13.5 m	Stabilizers up Stabilizers down					*8460 *8600	*8460 *8600	*7300 *7540	*7300 *7540	*5330 *5790	*5330 *5790												*5110 *5020	9.12 9.43	
12.0 m	Stabilizers up Stabilizers down					*9160 *9260	*9160 *9260	*8440 *8570	7460 *8570	7110 *7470	5530 *7470	*5120 *5520	4210 *5520										*4700 *4650	10.70 10.92	
10.5 m	Stabilizers up Stabilizers down					*9760 *9800	*9760 *9800	*8570 *8590	7440 *8590	7120 *7690	5550 *7690	5520 *6980	4260 *6980		*4580 *4580									4430 *4460	11.87 12.05
9.0 m	Stabilizers up Stabilizers down					*10080 *10170	*10080 *10170	*8760 *8810	7310 *8810	7040 *7810	5470 *7810	5480 *7010	4230 *7010	4370 *6340	3330 *6340									3900 *4360	12.77 12.90
7.5 m	Stabilizers up Stabilizers down			*11340 *11720	*11340 *11720	*10710 *10850	9990 *10850	*9130 *9210	7070 *9210	6880 *8030	5310 *8030	5390 *7120	4140 *7120	4320 *6370	3290 *6370		*4420 *4420							3550 *4340	13.43 13.53
6.0 m	Stabilizers up Stabilizers down	*13110 15300	*13110 15300	*14790 *15140	14660 *15140	*11610 *11780	9410 *11780	8790 *9720	6730 *9720	6650 *8310	5100 *8310	5240 *7260	4000 *7260	4240 *6410	3210 *6410	3490 *5630	2610 5480							3310 *4370	13.91 13.97
4.5 m	Stabilizers up Stabilizers down			*16850 *17170	13160 *17170	11640 *12760	8690 *10230	8350 *10230	6310 *10230	6380 *8570	4840 *7370	5070 *7370	3840 *7370	4140 *6420	3110 *6420	3430 *5570	2550 5420							3160 *4470	14.20 14.24
3.0 m	Stabilizers up Stabilizers down			*8750 *7280	*8750 *7280	10830 *13400	7940 *13400	7890 *10570	5890 *10570	6100 *8730	4580 *8730	4890 *7410	3670 *7410	4020 *6370	3000 *6360	3370 *5430	2490 5350							3070 *4620	14.33 14.34
1.5 m	Stabilizers up Stabilizers down			*4760 *4630	*4760 *4630	10180 *13370	7340 *13370	7500 *10580	5520 *10580	5850 *8690	4340 *8690	4730 *7310	3510 *7310	3920 *6200	2900 *6200	3310 *5180	2430 *5180							3040 *4550	14.31 14.29
0.0 m	Stabilizers up Stabilizers down			*4670 *4760	*4670 *4760	9780 *10380	6980 *10380	7220 *10170	5250 *10170	5660 *8370	4150 *8370	4600 *7000	3390 *7000	3840 *5860	2820 *5860	3260 *4740	2390 *4740							3070 *4220	14.12 14.07
-1.5 m	Stabilizers up Stabilizers down			*5370 *5530	*5370 *5530	9600 *9760	6810 *9760	7050 *9300	5100 *9300	5530 *7730	4030 *7730	4510 *6430	3300 *6430	3780 *5280	2770 *5280	3250 *4000	2370 *4000							3170 *3800	13.76 13.68
-3.0 m	Stabilizers up Stabilizers down					9570 *9340	6780 *9340	6990 *7990	5040 *7990	5480 *6710	3980 *6710	4480 *5540	3270 *5540	3770 *4360	2760 *4360										

Boom: 8850 mm – **Stick:** 7420 mm – **Maximum Reach / Height / Depth:** 15 650 / 17 800 / 5500 mm

Stick	Undercarriage configuration	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		15.0 m		m					
		Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Upright	Down	Reach			
16.5 m	Stabilizers up Stabilizers down					*5940 *6200	*5940 *6200																*5030 *4830	6.86 7.37	
15.0 m	Stabilizers up Stabilizers down							*6030 *6190	*6030 *6190	*4660 *4970	*4660 *4970												*4200 *4110	9.36 9.70	
13.5 m	Stabilizers up Stabilizers down							*6780 *6870	*6780 *6870	*5940 *6090	5750 *6090	*4620 *4860	4360 *4860											*3790 *3740	11.11 11.36
12.0 m	Stabilizers up Stabilizers down							*7240 *7310	*7240 *7310	*6680 *6780	5830 *6780	5720 *5910	4450 *5910	*4230 *4470	3440 *4470									*3560 *3530	12.43 12.63
10.5 m	Stabilizers up Stabilizers down							*7620 *7640	*7620 *7640	*6960 *6970	5810 *6970	5730 *6400	4460 *6400	4530 *5550	3480 *5550		*3610 *3610							*3420 *3410	13.46 13.61
9.0 m	Stabilizers up Stabilizers down							*7810 *7860	7710 *7860	*7070 *7110	5720 *7110	5670 *6480	4400 *6480	4500 *5930	3460 *5930	3630 *4790	2740 *4790							3260 *3340	14.25 14.37
7.5 m	Stabilizers up Stabilizers down					*8690 *8690	*8690 *8690	*8190 *8270	7470 *7360	7150 *7360	5560 *6620	5550 *6620	4290 *6000	4430 *6000	3380 *5450	3590 *5450	2700 *5450							2990 *3320	14.85 14.94
6.0 m	Stabilizers up Stabilizers down					*9950 *10380	*9950 *10380	*8730 *8830	7110 *8830	6900 *7690	5320 *7690	5380 *6810	4130 *6810	4320 *6100	3280 *6100	3530 *5470	2640 *5470	2910 *4080	2140 *4080					2810 *3340	15.28 15.33
4.5 m	Stabilizers up Stabilizers down			*13160 *14910	*13160 *14910	*11330 *11530	9350 *11530	8730 *9460	6660 *9460	6590 *8050	5030 *8050	5180 7010	3930 7010	4190 6190	3150 6190	3440 5480	2560 5440	2870 4710	2090 4600	2680 3400	1950 3400			1555 1558	
3.0 m	Stabilizers up Stabilizers down			*16700 *17010	12860 *17010	11440 *12570	8480 *12570	8200 *10030	6160 *10030	6260 8360	4710 8360	4960 7160	3720 7160	4040 6230	3010 6230	3350 5450	2470 5340	2810 4690	2040 4540	1880 3510	1880 3510			1567 15.67	
1.5 m	Stabilizers up Stabilizers down			*9780 8470	*9780 8470	10560 *13150	7680 *13150	7680 *10350	5680 *10350	5930 8520	4400 8520	4750 7210	3520 7210	3900 6200	2870 6200	3250 5340	2380 5240	2760 4490	1990 4480	2580 3650	1850 3650			15.64 15.62	
0.0 m	Stabilizers up Stabilizers down	*2580 2680	*2580 2680	*6300 5860	*6300 5860	9900 *13080	7070 *13080	7270 *10320	5290 *10320	5660 8460	4140 8460	4560 7100	3340 7100	3770 6040	2750 5110	3170 5110	2300 4710	2150 4150	1940 2710	2590 3810	1850 3810			15.47 15.43	
-1.5 m	Stabilizers up Stabilizers down	*3250 3380	*3250 3380	*5640 5660	*5640 5660	9500 *10950	6700 *10950	6980 9880	5010 9880	5450 8120	3950 8120	4420 6780	3200 6780	3670 5700	2660 5700	3110 4710	2240 4710	2690 3580	1920 3580	2650 3510	1900 3510			15.15 15.08	
-3.0 m	Stabilizers up Stabilizers down			*5950 6040	*5950 6040	9300 *10090	6530 *10090	6810 9000	4860 9000	5320 7450	3820 7450	4320 6200	3110 5120	3610 5120	2600 4060	3080 4060	2210 4060							2770 3130	14.66 14.56
-4.5 m	Stabilizers up Stabilizers down					9260 9150	6490 9150	6750 7680	4800 7680	5260 6410	3770 6410	4290 5290	3080 5290	3600 4220	2580 4220										

* Limited by hydraulic rather than tipping load.

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

Operator station

Adjustable pilot operated joystick type (wrist lever) controls with integral electrical switches for operation of the grapple rotate and magnet lift/drop
Air conditioner with auto climate control, heater and defroster
Ashtray with cigarette lighter
Beverage holder
Coat hook
Floor mat, washable
Intermittent, parallel windshield wiper, including washer
Instrument panel and gages
Interior lighting
Literature compartment
Low fuel indicator light
Neutral lock for all controls.
Left armrest activated
Openable two-piece front windshield
Parking brake
Radio mounting (loudspeakers, antenna)
Polycarbonate windows except laminated glass in retractable front windshield/tempered glass in removable lower windshield and sliding upper door window
Polycarbonate skylight, non opening
Storage compartment suitable for a lunch box
Sunscreen for front windshield and skylight
Positive filtered ventilation, variable speed blower
Pre-Start monitoring system (alert if there is a shortage of hydraulic oil, engine oil and engine coolant)
Suspension seat with adjustable and tiltable arm rests, lumbar support, adjustable and retractable seat belt

Language display Multipro

Clock with 10 days back-up battery
Filter/fluid change information
Gages for fuel level, engine coolant temperature and hydraulic oil temperature
Headlights indicator
Indicator for engine dial setting
Pre-start level check for hydraulic oil, engine oil and coolant
Warning messages
Working hour information

Undercarriage

Creeper speed
Exclusive 3 position transmission braking controls
Four solid tires
M325C MH – 12.00-20 (dual)
M325C LMH – 16.00-25 (single)
Four wheel hydrostatic drive with on-the-go shifting
Four independent or simultaneously controlled hydraulic stabilizers with single axis float pad
Fully hydraulic braking system
Internal oil disk brakes
Lockable oscillating axle
Toolbox, left hand
Two wheel steer
Two speed hydrostatic transmission
Wide steps on both sides

Engine

Automatic engine speed control with manual return to idle (not functional when hydraulic generator is in operation)
Automatic starting aid
Cat 3126B ATAAC diesel engine, turbocharged with air-to-air aftercooler
24-volt electric starting and air intake heater
Full hydraulic steering with emergency steering capability
High ambient cooling
Muffler
Side by side radiator/oil cooler
Water separator

Electrical

Alternator, 65A
Base machine light (frame)
Cat Electronic Machine Controller
Horn
Lights, cab mounted

Other standard equipment

2400 mm hydraulically adjustable cab riser
Automatic swing brake
Door locks and caps lock and Caterpillar one key security system
Fine swing control
Heavy duty upperframe with bottom guards
Material Handling counterweight
Mirrors, frame and cab
Travel alarm
Medium Pressure control

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

Operator station

Cover for the storage compartment, suitable for a lunch box
Falling object guard
Fixed one-piece front windshield
Headrest
Seat with air suspension, including horizontal suspension
and seat heating
Starting aid, cold weather
Visor, rain protection, polycarbonate

Electrical

Radio
Rotating beacon
Power supply, 12V-7A
Working lights, cab mounted (front and rear)

Material Handling front parts

Stick 6000 mm

Undercarriage

Optional tires air/pneumatic:
M325C MH – Nokia 11.00-20 16PR (dual)
M325C LMH – Michelin 23.5-R25 (single)

Hydraulics

Lowering control devices for boom
Lowering control devices for stick

Other equipments

Antifreeze
Cat machine security system (MSS)
Second Tool box
Generator set

M325C MH and 325C LMH Wheeled Material Handlers

HEHH3071 (07/2004) hr

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

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