

# M325B MH



## Wheeled Material Handler



### Engine

Engine Model	3116 TA	
Net Flywheel Power	125 kW	168 hp

### Operating Specifications

Maximum Reach	15.5 m	50.9 ft
Cat® Cab Riser	1.9 m	6.4 ft

### Weights

Operating Weight	37 200 kg	82,040 lb
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## M325B MH Wheeled Material Handler

*Specifically designed for the scrap and material handling customer, the M325B MH will deliver the reliability and productivity you demand from Caterpillar®.*

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### Caterpillar® M325B Wheeled Material Handler

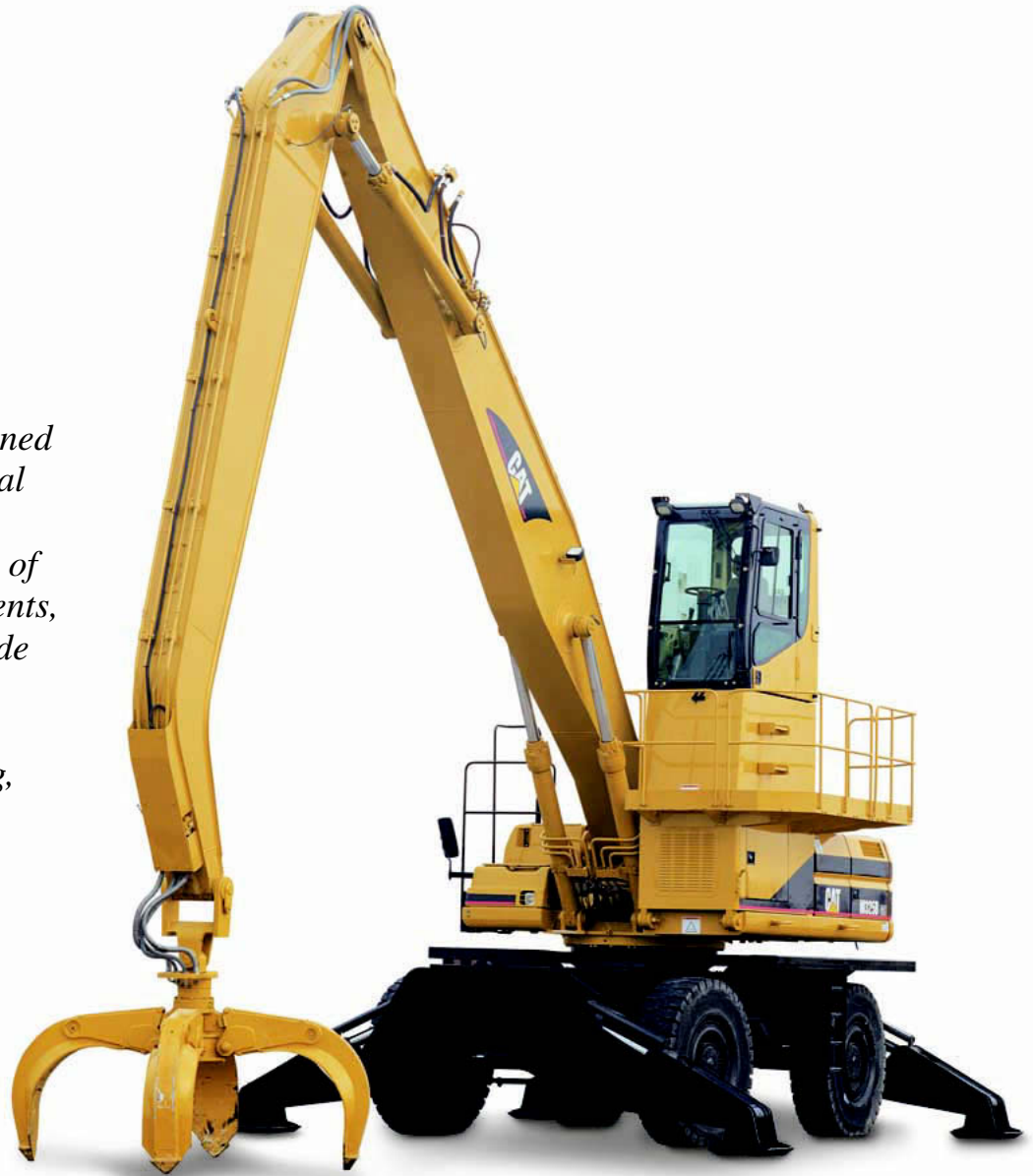
The many features of the M325B Wheeled Material Handler make it the ideal machine for the scrap, material handling, and millyard customer who requires versatility, mobility and the highest levels of production. **pg. 4**

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### Millyard Applications

Designed and built to meet diverse application needs, the M325B MH comes ready to improve your millyard's productivity. **pg. 5**

*The M325B Wheeled Material Handler is a versatile machine designed for a variety of industrial applications. It can be equipped with a variety of front linkages, attachments, and work tools to provide a highly mobile, highly productive machine for scrap, material handling, millyard, and waterfront applications.*



# Caterpillar M325B Wheeled Material Handler

*Tough, dependable, and loaded with performance-improving features.*



**M325B MH Two-piece Fronts.** Caterpillar booms and sticks are built for performance and long service life. Welded box-section structures feature thick, multi-plate fabrications in high stress areas allowing structures to flex, dissipating stresses and maximizing strength. Booms and sticks are stress relieved to maximize strength and minimize structure weight.

- The 15.5 m front offers a maximum horizontal reach of 50'10" from swing center and a maximum vertical pin height of 17.0 m (55'7")
- The 13.4 m front offers a maximum horizontal reach of 43'11" from swing center and a maximum vertical pin height of 15.3 m (50'4")



**1.9 m (6'5") Cab Riser.** Cat designed and built riser gets your operator to an operating height with excellent visibility for loading or unloading your processing equipment, trucks and rail cars. Access to the cab is provided by a platform which extends around the riser to allow windshield cleaning. The cab riser can also be tilted forward 90 degrees for shipping and provides ready access to service the generator system.

**Cat Material Handler Hydraulic Systems.** Auxiliary hydraulics are specifically designed to meet your hydraulic attachment requirements. The rotate circuit provides a separate 30.0 lpm (8.0 gpm) gear pump and fully adjustable control valve, allowing configuration to meet various grapple manufacturer's flow requirements. A separate fixed displacement gear pump is used to provide the hydraulic power to run a 20 kW generator system.



**The Upper Frame.** The heavy-duty upper frame is specifically designed for the scrap and material handling market, the upper frame is built of higher strength material and thicker steel sections to handle the increased swing loads developed with the longer fronts and heavier counterweights used in material handling.



**Special Counterweight.** The M325B MH is equipped with a counterweight which is 50 percent heavier than the standard counterweight.

# Caterpillar M325B Wheeled Material Handler

*Tough, dependable, and loaded with performance-improving features.*



## 20 kW Hydraulically Driven Generator

**Set.** This exclusive Caterpillar genset can power magnets up to 1702 mm (67") in diameter. A Caterpillar state-of-the-art electronic magnet controller and generator are linked to provide trouble-free service. The new controller completely eliminates traditional contactor maintenance and is supported and warranted through your Cat dealer.



## M325B MH Wheeled Carrier.

The carrier of the M325B MH has four wheel hydrostatic drive and two wheel steer. The fabricated frame has a trunnion mounted front drive steer axle and solid mount rear drive axle. A hydraulic front axle stabilizer locks in any position with plus or minus four degrees of oscillation. Front axle and parking brakes are hydraulic disc, while rear axle brakes are hydraulic drum. The two-speed powershift transmission provides a maximum drawbar pull of 14,830 kg (32,700 lb) and a maximum travel speed of 19.8 km/hr (12.3 mph).

**Controls.** The M325B MH features:

- Steering wheel with tilt steering column
- Independent or simultaneous outrigger controls, axle oscillation parking brake, transmission shift and high and low speed ranges.
- Service brake and forward reverse pedal are left and right of the steering column.

## Millyard Applications

*Designed and built to meet diverse application needs, the M325B MH comes ready to improve your millyard's productivity.*



**Heel Boom Front.** The Caterpillar 12.2 m (40') heel boom front with bottom mounted heel cylinder is available as a dealer installed kit. This arrangement fits a wide variety of log handling and loading applications in millyards. Heel booms are especially well-suited for use with large diameter sawlogs.

**30" Cab Riser.** The 0.76 m (30") cab riser option provides a lower cab riser as compared to the 1.9 m (6'5") riser. This arrangement results in a cab height of 4.78 m (15'8") when equipped with the optional Falling Object Guard, which is ideal for millyard applications. This riser also provides an access system from the ground on the left side of the machine and can be manually tilted forward 90 degrees for lower shipping height.



**Butt-N-Top (B-N-T) Front.** The Caterpillar Butt-N-Top log loader arrangement is available as a dealer installed kit. This arrangement provides an 11.3 m (37') maximum reach front which can accept the dealer-installed butt-n-top grapple. It is ideal for charging millyard endfeed conveyors where sorting butts and tops is required and off-loading logs from trucks directly into high storage decks.

## Engine

Engine Model	3116 TA	
Net Flywheel Power	125 kW	168 hp
Gross Power	132 kW	177 hp
Net Power - ISO 9249	125 kW	168 hp
Net Power - SAE J1349	125 kW	168 hp
Net Power - EEC 80/1269	125 kW	168 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5 in
Displacement	6.6 L	403 in <sup>3</sup>

- Ratings at 2000 rpm
- based on standard conditions of 25° C (77° F) and 99 kPa (29.32 in Hg) dry barometer
- used 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30° C (86° F) [ref. a fuel density of 838.9 g/L (7.001 lb/U.S. gal)]
- no derating required up to 2300 m (7550 ft) altitude
- net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator

## Operating Specifications

Maximum Reach	15.5 m	50.9 ft
Cat Cab Riser	1.9 m	6.4 ft
Generator Set	20 kW	26.8 hp
Maximum Pin Height	17 m	55.6 ft
Maximum Reach Below Ground	6.5 m	21.2 ft

## Hydraulic System

Maximum Flow (each of two pumps)	208 L/min	55 gal/min
Maximum Pressure Implements	34 300 kPa	4,980 psi
Maximum Pressure Travel	34 300 kPa	4,980 psi
Maximum Pressure Swing	29 400 kPa	4,250 psi
Pilot System Maximum Flow	41 L/min	10.8 gal/min
Pilot System Maximum Pressure	4100 kPa	595 psi
Rotate Circuit for Grapple Maximum Flow	30 L/min	8 gal/min
Rotate Circuit for Grapple Maximum Pressure	17 200 kPa	2,500 psi
Generator Auxiliary Pump Maximum Flow	174 L/min	46 gal/min
Generator Auxiliary Pump Maximum Pressure	17 200 kPa	2,500 psi

## Weights

Operating Weight	37 200 kg	82,040 lb
Upper	9470 kg	20,880 lb
Counterweight	7700 kg	16,980 lb
Lower (includes carbody)	14 365 kg	31,675 lb
Two-piece Front (with cylinders)	5665 kg	12,500 lb

## Performance

High Range Maximum Travel Speed	19.8 kph	12.3 mph
Maximum Drawbar Pull	14 830 kg	32,700 lb
Low Range Maximum Travel Speed	5.2 kph	3.2 mph
Gradeability	43 %	

## Dimensions

Operating Height - to Top of Cab	5892 mm	19.3 ft
Shipping Height - Cab Tipped	3759 mm	12.3 ft
Operating Width - Outside of Tires	3226 mm	10.6 ft
Width - Outriggers Up	3505 mm	11.5 ft
Width - Outriggers Down	5280 mm	17.3 ft
Shipping Length	10 508 mm	34.5 ft
Ground Clearance	356 mm	1.2 ft
Wheel Base	3200 mm	10.5 ft

## Swing Mechanism

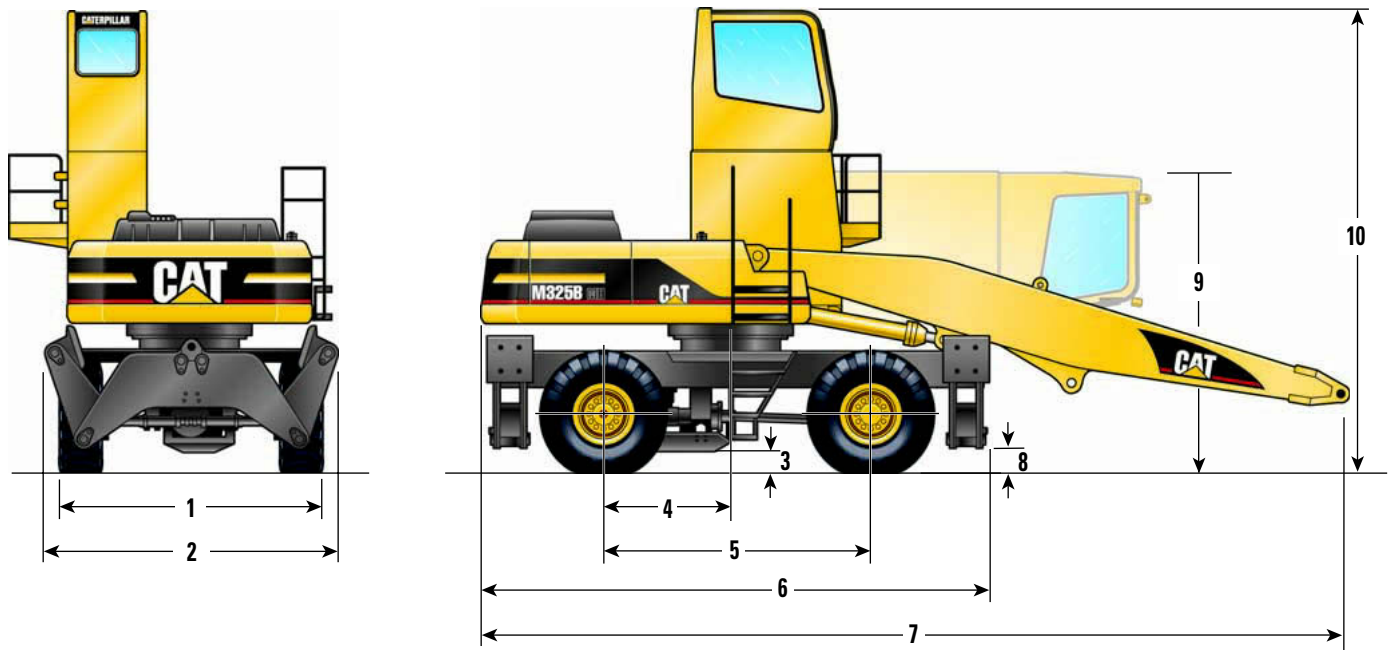
Swing Torque	76 kN·m	56,080 lb·ft
Swing Speed	10 RPM	

## Service Refill Capacities

Fuel Tank	420 L	111 gal
Cooling System	31.5 L	8.3 gal
Engine Oil	20 L	5.3 gal
Swing Drive	10 L	2.6 gal
Final Drive (each)	8 L	2.1 gal
Hydraulic System (including tank)	310 L	82 gal
Hydraulic Tank	175 L	46 gal

## Dimensions

All dimensions are approximate.

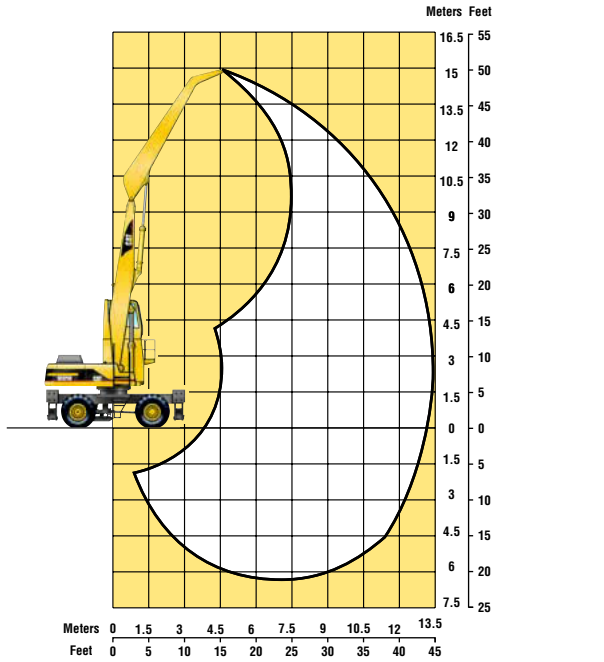


	mm (ft)
<b>1</b> Operating Width – outside of tires	3226 (10'7")
<b>2</b> Operating Width – outriggers up	3505 (11'6")
<b>3</b> Ground Clearance	356 (1'2")
<b>4</b> Swing Center to Centerline of Tire	1524 (5'0")
<b>5</b> Wheel Base	3200 (10'6")
<b>6</b> Length of Carrier	6147 (20'2")
<b>7</b> Rear of Carrier to End of Boom – 13.4 m front	10 508 (34'6")
<b>8</b> Ground Clearance of Outriggers	508 (1'8")
<b>9</b> Shipping Height – cab tipped	3759 (12'4")
<b>10</b> Operating Height – to top of cab	5892 (19'4")

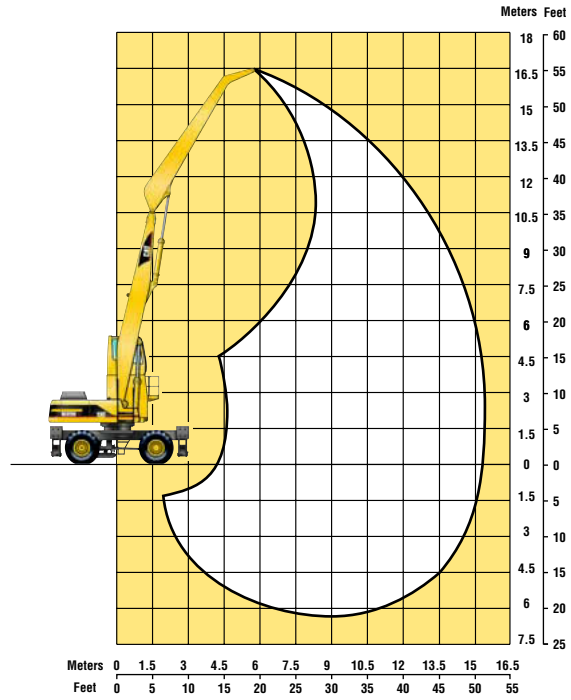
# M325B Working Ranges

13.4 (43'11") Two-piece MH Front, 15.5 m (50'10") Two-piece MH Front, Heel Boom Front, and Butt-N-Top Front

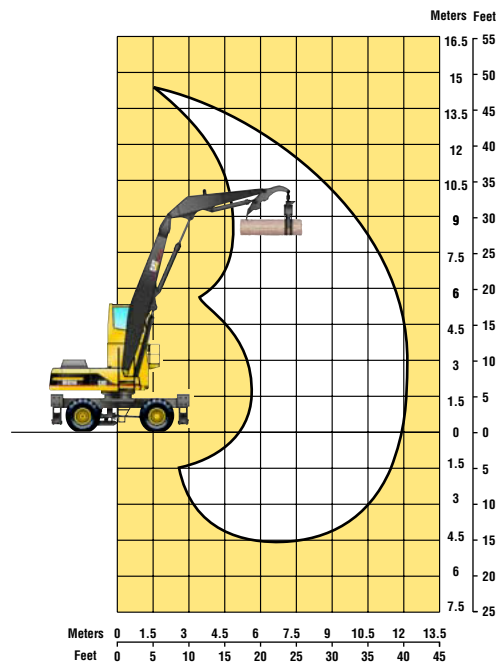
**13.4 m (43'11")  
Two-piece MH Front**



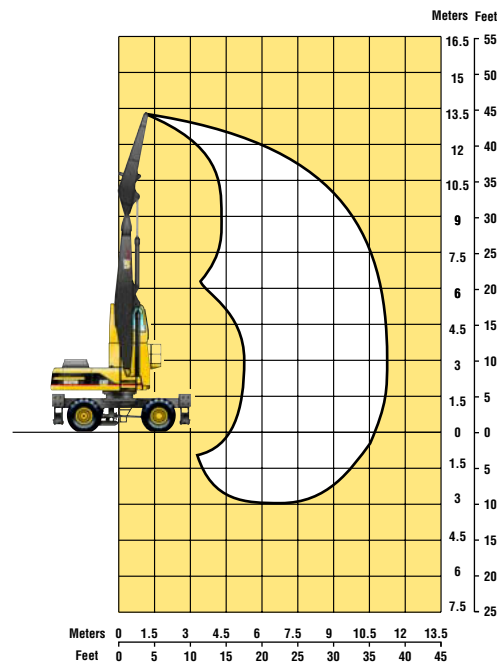
**15.5 m (50'10")  
Two-piece MH Front**



**Heel Boom Front**



**Butt-N-Top Front**



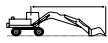














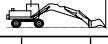














# Lift Capacities

M325B with 40' Under/Under Heel Boom Front (top) and M325B with 37' Butt-N-Top Front (bottom)

English

Height**	Undercarriage configuration	15 ft		20 ft		25 ft		30 ft		35 ft				ft
														
40 ft	Stabilizers Up	29.8*	29.8*	25.4*	22.0									
	Stabilizers Down	29.8*	29.8*	25.4*	25.4*									
35 ft	Stabilizers Up			23.8*	22.8	20.0	15.8					15.5	12.1	28.83
	Stabilizers Down			23.8*	23.8*	21.2*	21.2*					17.4*	17.4*	
30 ft	Stabilizers Up			23.4*	22.9	20.3	16.0	14.9	11.7			12.7	9.9	32.76
	Stabilizers Down			23.4*	23.4*	20.8*	20.8*	18.6*	18.6*			15.9*	15.9*	
25 ft	Stabilizers Up			24.0*	22.5	20.0	15.8	14.9	11.7	11.4	8.9	11.1	8.6	35.55
	Stabilizers Down			24.0*	24.0*	21.0*	21.0*	18.5*	18.5*	16.2*	16.2*	15.0*	15.0*	
20 ft	Stabilizers Up	29.4*	29.4*	25.4*	21.8	19.6	15.4	14.7	11.5	11.4	8.9	10.1	7.8	37.46
	Stabilizers Down	29.4*	29.4*	25.4*	25.4*	21.6*	21.6*	18.7*	18.7*	16.2*	16.2*	14.6*	14.6*	
15 ft	Stabilizers Up	35.1*	32.0	26.8	20.6	19.0	14.7	14.3	11.2	11.3	8.7	9.6	7.4	38.63
	Stabilizers Down	35.1*	35.1*	27.3*	27.3*	22.5*	22.5*	19.0*	19.0*	16.1*	16.1*	13.4*	13.4*	
10 ft	Stabilizers Up			25.3	19.3	18.2	14.1	13.9	10.7	11.1	8.5	9.3	7.2	39.12
	Stabilizers Down			29.0*	29.0*	23.1*	23.1*	19.1*	19.1*	15.7*	15.7*	12.2*	12.2*	
5 ft	Stabilizers Up	32.6*	26.9	24.0	18.1	17.5	13.3	13.5	10.4	10.9	8.3	9.3	7.2	38.96
	Stabilizers Down	32.6*	32.6*	29.4*	29.4*	23.1*	23.1*	18.6*	18.6*	14.9*	14.9*	10.8*	10.8*	
ground	Stabilizers Up	23.4*	23.4*	23.2	17.3	17.0	12.9	13.2	10.0	10.7	8.2	9.2*	7.4	38.14
	Stabilizers Down	23.4*	23.4*	27.9*	27.9*	21.8*	21.8*	17.3*	17.3*	13.2*	13.2*	9.2*	9.2*	
(5 ft)	Stabilizers Up	25.5*	25.5*	22.8	16.9	16.7	12.6	13.1	10.0	9.9*	8.2			
	Stabilizers Down	25.5*	25.5*	24.3*	24.3*	19.1*	19.1*	14.8*	14.8*	9.9*	9.9*			
(10 ft)	Stabilizers Up	22.2*	22.2*	18.5*	16.9	14.6*	12.6	10.4*	10.0					
	Stabilizers Down	22.2*	22.2*	18.5*	18.5*	14.6*	14.6*	10.4*	10.4*					

Height**	Undercarriage configuration	15 ft		20 ft		25 ft		30 ft		35 ft				ft
														
40 ft	Stabilizers Up	32.8*	32.8*											
	Stabilizers Down	32.8*	32.8*											
35 ft	Stabilizers Up	30.0*	30.0*	25.6*	25.6*	19.3	15.1					18.3	14.4	25.69
	Stabilizers Down	30.0*	30.0*	25.6*	25.6*	23.0*	23.0*					22.8*	22.8*	
30 ft	Stabilizers Up	29.4*	29.4*	25.0*	25.0*	19.6	15.5	14.5	11.4			14.5	11.3	30.04
	Stabilizers Down	29.4*	29.4*	25.0*	25.0*	22.1*	22.1*	19.7*	19.7*			19.7*	19.7*	
25 ft	Stabilizers Up	30.6*	30.6*	25.6*	25.6*	19.5	15.4	14.7	11.5			12.5	9.8	33.06
	Stabilizers Down	30.6*	30.6*	25.6*	25.6*	22.2*	22.2*	19.4*	19.4*			17.7*	17.7*	
20 ft	Stabilizers Up	33.7*	33.7*	27.1	21.0	19.2	15.1	14.6	11.4	11.4	8.9	11.3	8.9	35.12
	Stabilizers Down	33.7*	33.7*	27.1*	27.1*	22.8*	22.8*	19.5*	19.5*	16.2*	16.2*	16.1*	16.1*	
15 ft	Stabilizers Up			26.2	20.2	18.8	14.6	14.3	11.2	11.4	8.9	10.7	8.4	36.36
	Stabilizers Down			29.0*	29.0*	23.5*	23.5*	19.7*	19.7*	16.1*	16.1*	14.6*	14.6*	
10 ft	Stabilizers Up			25.2	19.3	18.2	14.2	14.1	11.0	11.3	8.8	10.5	8.1	36.88
	Stabilizers Down			30.3*	30.3*	24.0*	24.0*	19.5*	19.5*	15.5*	15.5*	13.1*	13.1*	
5 ft	Stabilizers Up			24.5	18.6	17.8	13.8	13.8	10.7	11.2	8.7	10.5	8.2	36.71
	Stabilizers Down			30.0*	30.0*	23.5*	23.5*	18.7*	18.7*	14.1*	14.1*	11.4*	11.4*	
ground	Stabilizers Up			24.0	18.2	17.5	13.5	13.7	10.6	11.1	8.7	9.4*	8.5	35.84
	Stabilizers Down			27.7*	27.7*	21.7*	21.7*	16.8*	16.8*	11.3*	11.3*	9.4*	9.4*	
(5 ft)	Stabilizers Up	23.5*	23.5*	23.0*	18.1	17.5	13.4	13.4*	10.6					
	Stabilizers Down	23.5*	23.5*	23.0*	23.0*	18.1*	18.1*	13.4*	13.4*					

\*Limited by hydraulic rather than tipping load.

\*\*Height of stick pin.



Load Radius Over Front



Load Radius Over Side



Load at Maximum Reach

Machine lift capacity ratings are the above lifting capacities in lbs. × 1000. The above loads are in compliance with hydraulic excavator lift capacity ratings standard SAE J/ISO 10567.

They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Weight of all lifting accessories must be deducted from the above lifting capacities.

## Standard Equipment

*Standard equipment may vary. Consult your Caterpillar Dealer for specifics.*

### Electrical Equipment

- Alternator (50-amp)
- Base machine light (Frame)
- Horn
- Lights, cab mounted (Two)

### Operator Environment

- Adjustable pilot operated joystick type (wrist lever) controls with integral electrical switches for operation of the grapple open close, grapple rotate and magnet lift drop
- Air conditioner with auto climate control and defroster
- Five outrigger switches
- Interior lighting
- Neutral lever for all controls
- Parking brake switch with indicator light
- Polycarbonate windows except laminated glass in retractable front windshield/tempered glass in removable lower windshield and sliding upper door window
- Pre-start monitoring system (Alert if there is a shortage of hydraulic oil, engine oil and engine coolant)
- Pre-wired radio mounting areas with two stereo speakers (includes antennae) and one 24-volt to 12-volt converter
- Seat KAB 524P, suspension seat with adjustable armrest and retractable seat belt (cloth)
- Stationary skylight
- Steering column tilt and telescope adjustments
- Switch to activate suspension lock
- Switch to select normal or turtle speed
- Switch to select transmission hi or low range
- Toggle switch in RH console to switch between magnet and grapple operation
- Travel brake pedal
- Travel control rocker pedal
- Windshield wiper/washers (upper/lower)

### Antifreeze

- Includes 50% concentration with protection of  $-34^{\circ}\text{C}$  ( $-30^{\circ}\text{F}$ )

### Hydraulic Systems

- Auxiliary pump and lines to drive generator
- Fully pressurized hydraulic system
- High pressure grapple open close hydraulic circuit
- Medium pressure auxiliary hydraulic circuit for powering rotating grapples (includes pump, valve and lines)

### Power Train

- Automatic engine speed control with manual return to idle (not functional when hydraulic generator is in operation)
- Cat 3116 TA Diesel engine with 24-volt electric starting and air intake heater
- Muffler
- Power mode selector (2 modes)
- Side by side radiator/oil cooler
- Water separator in fuel line

### Undercarriage

- Four independent or simultaneously controlled hydraulic stabilizers with single axis float pad
- Four wheel hydrostatic drive
- Lockable front axle stabilizer
- Two-speed powershift transmission
- Two wheel steer

### Other Standard Equipment

- Automatic swing parking brake
- Cab riser, 1.9 m (6'5") with platform
- Counterweight, 16,940 lb MH
- Door locks and caps locks and Caterpillar one key security system
- Ether and cold weather starting aids
- Fine swing control
- Heavy-duty upper frame with bottom guards
- Mirrors (Frame-right, cab-left)
- Travel alarm

## Optional Equipment

*Optional equipment may vary. Consult your Caterpillar Dealer for specifics.*

- 13.4 m (43'11") MH front linkage
- 15.5 m (50'10") MH front linkage
- 11.3 m (37') Butt-n-top front linkage  
(Available as dealer installed kit)
- 12.2 m (40') heel boom front linkage with bottom cylinder  
(Available as dealer installed kit)
- 20 kW solid state generator
- 0.8 m (30") manual tilt cab riser
- Cat four-tine orange peel grapples
  - 1 yd<sup>3</sup>
  - 1.5 yd<sup>3</sup>

### Falling Object Guard

- Secondary window exit with internal and external opening provisions

### Tires

- 20.5-R25 XMineD2
- 23.5-R25 XHA L3
- 16-25 Solid Tires

# M325B MH Wheeled Material Handler

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.CAT.com](http://www.CAT.com)

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

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