

330C MH

Material Handler



Engine

Engine Model	C9	
Net Flywheel Power	184 kW	247 hp

Operating Specifications

Max. Reach	15.9 m	52.2 ft
Cat® Cab Riser	1.96 m	6.4 ft

Weights

Operating Weight	43 815 kg	96,595 lb
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330C MH Material Handler

Aggressive and durable, the 330C MH will deliver excellent productivity.

330C MH Material Handler

Material Handling purpose-designed features provide for aggressive performance, reliability, and excellent productivity. **pg. 4**

330C MH Two-Piece Caterpillar® Front Linkage

Caterpillar 330C Material Handler fronts are purpose designed and built allowing excellent reach, flexibility, and lift performance to meet all requirements of material handling applications. **pg. 5**

Engine and Hydraulics

The Cat C9 Diesel engine and hydraulics give the 330C MH exceptionally powerful and efficient performance unmatched in the industry for material handling applications. **pg. 6**

Complete Customer Support

Cat Dealer services help you operate longer with lower costs. **pg. 10**

Excellent reach and wide track gauge deliver aggressive performance to meet the challenging requirements of scrap and material handling.



Structures

The 330C MH structural components are the backbone of the machine's durability and provide for excellent stability. **pg. 7**

Work Tools – Attachments

A variety of grapples and magnets are available to maximize machine performance in material handling applications. **pg. 8**

Serviceability

Simplified service and maintenance features save you time and money. **pg. 9**



330C MH Material Handler

Material Handling purpose-designed features provide for aggressive performance, reliability, and excellent productivity.



Cab Riser. Cat designed and built, 77" (1.95 m) manual tilt cab riser provides for operating height with excellent visibility for loading and unloading processing equipment, trucks, and rail cars. Access to the cab is provided by a ladder to the platform extending around the cab riser. This platform allows windshield cleaning. The cab riser can be manually tilted forward 90 degrees for shipping.



Generator Set. A 20 kW hydraulically driven generator set can power magnets of 66" (1676 mm) in diameter. A Baldor generator and electronic magnet controller manufactured by Cat are linked to provide trouble free service. This controller virtually eliminates traditional contractor maintenance.

Material Handler Counterweight.

The material handler specific counterweight is 30% heavier than the standard counterweight for added stability.



Side-By-Side Cooling System.

The C-Series side-by-side cooling system is separated to prevent stacking of debris and allow easier access for cleaning.

330C MH Two-Piece Caterpillar Front Linkage

Caterpillar 330C Material Handler fronts are purpose designed and built allowing excellent reach, flexibility, and lift performance to meet all requirements of material handling applications.

Cat Two-Piece Front Linkage. Offers a maximum horizontal reach of 52'2" (15.9 m) from swing center and maximum vertical reach of 53'10" (16.4 m), which meets aggressive reach requirements in material handling applications. The Cat 1.25 CYD (0.96 cu. m) Orange Peel Grapple is an excellent fit for these requirements.

Material Handling Booms and Sticks. Designed and built for excellent performance and long service life in above ground applications.

Welded Box-Section Structures. Efficiently designed with thick, multi-plate fabrications in high stress areas, which allows structures to flex, dissipating stresses and maximizing strength and durability.

Stress Relieving Booms and Sticks. Maximizes strength and minimizes structure weight.



Dual Stick Cylinders. Provides excellent geometry for working close in to the machine or at full reach.

Engine and Hydraulics

The Cat C9 Diesel engine and hydraulics give the 330C MH exceptionally powerful and efficient performance unmatched in the industry for material handling applications.



Engine. Six-cylinder, turbocharged engine built for power, reliability, and economy will allow the machine to consistently perform at high levels. The Cat C9 engine is designed for low emissions and will meet EPA Tier 2 and EU Stage II emissions requirements.

Low Sound, Low Vibration. The C9 is designed to improve operator comfort by reducing sounds and vibration.

Electronic Control Module.

The Electronic Control Module (ECM) regulates the engine's control system, responding quickly to operating variables for maximum efficiency. Fully integrated sensors in the engine's fuel, air, coolant, and exhaust systems allow the ECM to store and relay information on conditions such as RPMs, fuel consumption, and diagnostics.

Automatic Engine Speed Control.

The two-stage, one-touch control maximizes fuel efficiency and reduces sound levels.

Hydraulic Systems. Cat Material Handler Hydraulic Systems are specifically designed to meet hydraulic attachment requirements.

Hydraulic Implement Circuits.

The grapple open/close circuit works with the other implement circuits to deliver smooth, simultaneous, multi-function control. The rotate circuit provides a separate gear pump and fully adjustable control valve, which allows this configuration to match grapple flow requirements. A separate fixed displacement gear pump is used to provide the hydraulic power to run a 20 kW generator system.

Hydraulic Cross Sensing System.

Improves productivity with faster implement speeds and quicker, stronger pivot turns.

Controllability. The hydraulic system offers precise control of the 330C MH, reducing operator fatigue, improving operator efficiency for increased productivity.

Structures

The 330C MH structural components are the backbone of the machine's durability and provide for excellent stability.

Wide Track Gauge. Wide, 11'10" (3609 mm) track gauge provides excellent over-the-side stability required to handle heavy loads and improve productivity. Operator comfort is also enhanced.

Advanced Square Carbody Design. Stands up in the toughest, most difficult applications.

Modified X-shaped, box-section carbody provides excellent resistance to torsional bending.

Upper structure weight and stresses are distributed evenly across the full length of the track roller frame.

Robotic Welding. Up to 95% of the structural welds are done robotically, which achieves up to three times the penetration of manual welds for improved durability.

Heavy Duty Upper Frame. The upper frame is specifically designed for the scrap and material handling applications. It is built of higher strength material and thicker steel sections to handle increased swing loads from the longer front and heavier counterweights used in material handling.



Work Tools – Attachments

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



Cat Orange Peel Grapples. The 1.25 CYD (0.96 cu. m) Orange Peel Grapple is constructed with four wear-resistant steel tines and fully replaceable tips for excellent service life.

Hydraulic Cylinders. 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 loading for superior productivity in material handling applications including many of the various scrap materials.

Walker Magnets. The Walker 66" (1676 mm) Lift Master magnet can be used with the 330C MH with a genset. These magnets have been designed and engineered for scrap processing applications. Ask your dealer salesperson for information on the Walker Magnet.

Serviceability

Simplified service and maintenance features save you time and money.

Faster, Easier Maintenance.

Means improved uptime and a better value.

Service points are centrally located with easy access to facilitate routine maintenance.

Ground Level Service. Many of the service locations are easily accessible at ground level allowing critical maintenance to get done quickly and efficiently.

Pump Compartment. A service door on the right side of the upper structure allows ground-level access to the pump and pilot filter.

Radiator Compartment. The left rear service door allows easy access to the engine radiator.

Air Filter Compartment. The air filter features a double-element construction for maximum cleaning efficiency.



Complete Customer Support

Cat Dealer services help you operate longer with lower costs.



Cat Dealers. Your Cat Dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. To help you get the best return on your investment, the dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement.

Selection. Make detailed comparisons of the machines you are considering before you purchase. What are the job requirements? What production is needed? What is the true cost of lost production? Your Cat Dealer can help you find precise answers to these questions.

Purchase. Look past the initial price of the machine. 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 owning and operating costs over the long run.

Maintenance. What is the cost of preventive 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 Scheduled Oil Sampling and Technical Analysis help you to avoid unscheduled repairs.

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

Product Support. You will find nearly all parts at our dealer parts counter. Cat Dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can also save money with remanufactured components.

Engine

Engine Model	C9	
Net Flywheel Power	184 kW	247 hp
Gross Power	197 kW	264 hp
Net Power – ISO 9249	184 kW	247 hp
Net Power – SAE J1349	182 kW	244 hp
Net Power – EEC 80/1269	184 kW	247 hp
Bore	112 mm	4.41 in
Stroke	149 mm	5.87 in
Displacement	8.8 L	537 in ³

Operating Specifications

Max. Reach	15.9 m	52.2 ft
Cat Cab Riser	1.96 m	6.4 ft
Generator Set	20 kW	26.8 hp
Max. Pin Height	16.42 m	53.87 ft
Cat 2-Piece MH Linkage Arrangement	15.9 m	52.2 ft
Travel Speed	5 kph	3.11 mph

Hydraulic System

Maximum Flow (each of two pumps)	280 L/min	74 gal/min
Max. Pressure Implements	33 784 kPa	4,900 psi
Max. Pressure Travel	33 784 kPa	4,900 psi
Max. Pressure Swing	27 900 kPa	4,046 psi
Pilot System Max. Flow	37 L/min	10 gal/min
Pilot System Max. Pressure	4120 kPa	597 psi
Rotate Circuit for Grapple Max. Flow	49.21 L/min	13 gal/min
Rotate Circuit for Grapple Max. Pressure	13 790 kPa	2,000 psi
Generator Auxiliary Pump Max. Flow	159 L/min	42 gal/min
Generator Auxiliary Pump Max. Pressure	17 237 kPa	2,500 psi

Weights

Operating Weight	43 815 kg	96,595 lb
Counterweight	8300 kg	18,300 lb

Performance

High Range Max. Travel Speed	5 kph	3.1 mph
Max. Drawbar Pull	294 kN	66,094 lb
Low Range Max. Travel Speed	3.3 kph	2.1 mph
Maximum Gradeability	70%	

Dimensions

Operating Height – to Top of Cab	5078 mm	16.7 ft
Shipping Height – Cab Tipped	3180 mm	10.4 ft
Operating Width	4375 mm	14.3 ft
Shipping Width	4267 mm	14 ft
Shipping Length	12 744 mm	41.8 ft
Tail Swing Radius	3500 mm	11.5 ft
Rear of Carrier to Tipped Cab	8588 mm	28 ft
Ground Clearance	505 mm	1.7 ft
Height to Top of Exhaust	2887 mm	9.5 ft
Counterweight Clearance	1225 mm	4 ft

Swing Mechanism

Swing Torque	108 kN•m	79,657 lb ft
Swing Speed	10 RPM	

Track

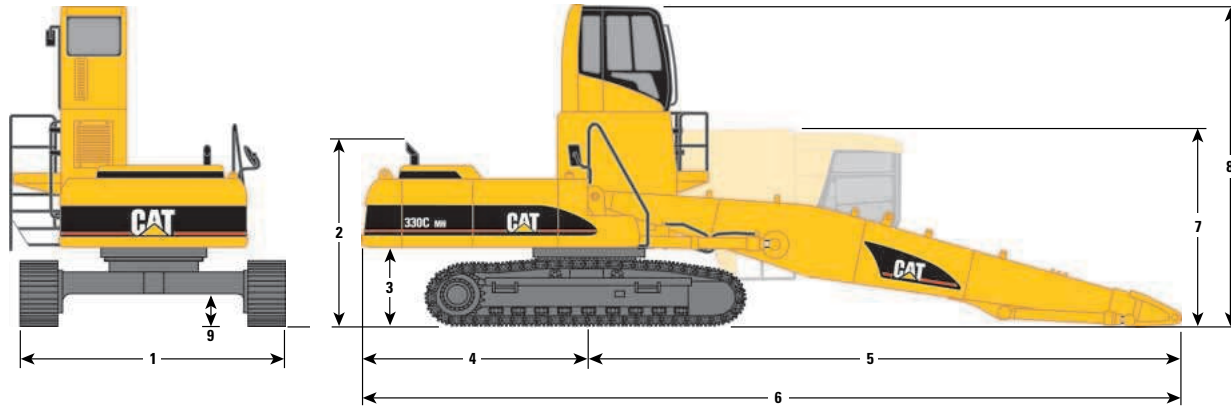
Track Shoes	600 mm	24 in
Ground Clearance	505 mm	20 in
Gauge	3609 mm	141.7 in
Shoes (each side)	49	
Rollers (each side)	9	
Overall Track Length	5020 mm	197.6 in

Service Refill Capacities

Fuel Tank	618 L	163 gal
Cooling System	38 L	10 gal
Engine Oil	36 L	9.4 gal
Swing Drive	19 L	5 gal
Final Drive (each)	15 L	4 gal
Hydraulic System (including tank)	410 L	108 gal
Hydraulic Tank	175 L	46 gal

Dimensions

All dimensions are approximate.



15.9 m (52'2") front

1 Operating Width	4375 mm (14'4")
2 Height to Top of Exhaust	2887 mm (9'6")
3 Counterweight Clearance	1225 mm (4'0")
4 Tail Swing Radius	3500 mm (11'6")
5 Swing Center to End of Boom	9257 mm (30'4")
6 Rear of Carrier to End of Boom	12 744 mm (41'10")
7 Shipping Height – cab tipped	3180 mm (10'5")
8 Operating Height – to top of cab	5078 mm (16'8")
9 Ground Clearance	505 mm (1'8")

Lift Capacities

330C MH

BOOM – 9.2 m (30'2")
STICK – 7.6 m (25'0")

MAX REACH – 15.9 m (52'2")
MAX HEIGHT – 16.4 m (53'10")

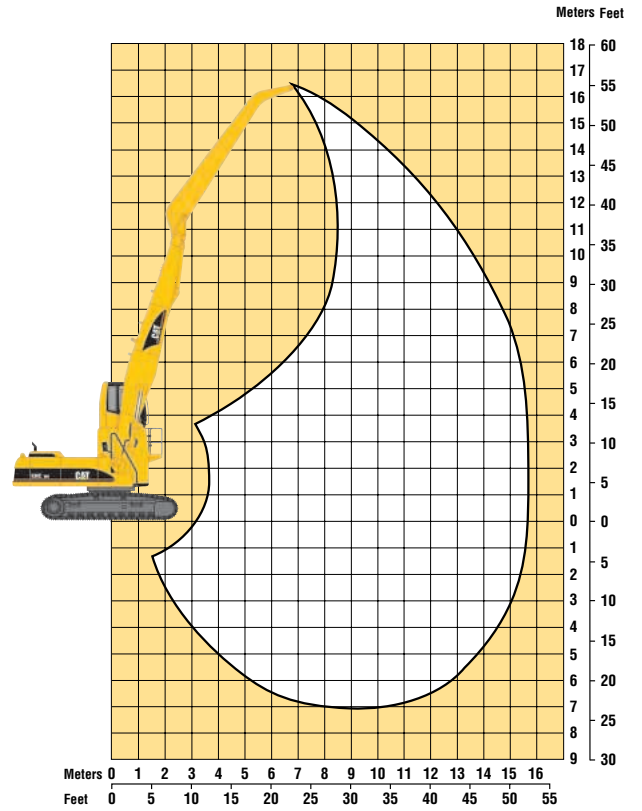
Lift Point Height	3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft		9.0 m/30.0 ft		10.5 m/35.0 ft		12.0 m/40.0 ft		13.5 m/45.0 ft		15.0 m/50.0 ft		Maximum Reach						
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	m ft				
15.0 m 50.0 ft	kg																				*4800	*4800	9.10		
	lb																				*10,900	*10,900	28.64		
13.5 m 45.0 ft	kg									*6600	*6600	*5000	*5000								*4400	*4400	10.94		
	lb									*13,800	*13,800	*9900	*9900								*9700	*9700	35.13		
12.0 m 40.0 ft	kg									*7500	*7500	*6400	*6400	*4700	*4700						*4100	*4100	12.34		
	lb									*16,100	*16,100	*13,400	*13,400								*9100	*9100	39.96		
10.5 m 35.0 ft	kg									*8300	*8300	*7400	*7400	*6000	*6000						*4000	*4000	13.42		
	lb									*18,000	*18,000	*15,800	*15,800	*12,500	*12,500						*8700	*8700	43.89		
9.0 m 30.0 ft	kg									*8500	*8500	*7700	*7700	6800	6300	*5200	5100				*3900	*3900	14.27		
	lb									*19,000	*19,000	*16,800	*16,800	14,600	13,500	*10,500	*10,500				*8600	*8600	46.58		
7.5 m 25.0 ft	kg									*8700	*8700	*7900	7800	6700	6200	5500	5000				*3900	*3900	14.91		
	lb									*19,000	*19,000	*17,100	16,700	14,400	13,300	11,700	10,700				*8500	*8500	48.78		
6.0 m 20.0 ft	kg									*10 400	*10 400	*9100	*9100	8100	7500	6600	6000	5400	4900	4500	4100	*3900	*3900	15.39	
	lb									*22,600	*22,600	*19,700	*19,700	17,500	16,200	14,100	13,000	11,500	10,600	*9200	*9200	*8600	*8600	50.39	
4.5 m 15.0 ft	kg									*11 800	*11 800	*9500	9300	7900	7300	6400	5800	5300	4800	4400	4000	*4000	*3700	15.70	
	lb									*24,100	*24,100	*20,600	20,000	17,000	15,600	13,700	12,600	11,300	10,300	9400	8600	*8700	*8100	51.47	
3.0 m 10.0 ft	kg									*14 700	*14 700	9600	8800	7600	7000	6200	5600	5100	4700	4300	3900	3900	3600	15.86	
	lb									*31,800	*31,800	20,700	19,000	16,300	15,000	13,300	12,100	11,000	10,000	9200	8400	8600	7800	52.04	
1.5 m 5.0 ft	kg									*14 800	*14 800	*15 600	15 500	12 000	10 900	9100	8400	7300	6700	6000	5400	4200	3900	3500	15.89
	lb									*32,500	*32,500	32,800	25,800	23,500	19,700	18,000	15,700	14,300	12,800	11,700	10,700	9700	8500	7700	52.12
0.0 m 0.0 ft	kg	*3100	*3100	*7500	*7500	*15 800	14 200	11 300	10 300	8700	7900	7000	6400	5800	5300	4900	4400	4100	3800	3800	3800	3500	3500	15.71	
	lb	*7100	*7100	*17,100	*17,100	33,900	30,600	24,400	22,200	18,800	17,100	15,100	13,700	12,400	11,300	10,400	9500	8900	8100	8100	8500	7700	7500	51.71	
-1.5 m -5.0 ft	kg	*3700	*3700	*6400	*6400	*12 800	*12 800	10 900	9800	8400	7600	6800	6200	5600	5100	4800	4300	4100	3700	3900	3900	3500	3500	15.50	
	lb	*8200	*8200	*14,600	*14,600	29,200	29,200	23,400	21,200	18,100	16,400	14,600	13,300	12,100	11,000	10,200	9300	8800	8000	8000	8600	7800	7500	50.61	
-3.0 m -10.0 ft	kg	*4400	*4400	*6500	*6500	*10 900	*10 900	10 600	9600	8200	7400	6600	6000	5500	5000	4700	4200	4100	3700	4000	3700	3500	3500	15.10	
	lb	*9800	*9800	*14,600	*14,600	25,000	25,000	22,800	20,600	17,700	16,000	14,300	12,900	11,900	10,800	10,100	9100			4000	3700	3500	3500	49.39	
-4.5 m -15.0 ft	kg			*6900	*6900	*10 600	*10 600	*10 100	9400	8100	7300	6500	5900	5500	4900	*4600	4200			*3700	*3700	3500	3500	14.48	
	lb			*15,500	*15,500	*24,000	*24,000	*21,700	20,300	17,400	15,700	14,100	12,800	11,800	10,700	*9600	9100			*8000	*8000	8100	8100	47.39	
-6.0 m -20.0 ft	kg			*9600	*9600	*8300	*8300	*7000	*7000	7000	6400	5800	5300	4800	*4600	*4600									
	lb			*20,600	*20,600	*17,700	*17,700	*14,900	*14,900	14,900	14,300	12,300	11,300	10,300	9600	9600									

* Indicates that the load is limited by hydraulic capacity rather than tipping capacity. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Working Ranges — Two-Piece Front Linkage

Machine equipped with 15.9 m (52'2") two-piece front linkage.

Maximum reach	15.9 m	52'2"
Maximum height	16.4 m	53'10"



Standard Equipment

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

ELECTRICAL

- 65-Ampere alternator
- Base machine light (frame)
- Horn
- Working lights, cab mounted (two)

OPERATOR ENVIRONMENT

- Adjustable pilot operated joystick type controls
- Air conditioner with auto climate control and defroster
- AM/FM Radio
- Ashtray with lighter
- Beverage holder
- Coat hook
- Floor mat
- Instrument panel and gauges
- Interior lighting
- Literature compartment
- Neutral lever for all controls
- Openable skylight
- Polycarbonate windows
- Positive filtered ventilation
- Pre-start monitoring system
- Pre-wired radio mounting areas with two speakers and one 24V to 12V converter
- Seat, KAB 527P/C suspension seat with adjustable arm rest and seat belt
- Storage compartment
- Toggle switch for grapple – magnet operation
- Travel control pedals
- Windshield wiper/washers

POWER TRAIN

- Automatic engine speed control with manual return to idle
- Cat C9 Diesel engine with 24V electric starting
- Muffler
- Power mode selector
- Side by side radiator/oil cooler
- Straight line travel
- Two speed auto-shift travel
- Water separator in fuel line

UNDERCARRIAGE

- 24" (600 mm) triple grouser shoes (49 sections)
- High wide carbody with swivel guard
- Hydraulic track adjusters
- Idler and center section track guiding guards
- Track type undercarriage with grease lubricated seals

OTHER STANDARD EQUIPMENT

- 52'2" (15.9 m) 2-piece Material Handling front linkage
- Antifreeze
 - Includes 50% concentration with protection of -30° F (-34° C)
- Automatic swing parking brake
- Caterpillar 77" (1.9 m) cab riser with platform
- Door locks and caps locks and Cat one-key security system
- Ether and cold weather starting aids
- Fine swing control
- Heavy duty upper frame with bottom guards
- 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
- Mirrors (frame-right, cab-left)
- Material Handling Counterweight – 18,375 lb (8335 kg)
- Travel alarm

Optional Equipment

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

Coolant, extended life –58° F (–50° C)

Exit, secondary, rear window

Generator, 20 kW hydraulically driven solid state generator
with crosshead adapter for hanging magnet

Grapple, Caterpillar 1.25 CYD (0.96 cu. m) Orange Peel

Guard, falling objects

Ladder, rear cab access

Magnet, walker 66" (1676 mm) lift master

Precleaner, air

330C MH Material Handler

AEHQ5525-01 (6-04)
(Replaces AEHQ5525)

For more complete information on Cat products, dealer services
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See your Caterpillar dealer for available options.

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