

325D Material Handler



Engine

Engine Model	Cat® C7 ACERT™	
Net Flywheel Power	152 kW	204 hp

Weights

Operating Weight	35 526 kg	78,321 lb
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Operating Specifications

Max Reach - 19'8"	14 121 mm	46 ft 4 in
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Max Reach - 24'3"

15 514 mm

50 ft 11 in

Stick

325D Material Handler

The D Series is tough, dependable, and incorporates innovative features for improved performance.

325D MH Material Handler

Special features provide for aggressive performance, reliability, and excellent productivity. **pg. 4**

325D MH Two-Piece Caterpillar® Front Linkage

Caterpillar 325D Material Handler fronts are purpose designed and built for excellent reach, flexibility, and lift performance to meet all requirements of material handling applications. **pg. 5**

Engine

✓ ACERT™ Technology works at the point of combustion to optimize engine performance and provide low exhaust emissions to meet U.S. EPA Tier 3 emission regulations, with exceptional performance capabilities and proven reliability. **pg. 6**

More powerful engine, improved cooling system, longer track length, increased hydraulic pressure, and cab riser options lead to increased productivity and lower operating cost.



Structures

The 325D 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 and Complete Customer Support

Simplified service and maintenance features save you time and money. Your CAT® dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment. **pg. 9**



✓ *New Feature*

325D MH Material Handler

Special features provide for aggressive performance, reliability, and excellent productivity.



Fixed Cab Riser. CAT® designed and built, 6'5" (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 leading up to the platform extending around the cab riser. This platform will allow for windshield cleaning. The cab riser can be manually tilted forward 90 degrees for shipping.



Hydraulic Cab Riser. Optional hydraulic cab riser provides up to 8'6" (2.6 m) of additional operating height. There is easy access to the cab platform provided by handrails attached to the riser.

Operator Controls. The ability to modulate the grapple open-close function is also provided on the right side joystick. The rotate function is modulated by using a slider switch mounted on the joystick.



Cooling System. External debris filters allow easy access for cleaning. This prevents clogging from dirt and dust coming into the cooling system. The optional automatic reversing fan purges dirt and dust from cooling system.



Generator Set. An optional 20 kW generator set can power magnets up to 66" (1.68 m) in diameter.

325D MH Two-Piece Caterpillar Front Linkage

Caterpillar 325D Material Handler fronts are purpose designed and built for excellent reach, flexibility, and lift performance to meet all requirements of material handling applications.



The CAT® Two-Piece Front Linkage.

Offers a maximum horizontal reach of 50' 11" (15.5 m) from swing center and maximum vertical height of 53' 11" (16.4 m). It is an excellent match for a .75 yd³ (.57 cubic meter) Orange Peel Grapple or a 57" (1.45 m) Walker Magnet.

The optional 46' 4" (14.1 m) two-piece front linkage has a maximum vertical reach of 49' 6" (15.1 m) and is an excellent match for a 1.25 yd³ (0.96 cubic meter) Orange Peel Grapple or the 66" (1.68 m) Walker magnet.

Booms and Sticks. Designed and built for performance and long service life.

Welded Box-Section Structures.

Efficiently designed with thick, multiplate fabrications in high stress areas, which allows structures to flex, dissipating stress and maximizing strength.

Stress Relieving Booms and Sticks.

Maximize strength and minimizes structure weight.

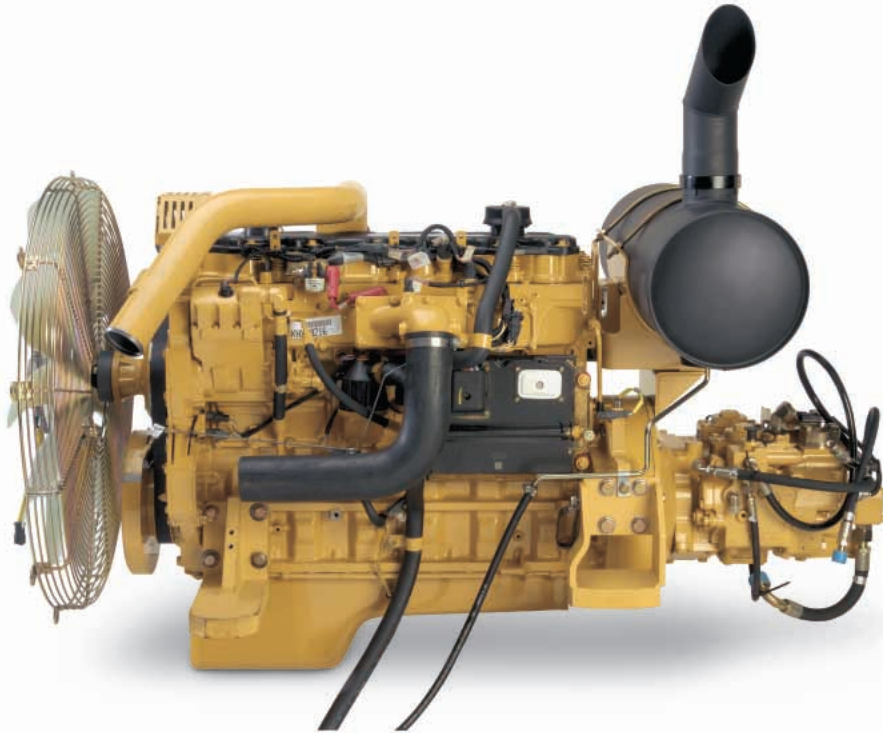
Dual Stick Cylinders.

Provides excellent geometry for working close to the machine or at full reach.

Heavy Lift. Provides additional lifting capacity for handling of heavy, robust objects.

Engine

Built for power, reliability, economy, and lower emissions.



CAT® C7 ACERT™. The CAT® C7 with ACERT™ Technology works introduces a series of evolutionary, incremental improvements that provide breakthrough engine technology. The building blocks of ACERT™ Technology are fuel delivery, air management, and electronic control. ACERT™ Technology optimizes engine performance while meeting U.S. EPA Tier 3 engine emissions regulations.

Performance. The 325D MH, equipped with the C7 engine with ACERT™ Technology, provides 12% more horsepower as compared to the 3126B ATAAC HEUI in the 325C MH.

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

ADEM™ A4 Engine Controller .

ADEM™ A4 electronic control module manages fuel delivery to get best performance per liter of fuel used. The engine management system provides flexible fuel mapping, allowing the engine to respond quickly to varying application needs. It tracks engine and machine conditions while keeping the engine operating at peak efficiency.

Electronic Control Module. The Electronic Control Module (ECM) works as the “brain” of the engine’s control system, responding quickly to operating variables to maximum engine efficiency. Fully integrated with sensors in the engine’s fuel, air, coolant, and exhaust systems, the ECM stores and relays information on conditions such as RPM, fuel consumption, and diagnostic information.

Fuel Delivery. The CAT® C7 features electronic controls that govern the fuel injection system. Multiple injection fuel delivery involves a high degree of precision.

Air Cleaner. The radial seal air filter features a double-layered filter core for more efficient filtration and is located in a compartment behind the cab. A warning is displayed on the monitor when dust accumulated above the preset level.

Noise Reduction Technologies. The engine mounts are rubber-isolating mounts matched with the engine package. Further noise reduction has been achieved through design changes to the isolated top cover, oil pan, multiple injection strategy, insulated timing cover, sculpted crankcase and gear train refinements.

Structures

The 325D MH structural components are the backbone of the machine's durability and provide for excellent stability.



High, Square Undercarriage. Provides excellent over-the-side stability required to handle heavy loads and improve productivity.

Excellent ground clearance provided to clear obstacles.

Longer track roller frames increase over-the-front stability. Stands up in the toughest 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 roller track frame.



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.

Work Tool Selection. When choosing a work tool, please consider the work tool application, the variation of the density of material to be handled and productivity requirements. Check with your CAT[®] dealer for more details on specifications, sizes, and other work tool types.



Walker Magnets. The Walker 57" (1.45 m) or 66" (1.68 m) Lift Master magnets can be used with the 325D MH. These magnets have been designed and engineered for scrap processing applications. Ask your dealer salesperson for information on the Walker Magnet.



Orange Peel Grapples. The .75 yd³ and the 1.25 yd³ Orange Peel Grapples are available attachments.

Serviceability and Complete Customer Support

Simplified service and maintenance features save you time and money. Your CAT® dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment.

Ground Level Service. The design and layout of the 325D MH was made with the service technician in mind. Many 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, oil cooler and air-to-air-after-cooler. A reserve tank and drain cock are attached to the radiator for simplified maintenance.

Air Filter Compartment. The air filter features a double-element construction 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 outside the hydraulic tank. This filter prevents contaminants from entering the system when hydraulic oil is changed and keeps the operation clean.

Fan Guard. Engine radiator fan is completely enclosed by fine wire mesh, reducing the risk of an accident.

Diagnostic and Monitoring. The 325D MH is equipped with S•O•SSM sampling ports and hydraulic test ports for the hydraulic system, engine oil, and for coolant. A test connection for the CAT® Electronic Technician (CAT® ET) service tool is located in the cab.

Extended Service Interval. The 325D MH service and maintenance intervals have been extended to reduce machine service time and increase machine availability



CAT® Dealer Maintenance. Choose from your CAT® Dealer's wide range of maintenance services at the time you purchase your machine. Preventive Maintenance will help you to avoid unscheduled repairs and diagnostic programs such as Scheduled Oil Sampling and Technical Analysis are available.

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 down time. Save money with remanufactured components.

Machine Selection. Make detailed comparisons of the machines you are considering before you buy. What are the job requirements, machine attachments and operating hours? What production is needed? Your CAT® dealer can provide recommendations.

Customer Support Agreements. CAT® dealers offer a variety of product support agreements, and work with customers to develop a plan that best meets specific needs. These plans can cover the entire machine, including attachments, to help protect the customer's investment.

Engine

Engine Model	Cat® C7 ACERT™	
Net Flywheel Power	152 kW	204 hp
Net Power - ISO 9249	152 kW	204 hp
Net Power - SAE J1349	151 kW	202 hp
Net Power - EEC 80/1269	152 kW	204 hp
Bore	110 mm	4.33 in
Stroke	127 mm	5 in
Displacement	7.2 L	440 in ³

- The 325D MH meets U.S. EPA Tier 3 emissions and EU Stage III engine emissions 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 needed up to 2300 m(7,500 ft).

Operating Specifications

Cab Riser - Fixed	1.96 m	6 ft 6 in
Cab Riser - Hydraulic	2.6 m	8 ft 6 in
Generator Set	20 kW	27 hp
Max Reach - 19'8" Stick	14 121 mm	46 ft 4 in
Max Reach - 24'3" Stick	15 514 mm	50 ft 11 in

Hydraulic System

Maximum Flow (each of two pumps)	235 L/min	62 gal/min
Max. Pressure Implements	35 000 kPa	5,076 psi
Max Pressure - Heavy Lift	36 000 kPa	5,221.36 psi
Max. Pressure Travel	35 000 kPa	5,076 psi
Max. Pressure - Swing	28 900 kPa	4,192 psi
Pilot System Max. Flow	32.4 L/min	8.6 gal/min
Pilot System Max. Pressure	3900 kPa	566 psi
Rotate Circuit for Grapple Max. Flow	57 L/min	15 gal/min
Rotate Circuit for Grapple Operating Pressure	13 789 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	35 526 kg	78,321 lb
Upper	9194 kg	20,269 lb
Counterweight	7700 kg	16,980 lb
Undercarriage (includes carbody)	11 402 kg	25,137 lb
Two-Piece Front (with cylinders)	5889 kg	12,983 lb
Grapple/Adapter	1341 kg	2,956 lb

Swing Mechanism

Swing Torque	86.3 kN-m	63,659 lb ft
Swing Speed	10.2 RPM	

Track

Track Shoes	600 mm	24 in
Gauge	3394 mm	133.6 in
Shoes (each side)	50	
Rollers (each side)	9	
Overall Track Length	4860 mm	191 in

Service Refill Capacities

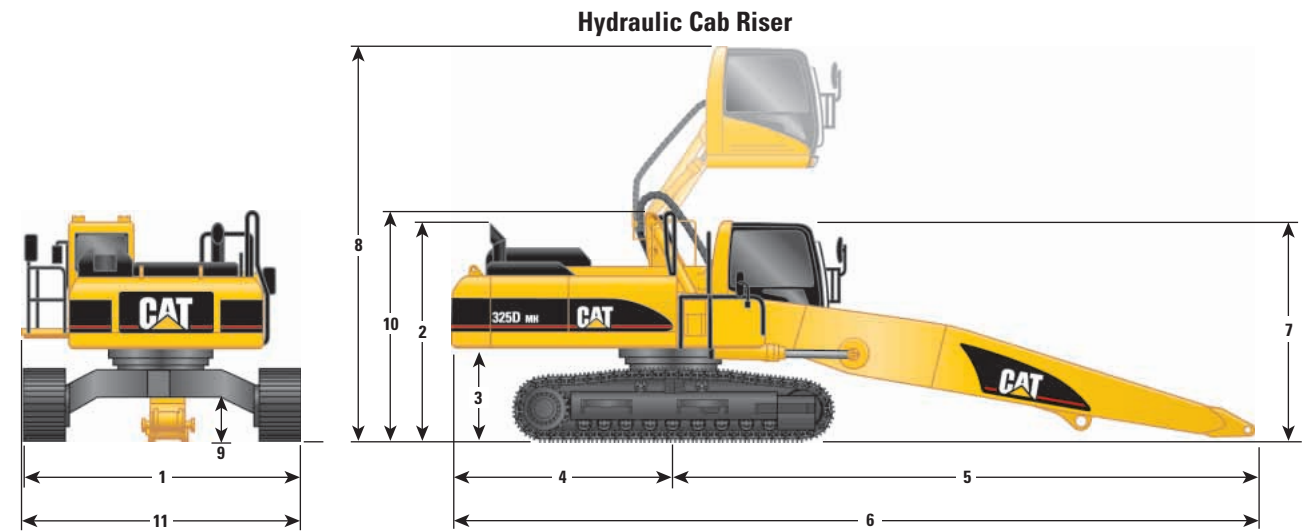
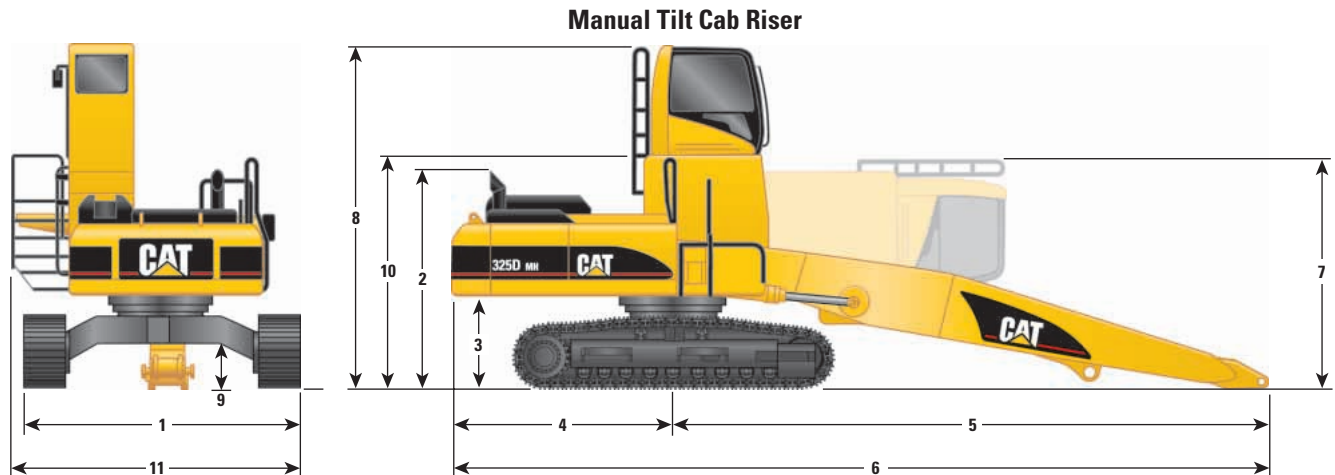
Fuel Tank	520 L	137 gal
Cooling System	30 L	7.9 gal
Engine Oil	30 L	7.9 gal
Swing Drive	10 L	2.6 gal
Final Drive (each)	6 L	1.6 gal
Hydraulic System (including tank)	310 L	82 gal
Hydraulic Tank	145 L	38 gal

Drive

Maximum Drawbar Pull	245 kN	55,078.18 lb
Maximum Travel Speed	5.3 km/h	3.3 mph

Dimensions

All dimensions are approximate.

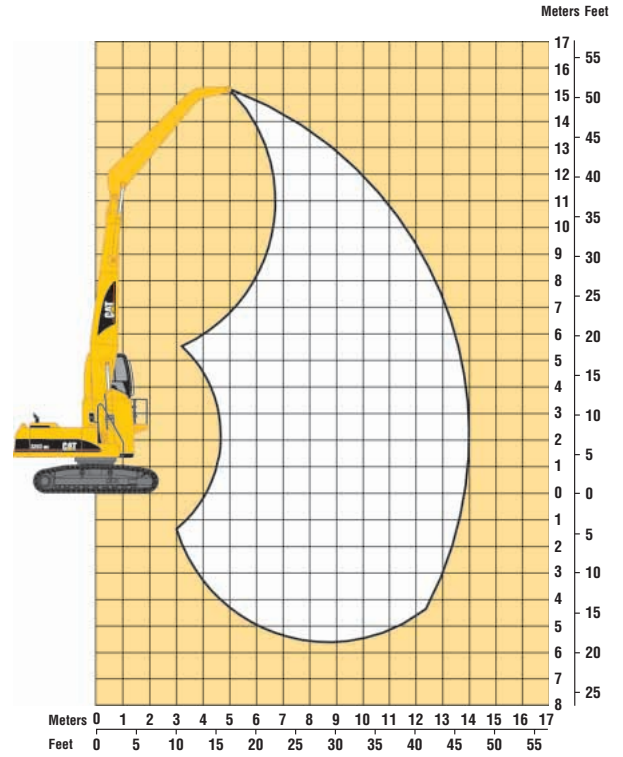


	Manual Tilt Cab Riser	Hydraulic Cab Riser
1 Shipping Width	4024 mm (13'2")	4024 mm (13'2")
2 Height to Top of Exhaust	2917 mm (9'7")	2917 mm (9'7")
3 Counterweight Clearance	1355 mm (4'5")	1355 mm (4'5")
4 Tail Swing Radius	3026 mm (9'11")	3026 mm (9'11")
5 Swing Center to End of Boom	8940 mm (29'4")	8940 mm (29'4")
6 Rear of Carrier to End of Boom	11 966 mm (39'3")	11 966 mm (39'3")
7 Shipping Height – with ladder	3439 mm (11'3")	
Shipping Height to Top of Cab with FOGS		3427 mm (11'3")
8 Operating Height – to top of cab	5214 mm (17'1")	
Operating Height – with FOGS	5374 mm (17'8")	
Operating Height with Cab Up to Top of Cab with FOGS		6050 mm (19'10")
9 Ground Clearance	643 mm (2'1")	643 mm (2'1")
10 Shipping Height – RH handrail	3448 mm (11'4")	3448 mm (11'4")
11 Operating Width	4249 mm (13'11")	4172 mm (13'8")

Working Ranges

Machine equipped with 14.1 m (46'4.02") linkage.

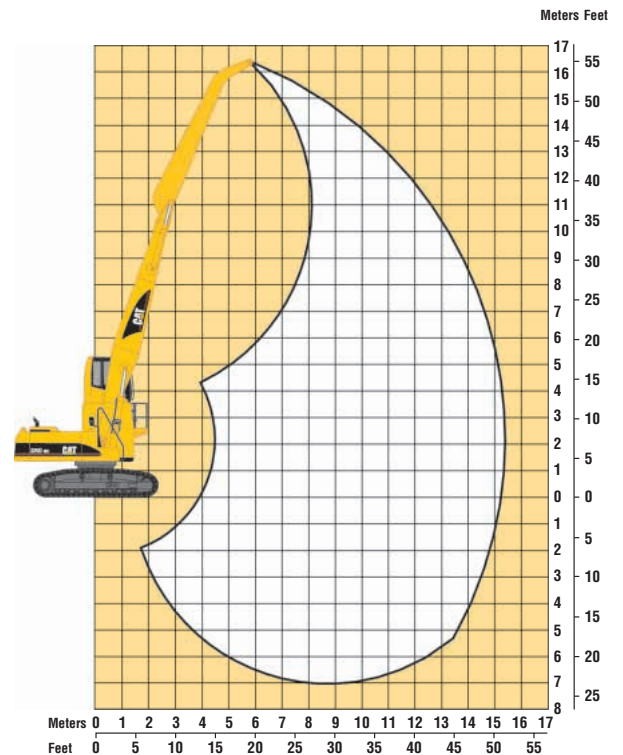
Maximum reach	14.1 m	46'4"
Maximum height	15.2 m	49'11.4"
Maximum depth	5.7 m	18'7"



Working Ranges

Machine equipped with 15.5 m (50'11.5") linkage.

Maximum reach	15.5 m	50'11.5"
Maximum height	16.4 m	53'10.6"
Maximum depth	7.1 m	23'2"



Standard Equipment

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

BOOM

- 29'0" (8.85 m) Material Handling Boom
- Includes high pressure tig welded steel tubes

ELECTRICAL

- 80 Ampere alternator
- Lights, cab mounted (two)
- Horn
- Light, storage box mounted

OPERATOR ENVIRONMENT

- Bolt on FOGS capability
- Polycarbonate windows except laminated glass in retractable front windshield / tempered glass in removable lower windshield and sliding upper door window
- Rear window emergency exit
- KAB 84/ E4P Suspension seat with adjustable arm rest and 3" retractable seat belt (cloth)
- Monitor
 - Full graphic and full color display with language capability
 - Warning information, filter, and fluid change information
 - Working hour information
 - Machine condition, error code and tool mode, and setting information
 - Start up level check hydraulic oil, engine oil, and engine coolant
- Pop up skylight with sunscreen
- Windshield wiper / washers (upper/lower)
- Positive filtered ventilation
- Bi-level air conditioner, heater, and defroster
- Instrument panel and gauges
- Interior lighting
- Coat hook
- Ashtray with lighter
- Literature compartment
- Storage compartment suitable for lunch box
- Neutral lever for all controls
- Adjustable pilot operated joystick type (wrist lever) controls with integral electrical switches for operation of the grapple rotate (modulated) and magnet lift/drop
- Modulated grapple open-close controls using right side joystick
- Toggle switch in RH console to switch between magnet and grapple operation
- Travel control pedals with removable hand levers
- Platform next to cab for improved access
- Washable floor mat
- Sunscreen on windshield
- Beverage holder
- AM/FM Radio with two stereo speakers

POWERTRAIN

- CAT® C7 diesel engine with 24-volt electric starting and air intake heater
- Emissions package to meet EPA Tier III requirements
- Radial seal air filter
- Automatic engine speed control with manual return to idle (not functional when hydraulic generator is in operation)
- Water separator in fuel line
- Two speed auto-shift travel
- Side by side cooling package (high ambient)
- Removable external debris filter covering air inlets
- Muffler
- Air precleaner
- Block heater
- Electric priming pump

UNDERCARRIAGE

- High square carbody
- Hydraulic track adjusters
- Track type undercarriage with grease lubricated seals
- Idler and center section track guiding guards
- 24" (600 mm) Triple Grouser Shoes (50 sections)
- Heavy duty track rollers

OTHER STANDARD EQUIPMENT

- Heavy duty upper frame with bottom guards
- Door locks and caps locks and Caterpillar One Key Security System
- Mirrors (frame-right, cab-left)
- 16,980 lb. Material Handling Counterweight
- Automatic swing parking break
- Fine swing control
- Travel alarm
- Extra batteries, heavy duty starter
- Secondary engine shut off switch
- Ether and cold weather starting aids
- Cold start receptacle
- Crosshead adapter
- Product Link ready

HYDRAULIC SYSTEMS

- Fully pressurized hydraulic system
- Auxiliary pump and lines to drive generator
- Medium pressure auxiliary hydraulic circuit for powering rotating grapples (includes pump, valve with flow control, and lines)
- High pressure grapple open / close hydraulic circuit with shut off valves at the end of the stick
- Boom and stick lowering check valve
- Regeneration circuit for boom and stick
- Heavy Lift Mode

Optional Equipment

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

One of two cabrisers **MUST** be chosen:

6'5" (1.9 m) manual tilt cab riser

8'6" (2.6 m) hydraulic cab riser

One of two stick options **MUST** be chosen:

Stick, 19'8" (6.0 m) Material Handling providing a linkage with a maximum reach of 46'4"

Stick, 24'3" (7.42 m) Material Handling providing a linkage with a maximum reach of 50'11"

Guard, Falling Objects

Fan, auto reversing

Generator, 20 kW

Coolant extended life -58F (-50C)

Exit, secondary rear window with an internal and external opening provisions mandatory for Province of British Columbia, Canada

Magnet-Scrap Handling

57" (1.45 m) Walker Liftmaster Series

66" (1.68 m) Walker Liftmaster Series

Grapple-four tine, Orange Peel

.75 yd³ (.57 cubic meter)

1.25 yd³ (.96 cubic meter)

325D 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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Featured machines in photos may include additional equipment.
See your Caterpillar dealer for available options.

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