

MH3040

WHEEL MATERIAL HANDLER



Engine Model
Maximum Operating Weight
Maximum Reach

Cat® C7.1
39 000 kg (86,000 lb)
15 490 mm (50.8 ft)



MH3040

WHEEL MATERIAL HANDLER

The Cat® MH3040 material handler builds upon the legacy of the M325D L MH to provide the power and reliability you need for your toughest material handling applications. A new cab along with up to 25% reduced fuel costs and up to 20% reduced maintenance costs combine with proven components to bring you the next generation of Cat Material Handlers.



PROVEN RELIABILITY

The MH3040 is built from proven components designed to withstand the toughest applications. Count on the MH3040 to provide the durability and reliability you expect from Cat products.

UP TO 25% LOWER FUEL CONSUMPTION

Two power modes and a new electrically driven fan with auto reverse function minimize fuel use and increase engine efficiency.

UP TO 20% LOWER MAINTENANCE COSTS

With extended maintenance intervals and fewer connections and hoses, you get more done at a lower cost compared to the previous model.

LATEST FEATURES



- Cab Avoidance helps you avoid contact between your attachment and the cab.
- Standard 2D E-fence prevents your machine from moving outside operator-defined parameters.
- Cat Payload helps you achieve precise load targets to improve your operating efficiency. Pick up a load of material and get a real-time weight estimate without swinging.
- Standard autolube system for linkage helps decrease maintenance time and improve greasing efficiency.
- Enhance visibility to make service work easier and safer with optional inspection lighting.

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area. Build Number: 07D



HIGH PERFORMANCE

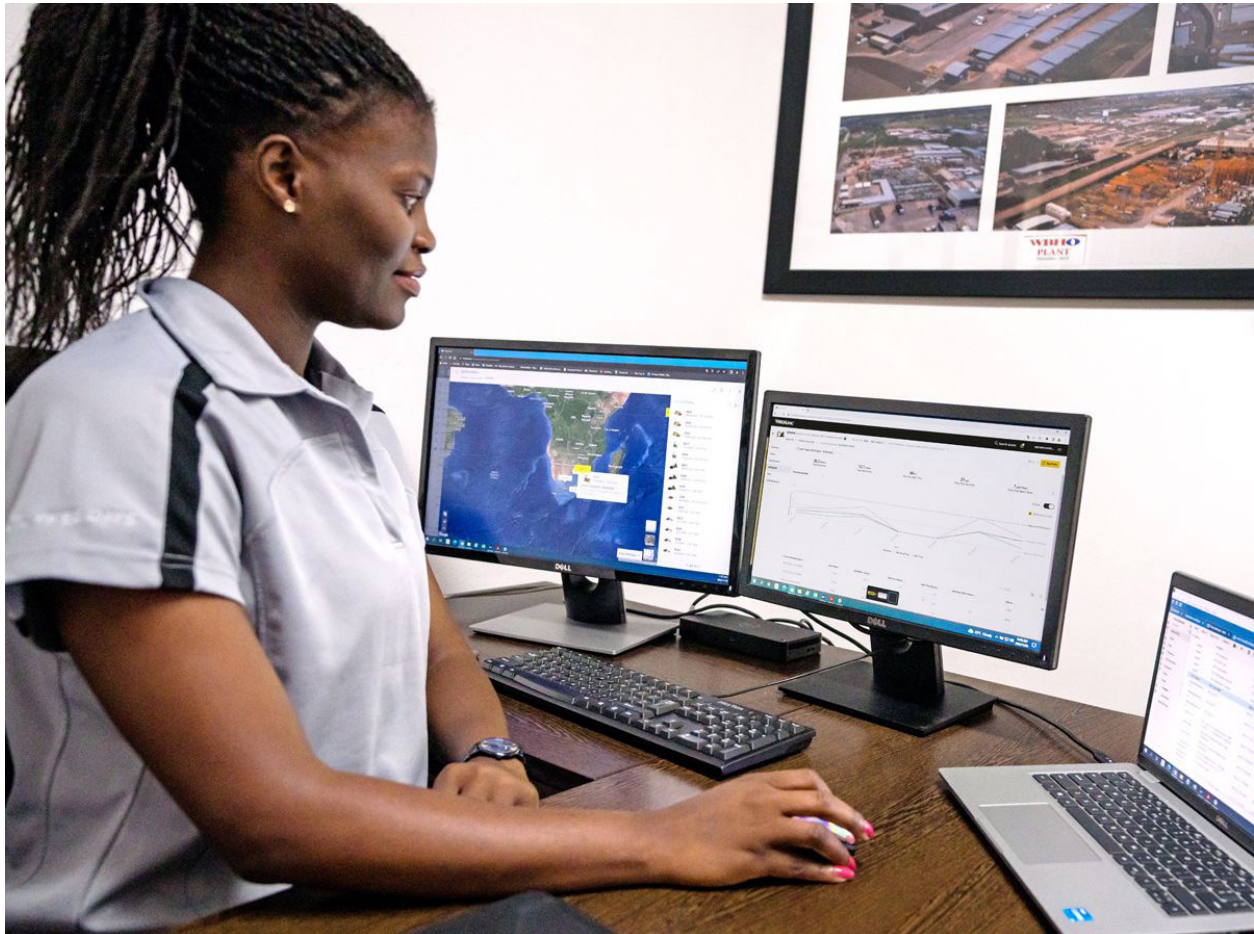


- Use up to 25% less fuel than the M325D L MH in similar applications.
- The C7.1 engine can run on biodiesel up to B20 and meets U.S. EPA Tier 4 Final and EU Stage V emission standards with an aftertreatment system that requires no scheduled maintenance or downtime.
- The advanced hydraulic system provides the optimum balance of power and efficiency while giving you the control you need.
- Valve priority puts hydraulic pressure and flow where you need it.
- Boost lifting capabilities and improve the controllability of heavy loads with heavy lift mode.
- Match the machine to the job with three power modes – Power, Smart, and Eco. Smart mode automatically matches engine and hydraulic power to working conditions, providing maximum power when needed and reducing power when it isn't to save fuel.

TAKE THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

- Cat Payload helps you achieve precise load targets to improve your operating efficiency. Pick up a load of material – with a bucket and thumb combination or grapple and clamshell attachments – and get a real-time weight estimate without swinging.
- Combine Payload with VisionLink® and remotely manage your production targets.
- VisionLink provides actionable data insights for all assets – regardless of fleet size or equipment manufacturer.* Review equipment data from your desktop or mobile device to maximize uptime and optimize assets. Dashboards provide information such as hours, miles, location, idle time, and fuel utilization. Make informed decisions that lower costs, simplify maintenance, and improve safety and security on your jobsite.
- Remote Troubleshoot is a mobile application that allows your Cat dealer to perform diagnostic testing on your connected machine remotely to help ensure that issues are resolved quickly and with less downtime.
- Remote Flash is a mobile application that allows you to update onboard software without a technician being present, allowing you to initiate software updates when convenient, increasing your overall operating efficiency.

****Data field availability can vary by equipment manufacturer.***



WORK IN COMFORT



- The wide seat adjusts for operators of all sizes.
- Get in and out of the cab easier using the tip-up left console.
- Control the machine comfortably with easy-to-reach controls in front of you.
- Standard automatic climate control keeps you at the right temperature all shift long.
- Stow your gear with plenty of in-cab storage beneath and behind the seat, overhead, and in the consoles. A cup holder, document holder, bottle holder, and coat hook are also provided.
- Connect to personal devices via the standard radio's USB ports and Bluetooth® technology.
- Cat continues to improve user interface functionality for operators of all skill levels. The touchscreen monitor is an easy-to-use operating tool that presents the jobsite dashboard with an intuitive format.
- Productivity applications are displayed in grid view to read on the go, and touchscreen navigation is programmed to ensure job performance continues without any hold-ups.
- Optional auxiliary relay powers on and turns off CB radios, beacon lights, and other attachments without taking your hands off the joysticks.

RELIABLE, DURABLE, AND VERSATILE

- Count on your machine to withstand wear throughout the years. Boom, sticks, and other high-stress areas are reinforced with thick multi-plate fabrications, castings, and forgings to ensure quality and reliability.
- The upper frame uses specially designed mountings to support the heavy-duty cab, and the lower frame is reinforced to enhance component durability.
- Work up to 3000 m (9,840 ft) above sea level without de-rating.
- Don't let the temperature stop you from working. The MH3040 has a standard high-ambient temperature capability of 43° C (109° F) and cold start capability of -20° C (-4° F). Consult your Caterpillar dealer for additional information on special configurations of your machine.
- Auto warm-up speeds up hydraulic oil warming in cold temperatures and helps prolong the life of components.
- Equip your MH3040 with an optional 20kW generator for magnet operation.
- Match your machine to the application. Multiple configurations allow you to customize your machine for millyard, scrap, and log loading applications.
- Expand your work capabilities with attachments for a variety of applications.
- Make operating easier with the touch of a joystick button. Additional auxiliary relays allow you to power on or turn off a CB radio, beacon light, and even a dust suppression watering system without taking your hands off the joysticks.



MAINTENANCE



- Track your machine's filter life and maintenance intervals via the in-cab monitor.
- Using Cat genuine oil and filters and doing your typical Scheduled Oil Sampling (S-O-SSM) monitoring will double the current service interval to 1,000 hours, giving you greater uptime to do more work.
- Expect the latest air intake filter with pre-cleaner to last up to 1,000 hours – a 100% increase over the previous filter.
- The latest hydraulic oil filter provides improved filtration performance, anti-drain valves to keep oil clean when the filter is replaced, and longer life with a 3,000-hour replacement interval – 50% longer than previous filter designs.
- High-efficiency cooling fans run only when needed; you can program intervals so they automatically reverse to keep cores clean without interrupting your work.
- S-O-S ports are on ground level, simplifying maintenance and allowing for quick, easy extraction of fluid samples for analysis.
- Boost productivity with proactive service reminders. The integrated vehicle health management system alerts the operator with step-by-step service guidance and the parts needed so you don't experience unnecessary downtime.

- Ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.
- Keep your machine secure with Operator ID. Use your PIN code on the monitor to enable the push-button starting feature.
- Enjoy great all-around visibility with the help of smaller cab pillars, larger windows, and a flat engine hood design. Rearview and side-view cameras are standard.
- Standard 1800-lumen LED exterior lights illuminate your surroundings for a safer work environment.
- Thick impact-resistant windshields fulfill P5A standards.
- Service platform design provides easy, safe, and quick access to the upper service platform. The service platform steps use an anti-skid punch plate to prevent slipping.
- The standard hydraulic lockout lever isolates all hydraulic and travel functions in the lowered position.
- Optional Operator Protective Guards (OPG) protect from falling and flying debris.
- When activated, the ground-level shutoff switch stops all fuel in the engine and shuts down the machine.
- In an emergency, safely lower the cab with the cab lowering valve behind the cab riser or to the right of the seat. The valve located behind the cab riser is easily accessible.
- Boom and stick lowering check valves prevent reverse flow, keeping your front linkage securely in place should the hydraulic system unexpectedly lose pressure.
- Make service work more accessible and safer with optional inspection lighting. With the flip of a switch, lights will illuminate the engine pump, battery, and radiator compartments to enhance visibility.



SUSTAINABILITY

- The Cat® C7.1 engine meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- The MH3040 emits up to 34% less CO₂ than the previous M325D L MH*.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels*** up to: 20% biodiesel FAME (fatty acid methyl ester)** or 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.
- Cat S-O-S Services help reveal excessive wear, contaminated fluids or other “unseen” issues that can shorten component life. In many cases, you can extend oil and coolant change intervals by using fluid monitoring. Consult your Cat dealer or the machine’s operation and maintenance manual for more information.
- Extended maintenance intervals not only reduce downtime but decrease the amount of fluid and filters that are replaced over the life of the machine.
- VisionLink displays the CO₂ emissions for monitored assets, calculated by fuel type for the Runtime Fuel Burned each day in a selected date range.
- Remote Flash minimizes downtime and maintenance time while keeping your asset running with maximum efficiency. Alerts for machine updates are sent virtually from your Cat dealer and updates can be deployed without a dealer technician needing to be onsite.
- Remote Troubleshoot decreases maintenance time and keeps your machine running with maximum efficiency by allowing your Cat dealer to virtually test the machine while working. Once a problem is identified, a technician can fix it the first time, saving time and money.
 - *All comparisons to M325D L MH. Productivity, fuel and CO₂ emissions vary by application. CO₂ emissions calculations based on a reference work cycle using 2.2 U.S. gallons per hour of #2 U.S. diesel fuel based. Applies IPCC2006 methodology using U.S. EPA Emissions Hub emission factors. Includes DEF (diesel exhaust fluid) related CO₂. Fuel measurements are at 15°C. Estimated average fuel consumption improvements are based on tests or VisionLink data where available. Productivity improvements are based on test data.
 - **Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel for use of blends higher than 20% biodiesel, consult your Cat dealer).
 - ***Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.



MORE THAN MACHINES

BUILT AROUND YOUR SUCCESS

When you buy Cat equipment, you get so much more than the machine. You also get the support of a best-in-class dealer network, backed by a range of flexible solutions, technology, tools, and more.



CUSTOMER VALUE AGREEMENTS

A Customer Value Agreement (CVA) from your Cat dealer helps you do more and worry less. A CVA simplifies machine ownership and maintenance, adds the security of expert dealer support, and gives you the peace of mind from effective equipment health management.

GENUINE CAT PARTS

Genuine Cat parts deliver the highest level of reliability and productivity. Order direct from your Cat dealer or shop online at parts.cat.com.

REPAIR OPTIONS

A broad range of repair options gives you choices that work with your needs, budget, and timeline. Every repair is performed by expert Cat technicians. You'll receive smart repair advice, a timely, accurate quote, and service that gets your machine back into action quickly.

FINANCIAL SERVICES

Count on Cat Financial to provide the best finance and extended protection solutions for your business. For more than 30 years, we have helped our customers succeed through financial service excellence.



DOZERS



SKID STEERS



MATERIAL HANDLERS



EXCAVATORS



WHEEL LOADERS



TRACK LOADERS

INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

Easily expand the performance of your machine by using Cat attachments. Each Cat attachment is designed to fit the weight and horsepower of Cat material handlers for improved performance, safety, and stability.

ORANGE PEEL GRAPPLES



FORESTRY GRAPPLES



CLAMSHELL GRAPPLES



TECHNICAL SPECIFICATIONS

Engine

Engine Model	Cat C7.1	
Net Power – ISO 9249	151 kW	202 hp
Net Power – ISO 9249 (DIN)	205 hp (metric)	
Engine Power – ISO 14396	152 kW	204 hp
Engine Power – ISO 14396 (DIN)	207 hp (metric)	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7 L	428 in ³
Biodiesel Capability	Up to B20 ¹	
Emissions	Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.	

Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system, and alternator with engine speed at 1,800 rpm. Advertised power is tested per the specified standard in effect at the time of manufacture.

¹Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to: 20% biodiesel FAME (fatty acid methyl ester)* or 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details. *Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

**Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Transmission

Maximum Travel Speed	18 km/h	11.2 mile/h
Drawbar Pull	154 kN	34,621 ft-lbf
Maximum Gradeability	43.8%	

Swing Mechanism

Swing Speed	6 r/min	
Maximum Swing Torque	82 kN-m	60,628 ft-lb

Machine Weights

Maximum Operating Weight	39 000 kg	86,000 lb
Minimum Operating Weight	37 000 kg	81,500 lb

Service Refill Capacities

Fuel Tank Capacity	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	10 L	2.6 gal
Rear Axle – Housing (Differential)	19 L	5 gal
Front Steering Axle – Differential	24 L	6.3 gal
Final Drive	6 L	1.6 gal
Powershift Transmission	2.9 L	0.8 gal
Hydraulic System – Including Tank	329 L	86.9 gal
Hydraulic Tank	147 L	38.8 gal
Diesel Exhaust Fluid (DEF) Tank	41 L	10.8 gal

Dimensions

Boom	MH 9.3 m (30'6")	
Stick	Industrial 7.1 m (23'3")	
Shipping Length	12 800 mm	42 ft
Machine Length	6330 mm	20.7 ft
Tail Swing Radius	3130 mm	10.3 ft
Counterweight Clearance	1740 mm	5.7 ft
Cab Height- Lowered	3660 mm	12 ft
Cab Height-Lowered with OPG	3805 mm	12.4 ft
Cab Height-Raised	6255 mm	20.5 ft
Cab Height-Raised with OPG	6400 mm	21 ft
Wheel Base	3210 mm	10.5 ft
Shipping Width	3000 mm	9.8 ft
Ground Clearance	265 mm	0.9 ft
Undercarriage Length	6225 mm	20.4 ft

Working Ranges

Boom	MH 9.3 m (30'6")	
Stick	Industrial 7.1 m (23'3")	
Maximum Reach	15 490 mm	50.8 ft
Maximum Height	17 510 mm	57.4 ft
Maximum Dump Height	5445 mm	17.8 ft
Maximum Depth	5265 mm	17.2 ft
Boom Pin Height	12 195 mm	40 ft

Hydraulic System

Maximum Pressure – Implements	35 000 kPa	5,076 psi
Maximum Pressure – Swing	28 400 kPa	4,061 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.2 kg (2.64 lb) of refrigerant which has a CO₂ equivalent of 1.716 metric tonnes (1.892 tons).

Sustainability

Recyclability	95%
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STANDARD & OPTIONAL EQUIPMENT

NOTE: Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
UNDERCARRIAGE AND STRUCTURES			ENGINE		
All wheel drive	✓		Three selectable modes: Power, Smart, Eco	✓	
Automatic brake/axle lock	✓		Cold start capability -18° C (0° F)	✓	
Creeper speed	✓		43° C (109° F) high-ambient cooling capacity with derate	✓	
Electronic swing and travel lock	✓		Double element air filter with integrated pre-cleaner	✓	
Heavy-duty axles, advanced disc brake system, and travel motor with adjustable braking force	✓		Electric fuel priming pump	✓	
Lockable, oscillating front axle with remote greasing point	✓		Two-stage fuel filtration system with water separator and indicator	✓	
Two speed hydrostatic transmission	✓		Reversible electric cooling fans	✓	
7700 kg (16,975 lb) counterweight	✓		Cold start, ether start	✓	
Tie down points on base frame	✓		Cold start, block heater		✓
Inspection lighting		✓	CAT TECHNOLOGY		
16.00-25 single solid rubber tires		✓	VisionLink®	✓	
23.5-R25 tires		✓	Cat Payload	✓	
BOOM AND STICKS			Remote Flash	✓	
10.4 m (34'9") Material Handler boom		✓	Remote Troubleshoot	✓	
9.3 m (30'6") Material Handler boom		✓	ELECTRICAL SYSTEM		
9.9 m (32' 6") Barge boom		✓	Maintenance-free battery	✓	
6.8 m (22'4") Log Loader boom		✓	LED chassis light, left-hand/right-hand boom lights, cab lights – 1800 lumens	✓	
7.5 m (24'9") Drop Nose stick		✓	Surrounding lights	✓	
7.1 m (23'3") Drop Nose stick		✓	Centralized electrical disconnect switch	✓	
5.7 m (18'7") Drop Nose stick		✓	Programmable time delay LED working lights after engine shutdown	✓	
4.1 m (13'3") Log Loader Over/Under stick		✓	Generator, 20 kW with wiring to stick nose		✓
CAB			Rotating beacon		✓
Advanced sound suppressed Tip Over Protective Structure (TOPS) certified cab with rubber mounts	✓		<i>(continued on next page)</i>		
High-resolution 254 mm (10") LCD touch screen monitor	✓				
Heated seat with air suspension (Deluxe cab)	✓				
Heated and ventilated seat with air suspension (Premium cab)	✓				
5.7 m (18'7") Industrial stick		✓			
4.1 m (13'3") Log Loader Over/Under stick		✓			
Operator Protective Guards (OPG) with top window wiper		✓			
Auxiliary relay		✓			

STANDARD & OPTIONAL EQUIPMENT *(continued)*

NOTE: Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional
SERVICE AND MAINTENANCE		
Side entry to service platform	✓	
Grouped location for engine oil and fuel filters	✓	
S-O-S ports	✓	
Second dipstick for engine oil	✓	
Automatic lubrication system for implement and swing system	✓	
Radiator doors with external fine mesh screen		✓
HYDRAULIC SYSTEM		
Electric main control valve	✓	
Boom and stick regeneration circuits	✓	
Automatic hydraulic oil warm up	✓	
Tandem type electronic main pump	✓	
Element type main hydraulic filter	✓	
Heavy lift mode	✓	
Fine swing control function	✓	
Cab dampening with accumulator	✓	
Cab riser snubbing	✓	
7-way pattern changer	✓	
Hydraulic cab riser	✓	

	Standard	Optional
SAFETY AND SECURITY		
Caterpillar One Key Security System	✓	
Door and cap lock	✓	
Travel/swing lock	✓	
Signaling/warning horn	✓	
Travel alarm	✓	
Right-hand handrail and hand hold	✓	
Rearview camera	✓	
Right-side-view camera	✓	
Secondary engine shutoff switch	✓	
Openable rear window as emergency exit	✓	
Cold starting capability for -32° C (-25° F)		✓
Cab access platform, 600 mm (23'6")		✓
Cab access platform, narrow		✓
2D E-Fence (cab avoidance)	✓	
360-degree view camera		✓
Inspection lighting		✓

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

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www.cat.com www.caterpillar.com

AEXQ2854-04
Replaces AEXQ2854-03
Build Number: 07C
(N Am, Europe,
Turkey, Chile)

