

Cat[®] MH3024 Material Handler

We know that when it comes to material handling equipment, your success depends on productivity and low operating costs. The Cat[®] MH3024 is a purpose-built material handler that will provide you with the superior performance you need for your toughest waste and scrapyard applications. The MH3024 features simple-to-use technologies, a redesigned cab for enhanced comfort, and more boom options to match your work. Combine these features with up to 10% lower operating costs and up to 20% greater swing torque, and you have a safe, quality, and reliable product to take on the wide variety of challenges you face each day.

Not all features are available in all regions. Consult your Cat dealer for specific configurations available in your region.

High Performance with Lower Fuel Consumption

- Use up to 10% less fuel versus the previous model with no impact on your productivity.
- Get the job done faster with up to 20% greater swing torque.
- The C4.4 engine can run on biodiesel up to B20 and meets EU Stage IIIA and U.S. EPA Tier 3 emission standards.
- The advanced electro-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.
- Program and store your preferred power mode and joystick settings using your operator ID. The machine will automatically remember your selections, reducing operator stress and fuel consumption.
- The Cat App helps you manage fleet location, hours, and maintenance schedules; it also alerts you for required maintenance and even allows you to request service from your local Cat dealer.
- Product Link[™] comes standard so you can remotely monitor machine health, location, hours, and fuel consumption on demand.

Versatility Keeps You Productive and Profitable

- Match your machine to your application. Multiple configurations allow you to customize your machine to your needs.
- Equip your MH3024 with an optional 15 kW generator for magnet operation. Generator controls are fully integrated into the cab monitor.
- Expand your work capabilities with attachments for a variety of applications.

Work in Comfort in the All-New Cab

- The Deluxe seat is heated and air adjustable.
- The cab has a wide seat that adjusts for operators of all sizes.
- Control the machine comfortably with easy-to-reach controls.
- 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.
- Use the standard radio's USB ports and Bluetooth® technology to connect to personal devices.



Reliability and Durability You Can Count On

- 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.
- Work up to 3000 m (9,840 ft) above sea level without derating.
- Don't let the temperature stop you from working. The material handler has a standard high-ambient temperature capability of 52°C (125°F) and cold start capability of -18°C (0°F).
- Auto warm up speeds up hydraulic oil warming in cold temperatures and helps prolong the life of components.

Safety

- Cab Avoidance helps you avoid contact between your attachment and the cab.
- Standard E-Fence prevents your machine from moving outside operator-defined parameters.
- Keep your machine secure with Operator ID. Use your PIN code on the monitor to enable the push button starting feature.
- Access all daily maintenance points from ground level no need for you to climb on top of the machine.
- Enjoy great all-around visibility with the help of smaller cab pillars, larger windows, and a flat engine hood design. Rearview and sideview cameras are standard along with optional 360-degree visibility system.
- Standard 1800-lumen LED lights on the chassis, boom, stick, and cab illuminate your surroundings for a safer work environment.
- Thicker high-impact and impact-resistant windshields fulfill EN356 P5A standards respectively.
- Cab air pre-filtration reduces dust entry and air contamination. Upgrade to the optional Advanced Cabin Filtration system for additional protection against harmful particles.
- Joystick steering eliminates steering column, improving front visibility and increasing cab entrance width. There is an option for a steering wheel for operators who prefer it.
- New service platform design provides easy, safe, and quick access to the upper service platform. The service platform steps use antiskid punch plate to prevent slipping.
- The standard hydraulic lockout lever isolates all hydraulic and travel functions in the lowered position.
- Optional Falling Object Guard System (FOGS) provides protection from falling and flying debris.
- Ground-level shutoff switch stops all fuel to the engine when activated and shuts down the machine.
- Boom and stick lowering check valves prevent reverse flow, keeping your front linkage securely in place should the hydraulic system unexpectedly lose pressure.

Superior Serviceability

- Track your machine's filter life and maintenance intervals via the in-cab monitor.
- Change all fuel filters at a synchronized 1,000 hours.
- Expect the new air intake filter with cyclone precleaner to last up to 1,000 hours.
- The new 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, electrically driven cooling fans run only when needed; you can program intervals, so they automatically reverse to keep cores clean without interrupting your work.
- S·O·SSM ports simplify maintenance and allowing for quick, easy extraction of fluid samples for analysis.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
BOOMS AND STICKS			ENGINE		-
7.45 m (24'5") Straight MH boom		\checkmark	C4.4 engine	✓	
6.4 m (21') Straight MH boom		\checkmark	One-touch low idle with automatic engine	✓	
5.0 m (16'5") Drop Nose MH stick		\checkmark	speed control		
4.3 m (14'1") Straight MH stick		\checkmark	Automatic engine shutdown	\checkmark	
САВ			52°C (125°F) high-ambient capability	\checkmark	
Advanced sound-suppressed TOPS cab	✓		-18°C (0°F) cold start capability	\checkmark	
(ISO 12117-2 compliant)			Electric fuel priming pump	\checkmark	
Deluxe cab: air suspension heated seat, 10" (254 mm) touchscreen monitor	✓		Double element air filter with integrated precleaner	√	
Keyless push-to-start engine control	\checkmark		On-demand electric cooling fans with	\checkmark	
Tilt-up left-side console	\checkmark		auto-reverse function		
Fixed one-piece laminated windshield and	\checkmark		HYDRAULIC SYSTEM		
roof window (P5A glass)			Electric main control valve	\checkmark	
LED dome lights	\checkmark		Automatic hydraulic oil warm up	\checkmark	
CAT TECHNOLOGY			Automatic swing brake	\checkmark	
Cat Product Link	\checkmark		Separate dedicated swing pump	\checkmark	
2D E-fence and cab avoidance	\checkmark		Boom and stick lowering check valves	\checkmark	
Remote flash and services capability	\checkmark		Medium pressure auxiliary circuit	\checkmark	
ELECTRICAL SYSTEM			Element type main hydraulic filter	\checkmark	
Roading and indicator lights at front and rear	\checkmark		SmartBoom™	√ √	
Maintenance-free batteries	✓		Heavy lift mode	V	
LED left-hand-side, right-hand-side and		✓	SAFETY AND SECURITY		
rear lights for cameras installed on chassis			Rear- and right-side-view cameras	\checkmark	
Centralized electrical disconnect switch	✓		Travel alarm		✓
Programmable time delay LED working	\checkmark		Secondary engine shutoff switch	✓	
lights			UNDERCARRIAGE AND STRUCTURES		
Electrical refueling pump		\checkmark	2.75 m (9'0") wide undercarriage		\checkmark
SERVICE AND MAINTENANCE			2.99 m (9'10") wide undercarriage		\checkmark
Automatic lubrication system for	\checkmark		4200 kg (9,250 lb) counterweight		\checkmark
implement and swing system			4700 kg (10,350 lb) counterweight		\checkmark
S•O•S sampling ports	\checkmark		Push blade		\checkmark
			10.00-20 dual solid rubber tires		\checkmark
			11.00-20 16 PR dual tires		\checkmark

Secondary engine shutoff switch	\checkmark	
UNDERCARRIAGE AND STRUCTURES		
2.75 m (9'0") wide undercarriage		\checkmark
2.99 m (9'10") wide undercarriage		\checkmark
4200 kg (9,250 lb) counterweight		\checkmark
4700 kg (10,350 lb) counterweight		\checkmark
Push blade		\checkmark
10.00-20 dual solid rubber tires		✓
11.00-20 16 PR dual tires		✓
All wheel drive	\checkmark	
Automatic brake/axle lock	\checkmark	
Creeper speed	\checkmark	
Heavy-duty axles, advanced disc brake system, and travel motor with adjustable braking force	\checkmark	
Lockable, oscillating front axle with remote greasing point	✓	

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

For additional information and additional regional offerings, refer to the Technical Specifications brochure available at www.cat.com or your Cat dealer.

Technical Specifications

Engine		
Engine Model Cat C4.4		
Engine Power – ISO 14396:2002	129 kW	174 hp
Net Power – ISO 9249:2007	128 kW	171 hp
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	4.4 L	269 in ³

• The net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system, and alternator.
Meets EU Stage IIIA and U.S. EPA Tier 3 emission standards..

Transmission			
Maximum Travel Speed (with steering wheel)	20 km/h	12.4 mph	
Maximum Travel Speed (with joysticks)	15 km/h	9.3 mph	
Drawbar Pull	127 kN	28,550 lbf	
Maximum Gradeability 65%			

Hydraulic System		
Main System – Maximum Flow – Implements	306 L/min	81 gal/min
Maximum Pressure – Implements	37 000 kPa	5,366 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	39 000 kPa	5,656 psi

Machine Weights			
Maximum Operating Weight	26 500 kg	58,420 lb	
• Operating weight includes full fuel tank, operator, 1400 kg (3,086 lb) work tool. Weight varies depending on configuration.			

Service Refill Capacities			
Fuel Tank Capacity	350 L	92.5 gal	
Cooling System	36 L	9.5 gal	
Engine Oil	13 L	3.4 gal	
Hydraulic Tank	155 L	40.9 gal	
Hydraulic System (including tank)	345 L	91.1 gal	
Rear Axle (differential)	14 L	3.7 gal	
Steering Axle (differential)	10.5 L	2.8 gal	
Final Drive (each)	2.5 L	0.7 gal	
Powershift Transmission	2.5 L	0.7 gal	

Air Conditioning System

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.05 kg of refrigerant, which has a CO₂ equivalent of 1.502 metric tonnes.

Swing Mechanism		
Swing Speed	8.2 rpm	
Maximum Swing Torque	58 kN∙m	42,631 lb-ft

Dimensions			
Boom MH Boom 7.45 m (24'		5 m (24'5")	
Stick	Drop Nose 5.0 m (16'5")		
Undercarriage (wide)	3000 mm	9'10"	
Shipping Height with FOGS	3350 mm	11'0"	
Shipping Length	10 670 mm	35'0"	
Shipping Length (with push blade)	11 130 mm	36'6"	
Machine Length	5290 mm	17'4"	
Machine Length (with push blade)	5740 mm	18'10"	
Tail Swing Radius	2600 mm	8'6"	
Counterweight Clearance	1300 mm	4'3"	
Cab Height – Lowered	3350 mm	11'0"	
Cab Height – Lowered with FOGS	3350 mm	11'0"	
Cab Height – Raised	5750 mm	18'10"	
Cab Height – Raised with FOGS	5750 mm	18'10"	
Wheel Base	2750 mm	9'0"	
Shipping Width	2990 mm	9'10"	
Ground Clearance	320 mm	1'1"	
Undercarriage Length	5300 mm	17'5"	
Undercarriage Length (with push blade)	5740 mm	18'10"	
Upper Frame Width (including handrails)	2540 mm	8'4"	

Working Ranges			
Boom MH Boom 7.45 m (24'5")			
Stick	Drop Nose 5.0 m (16'5")		
Maximum Height	13 030 mm	42'9"	
Minimum Dump Height	4520 mm	14'10"	
Maximum Reach	12 010 mm	39'5"	
Maximum Reach at Ground Line	11 870 mm	38'11"	
Maximum Depth	3010 mm	9'11"	
Boom Pin Height	9260 mm	30'5"	



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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PEDJ0891-00 (01-2022) **Build Number: 05A** (Afr-ME, CIS, SE Asia, S Am)

