MH3024

Wheel Material Handler

2018

Engine		
Engine Model	Cat® C7.1 ACERT™	
Emissions	U.S. EPA Tier 4 Final	
Power (Maximum)		
ISO 9249 at 1,700 rpm	126 kW	169 hp
ISO 9249 at 1,700 rpm (metric)		171 hp
ISO 14396 at 1,700 rpm (gross)	129.4 kW	174 hp
ISO 14396 at 1,700 rpm (gross) (metric)		176 hp

Weights		
Operating Weight with Work Tool	21 485-24 980 kg	47,370-55,070 lb
Working Ranges (MH boom, stick 4900 mm)		
Maximum Reach (stick pin)	11 005 mm	36'1"
Maximum Height (stick pin)	12 065 mm	39'7"
Drive		
Maximum Travel Speed	25 km/h	15.5 mph

Introduction

We know that when it comes to material handling equipment, your success depends on high productivity and dependable performance. The MH3024 offers a great compromise between the agility, versatility and performance of a wheeled excavator and the stability, efficiency and power needed to cope with harsh environments and applications of industrial, scrap, waste recycling and bulk handling operations, which call for safe, quality and reliable products, while generating a low operating cost to the owner.

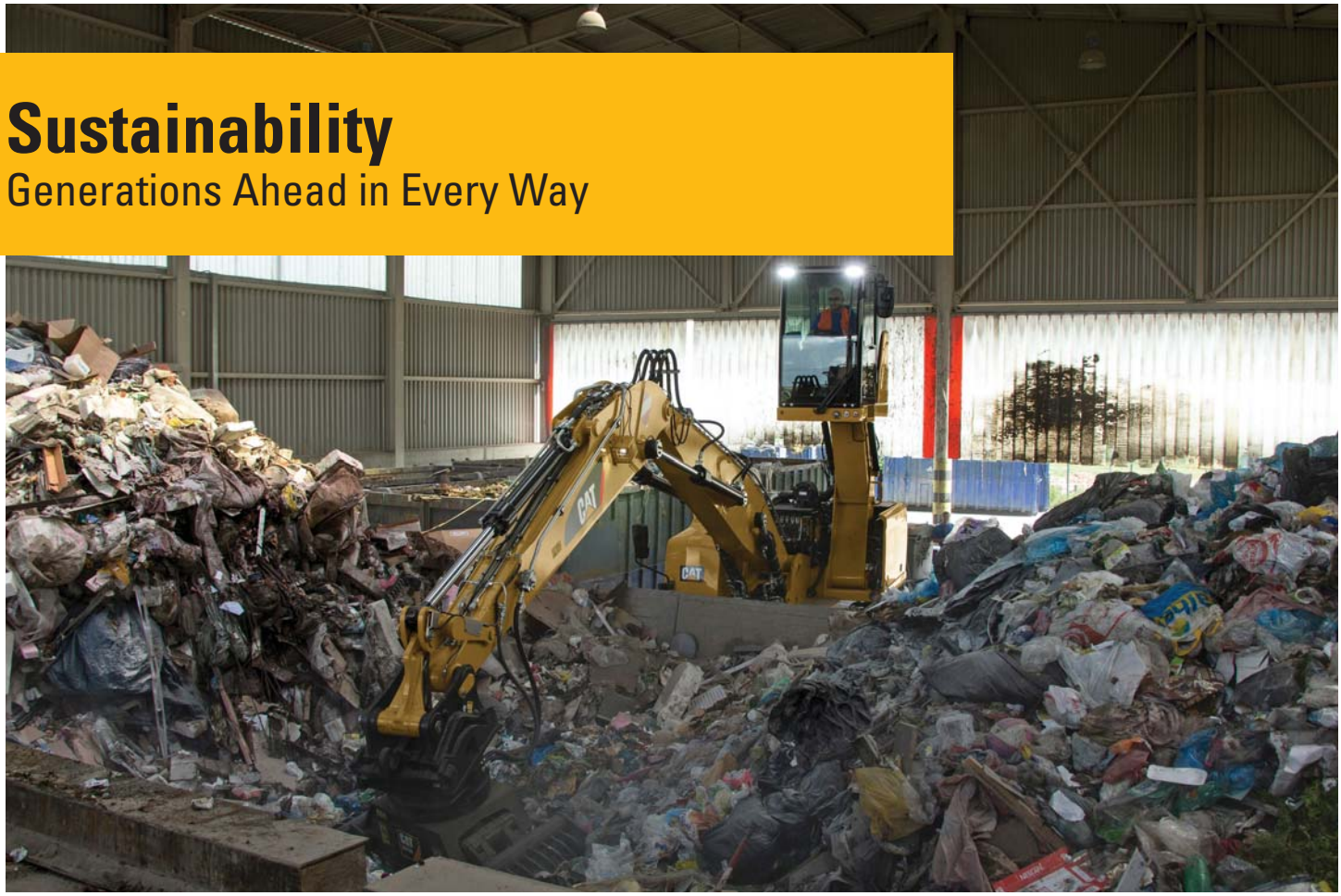
Contents

Our wheel material handlers are here to help you take on the wide variety of challenges you face every day, more easily and at a lower cost.

Commitment from the Ground Up.

Sustainability

Generations Ahead in Every Way



Fuel Efficiency and Reduced Exhaust Emissions

The engine meets Tier 4 Final emission standards, is powerful and efficient, with an optimized 10% fuel consumption improvement versus the previous series and no impact on your productivity. This means less resource consumption and fewer CO_2 emissions.

Transparent Technologies and Longer Service Intervals

- The Eco Mode, Auto Engine Speed Control and Engine Idle Shutdown help further reduce your overall fuel consumption.
- Product Link™ allows remote monitoring of the machine and helps improve overall efficiency.
- You Cat dealer can help extend service intervals, meaning fewer fluids and disposals, all adding up to lower costs.

Biodiesel and Biodegradable Hydraulic Oil

- The MH3024 has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 10 ppm of sulfur or less or up to B20 biodiesel fuel blended with ULSD.
- Cat BIO HYDO™ Advanced HEES™ reduces the impact on the environment.

Cat Certified Used

This program is a key element in the range of solutions offered by Caterpillar and Cat dealers to help customers achieve growth at the lowest cost while eliminating waste. Used equipment is inspected, guaranteed and ready for work and customers will benefit from a Caterpillar warranty.

NEW! Blue Angel Certification

This environmental award – supported by the German Federal Environmental Agency and the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety – recognizes products that protect both people and the environment by reducing noise and emissions.

Engine
Power, Reliability, and Fuel Economy

The Power and Performance You Need

Constant Power Strategy
Provides a quick response to changing loads, while delivering the same amount of power regardless of operating conditions.

A Transparent Emission Solution That Works.
The Cat C7.1 ACERT engine meets today's Tier 4 Final emission standards, and it does so without interrupting your job process. It is designed to be:

- **Transparent:** no operator intervention
- **Durable:** fit for life Diesel Particulate Filter
- **Efficient:** no work interruption, even in case of extended idling time
- **Simple:** minimum maintenance. Longitudinal engine installation, which further simplifies maintenance.

Biodiesel Not a Problem
The engine can run on up to B20 biodiesel fuel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.

Proven Technology
To assure that our technology will meet your expectations for reliable trouble-free service, we subjected these engines and technologies to extensive operating hours of test and validation.

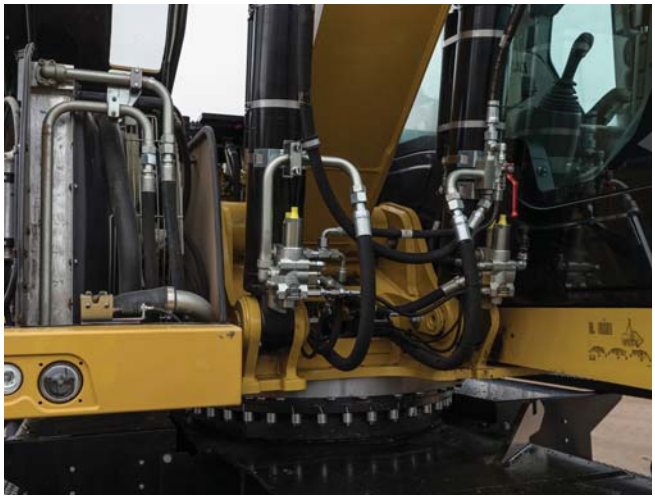
Built-in Fuel Savers That Add Up

- **Automatic Engine Speed Control:** lowers engine speed when it is not needed.
- **Engine Idle Shutdown:** turns the engine off when it's been idling for more than a pre-set amount of time.
- **On-Demand Cooling System:** variable speed and on-demand fan.
- **Enhanced Eco Mode:** reduces engine speed while delivering the same power.
- **Automatic Shift to Travel Mode** when you start driving.
- **Optimized Travel Mode:** travel mode rpm levels are set automatically on-demand only to further reduce fuel consumption.

Hydraulic System

Fast, Precise, Flexible

When it comes to moving material quickly, you need efficient hydraulics – the type the MH Series can deliver.



Efficient Design, Smart and Fast

- **Simple Design** – The hydraulic valve compartment and routings offer a simple and clean design to help ensure durability.
- **Smart Main Hydraulics** – The system allows reducing the load on the engine when not needed, which translates into lower fuel consumption.
- **Dedicated Swing Pump** – A closed hydraulic circuit is dedicated to the swing only. Having two separate pumps, one for the swing and the second for the other functions allows faster and smoother combined movements.

Control Like No Other

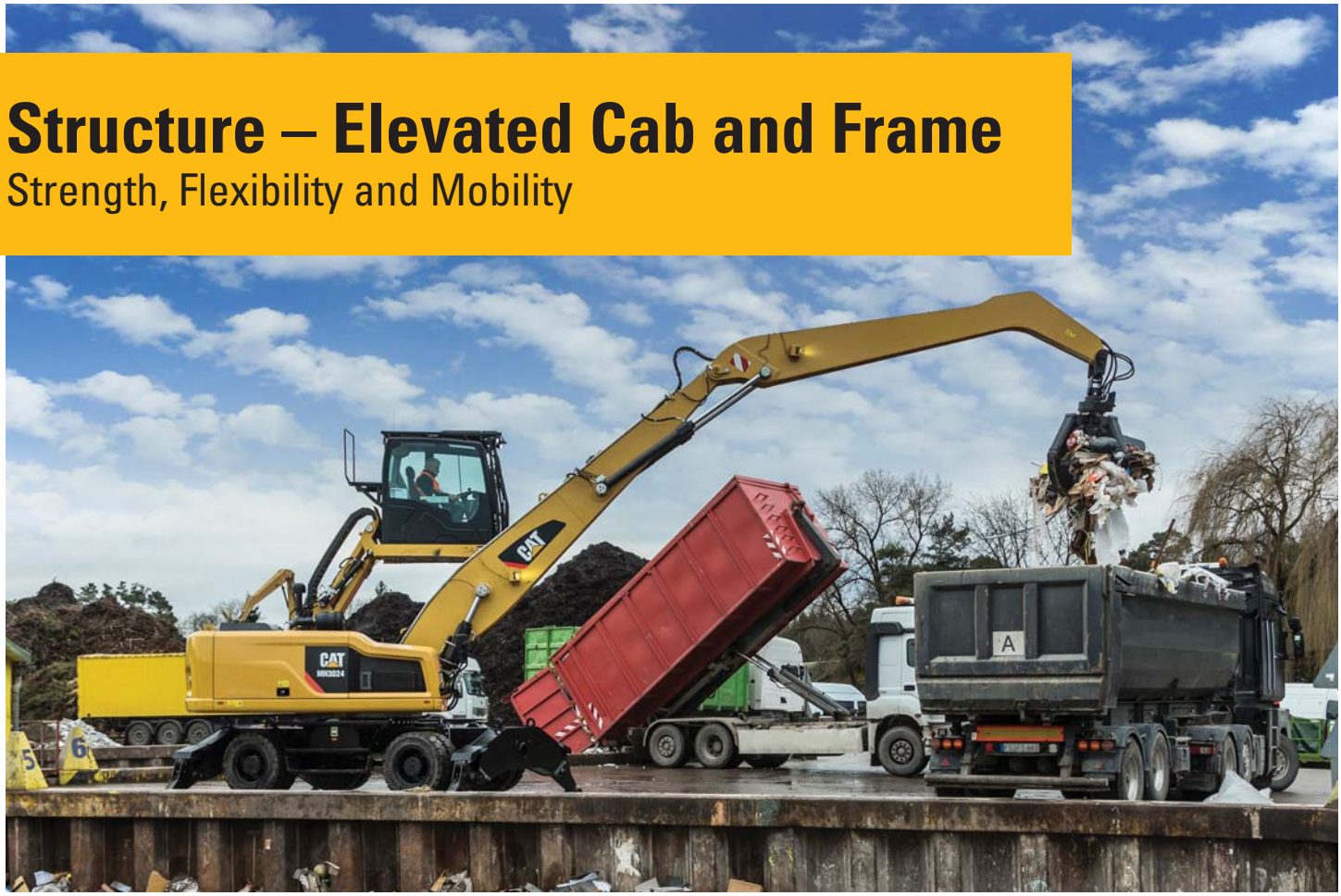
- **Electronic Pump Control** – Controllability is one of the main attributes of the MH3024, and one of the key contributors to this is the Electronic Pump Control (EPC) that's designed to improve response time and precision. It puts flow exactly where you need it, when you need it, which means a much smoother operation and greater efficiency.
- **Adjustable Hydraulic Sensitivity** – Allows you to adjust the aggressiveness of the machine according to the application.
- **Stick Regeneration Circuit** – Increases efficiency and helps enhance controllability for higher productivity of straight sticks with linkage.

Well Balanced Cooling Package

The hydraulic oil cooler is mounted side-by-side with the engine radiator and the air-to-air aftercooler (ATAAC). Located separately from the engine and featuring a well-balanced sizing, the cooling package offers unprecedented up-times even in difficult environments.

Structure – Elevated Cab and Frame

Strength, Flexibility and Mobility



High Visibility – 2400 mm (7'10") Elevated Cab

The hydraulic cab riser is designed to be:

- Stable – Wide lift arms, deep box-sectioned design, strong top and bottom links and retractable hydraulic cylinders used to raise the cab for greater stability.
- Fast – Two heavy-duty hydraulic cylinders provide quick and controlled up and down travel.
- Comfortable – The parallelogram design of the linkage allows the cab to remain level at all ranges of motion. Cab movement is also slowed as it reaches the end of the riser stroke, with no sudden start/stop effect.
- Safe – The cab can be lowered using either a lever inside the cab or one on the frame at ground level in the event of a hydraulic malfunction.

Undercarriage Options

Effective hydraulic line routing, transmission protection and heavy-duty axles make the Cat undercarriages perfect for material handler applications. Three different undercarriages are available to provide the stability you need for your applications: 2.75 m (9'0") standard undercarriage, 2.75 m (9'0") MH undercarriage and 2.99 m (9'10") MH undercarriage.

- **NEW!** Material Handling 2.75 m (9'0") undercarriage with or without pushing blade – The optional push blade mounted ahead of the front stabilizers to be used to push material commonly encountered in waste and millyard applications is also available on the 2.99 m (9'10") MH undercarriage.

Heavy-Duty Axles

The front axle offers wide oscillating and steering angles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance. The drive shaft offers long service intervals.

Advanced Disc Brake System

The disc brake system acts directly on the hub instead of the drive shaft to avoid planetary gear backlash. This minimizes the rocking effect associated with working free on wheels.

Driveline Concept

The driveline design effectively utilizes engine torque and power to provide a comfortable ride with improved smoothness.

Travel mode rpm levels are set automatically and “on-demand only” to further reduce fuel consumption.

SmartBoom™

Allow Your Operator to Fully Concentrate on Production

The unique Cat SmartBoom significantly enhances operator comfort and job efficiency by reducing stress and vibrations transmitted to the machine. Loading is more productive and more fuel efficient as the return cycle is reduced while the boom down function does not require pump flow.

Front Linkage

No Compromise on Durability

You know that a material handler works only as good as its front linkage is able to handle the job. The MH3024's booms and sticks are purpose built for the loads encountered in material handling applications.

MH Booms

MH boom includes high pressure hydraulic lines for opening and closing functionality and medium pressure lines for implement rotation.

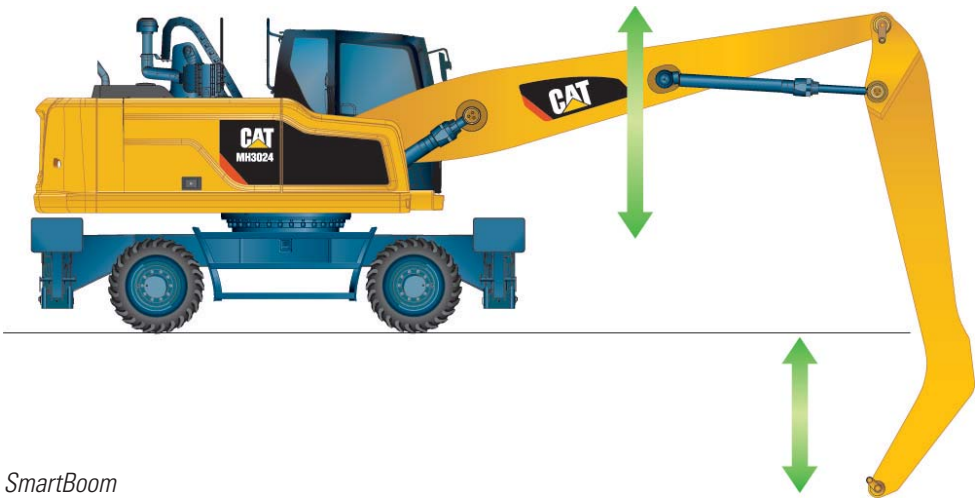
MH Sticks

MH sticks are equipped with high and medium pressure auxiliary lines. The 4900 mm (16'1") Drop Nose Stick offers the reaching and lifting capabilities required for typical MH applications, while the 4200 mm (13'9") Straight Stick is the best solution when additional work tool functionality is needed.

Special Applications

Our material handlers offer the ability to combine the hydraulic cab riser with a traditional excavator front linkage. This combination has been proven in transfer station, mining, and millyard applications.

Digging sticks are available in combination with a variable adjustable (VA) or one-piece boom.



SmartBoom

Smart Features
Easier than Ever

Joystick Steering (Optional)
Keep both hands on your joysticks even when you need to reposition the machine while simultaneously moving the implements.

Swing and Auto Travel Lock
No need for the operator to bend to engage the swing lock pin.
- Just press a button,
- Align the upper to the lower frame,
- Enjoy the ride: a green indicator confirms the swing and the implements have been automatically locked.
- The swing lock can be applied independently from the implements lock at low speed (below 5 km/h [3.1 mph])

Integrated Pin Code
No need to buy an optional security system to protect your equipment against theft.
- The pin code is integrated into the monitor (standard)
- Entering the right code allows the engine to start

The Machine Security System (MSS – optional) adds even more protection when needed.

Cruise Control
No need to press the pedal all the time.
- Choose the very speed you wish
- Press the quick access button on the monitor
- Enjoy the ride

Load and Go Auto Axle Lock
Presses the Pedal for You, Reducing the Number of Actions You Need to Do

The machine automatically detects when the service brake and axle need to be locked (like when working), or unlocked (roading), hence removing the need for the operator to systematically press the pedal. Brake and axle are released automatically by pressing the travel pedal again.

Premium Comfort
Keeps Operators Productive All Shift Long

Designed for the operator, our cabs are unique.

Ergonomic Layout
- Frequently used switches are centralized, kept to the minimum and ideally located close to the joysticks.
- Storage compartments are useful … when well designed. Several areas provide sufficient room to store a hard hat, a drink, phone, or keys.

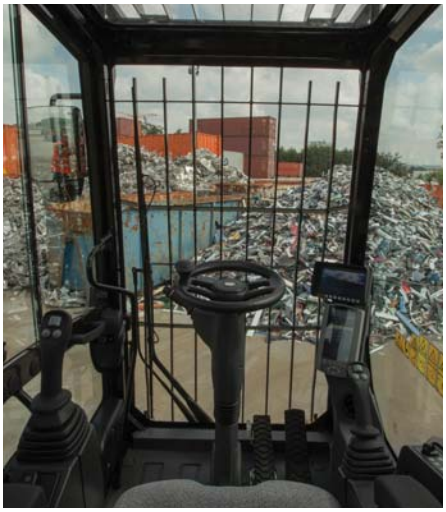
Comfortable Seat Options
Our seats provide all the comfort needed for a long day of work, including FULL adjustment. All seats are heated and air suspended. Automatic weight adjustment and ventilated seats are available.

Safety Is Not Optional
TOPS cabs, seat belt alarm, safety lever, sideview camera … among others.

Details That Make the Difference
Have a look at the cab; you will see it is through details that we improve pleasure of operating.

Smart Controls to Reduce Fatigue
- Features like SmartBoom or joystick steering will be precious to increase your productivity.
- New technologies that work transparently like the swing and auto travel lock or the automatic brake and axle lock, reduce the number of tasks you need to do.

Plug, Charge and Play Your Devices
- The 12V 10A power supply socket is conveniently located for charging your laptop, or a tablet.
- A CD/MP3 radio with speakers and USB port is available.



Simplicity and Functionality
For Ease of Operation

A Cab Just for You – Fully Adjustable
- Seat armrests, in height and angle
- Steering column adjustment, not only tilting fore/aft but also in height
- Hydraulic sensitivity of the machine to make it more or less aggressive
- Joystick and left pedal controls assignments: can be set up as desired and per tool
- Optional advanced joystick offering more controls (two sliders, five buttons each)
- Automatic air conditioning
- Optional heated mirrors are now also electrically adjustable from the cab

Incredibly Low Sound Levels, Less Fatigue
Increased cab pressure, preventing from dust entry, combined with the cab design contributes to reducing sound.

Outstanding Visibility: See the difference!
- All glass areas have been drastically increased
- Standard LED working lights and halogen front roading lights
- Standard LED dome light
- Standard rearview AND sideview wide angle cameras
- Wide angle mirrors for a better visibility even down to the ground
- Parallel intermittent (four speeds) wipers covering the whole windshield

Standard LED Lights for BOTH Cameras to See What's Going on Around, Day or Night
The rear camera is integrated into the counterweight for enhanced protection.

Split-Screen View of BOTH Cameras on the Same Monitor
The views from both cameras are displayed side by side on the additional wide color monitor for better visibility at first glance.

Large Color Machine Monitor
Easy to read and in local language, the high resolution LCD monitor will keep you aware of any important information. "Quick Access" buttons allow a quick selection of favorite functions. The tool select function lets you preset up to ten different hydraulic attachments for quick tool changes.

Serviceability
When Uptime Counts

Convenient Access Built In

You can reach routine maintenance items like fuel and engine oil filters and fluid taps at ground level while fuel and DEF tank are accessible from the safety of the slip-resistant new service foldable step. Compartments feature wide composite service doors, designed to be more resistant to shocks, which all include gas struts to facilitate the opening.

A Smart Design for Any Temperature

The side-by-side coolers and axial fan design allows greater cooling performance. The system is completely separated from the engine compartment to reduce noise and heat, and all radiators are gathered in the same compartment while featuring easy-to-clean cores with a tilting device that requires no tool to unlock.

- The optional Cooling Protection Package includes a fine mesh for enhanced radiator protection and an engine air pre-cleaner.
- The optional Waste Handling Package adds a reversing fan rotation function with adjustable intervals and a vibrating grill on the cooling hood. This vibration together with the reversed airflow direction will shake accumulated particles off the mesh.

A Fresh Idea

Ventilation inside the cab allows outside air to enter through a fresh air filter. The filter is located on the side of the cab to make it easy to reach, and it is protected by a lockable door that can be opened with the ignition key.

Lube and Fuel Options

An automatic lubrication system is a time-saving standard feature for greasing the whole uppercarriage. Greasing points for the undercarriage are kept to a minimum and grouped. The drive shaft extends greasing intervals from 500 hours to 1,000 hours and allows simultaneous greasing with the lower axle bearing. An electric refueling pump is also available. The hose is stored in a dedicated tray, for more cleanliness. Add in the new electric lift pump removing the need to prime the system manually, the standard fuel and water separator and you get a machine that does the fastidious maintenance work for you.

Keep it simple.

Integrated Technologies
It Pays to Know

Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

EQUIPMENT MANAGEMENT

Equipment Management – increase uptime and reduce operating costs.

PRODUCTIVITY

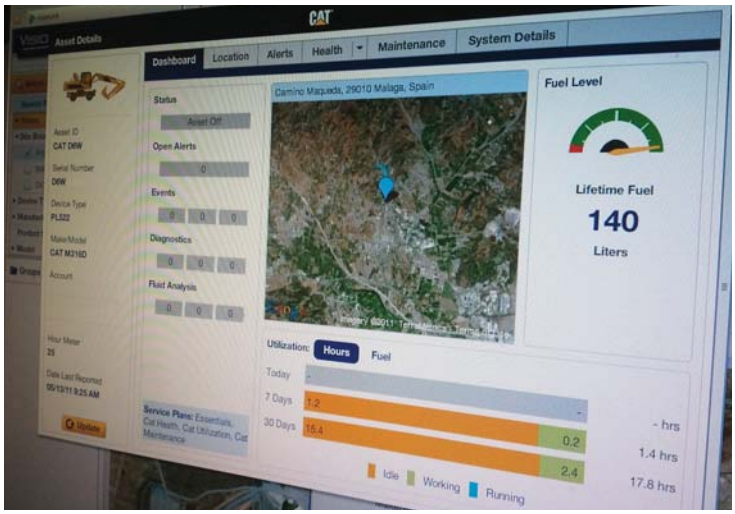
Productivity – monitor production and manage job site efficiency.

SAFETY

Safety – enhance job site awareness to keep your people and equipment safe.

Link

Link technologies provide wireless capability to machines to enable two-way transfer of information.



Manage Your Machine Remotely

Cat Product Link is a system that is deeply integrated into the machine monitoring system to take the guesswork out of managing your equipment. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes and shares it with you through VisionLink® to help you maximize efficiency, improve productivity, and lower operating costs.

Complete Customer Care
Your Cat Dealer Will Support You Like No Other

Support You Can Count On

From helping you to choose the right machine to knowledgeable on-going support, Cat dealers provide the best-in-sales and services.

- **Best long-term investment** with financing options and services
- **Productive operation** with training programs
- **Preventive maintenance** and guaranteed maintenance contracts
- **Uptime**, with best-in-class parts availability
- **Repair, rebuild, or replace?** Your dealer can help evaluate the best option.

Work Tool Attachments

Move More, Make More

Optional 15 kW (20 hp) Cat Generator with Solid State Controller

If your work tool or application needs additional power for operation, the MH3024 can come equipped with an optional 15 kW (20 hp) solid state generator. Experience enhanced sorting ability through the proprietary solid state generator control. The genset is capable of producing enough power to operate up to a 1.4 m (4'7") diameter magnet. The optional solid state genset would be placed in the upper frame for ease of maintenance without obstructing other machine components.

The operator friendly material sorting control enables the machine operator to turn the magnet current on and off at quick intervals without initiating the actual “drop” or “reverse current” cycle of the magnet which completely and quickly cleans the material off of the magnet during normal production handling.

This proprietary generator system is designed, sold and serviced by Caterpillar and Cat dealers worldwide.

Attachment Solutions for Industrial and Recycling Applications

When productivity, reliability and stability are important, Cat attachments are the perfect solution.

Productive and Perfectly Matched

Loading and unloading is foundational to your productivity. Grapples are designed for maximum penetration into the pile. The full power of your machine is utilized to provide fast open/close times and powerful closing force. Full, 360° rotation systems allow precise placement. Together, an MH3024 and Cat grapple allow you to move volumes with minimal time and effort.

Built for Severe Material

Cat grapples are built to take on the material you move. Hydraulic components are protected from damage, yet easily accessed for routine maintenance. Areas that dig and penetrate are made of high quality, wear resistant material. Cat grapples last for a positive impact to your bottom line.

Orange Peel Grapples

The perfect solution for scrap yards, recycling plants and transfer stations. These grapples are available with 4 or 5 tines, in capacities from 600 to 1000 L (0.78 to 1.30 yd^3). Several shell choices allow further customization of your grapple to the specific material you work with.

NEW! Grapples can further reduce fuel consumption. They feature reduced weight and improved cycle times. Castings in place of welded structures in high stress areas increase the durability of your equipment.

Waste Handling Grapples

The dedicated waste handling grapple has been specifically designed to offer high volume for maximum loads and proven fuel consumption.

Get the Most from Your Machine

You can easily expand all the possibilities the MH3024 offers by utilizing a straight stick linkage and combining it with any of the variety of Cat attachments for excavators. In this case, a quick coupler will bring the ability to quickly change attachments.

Ten hydraulic pump flow and pressure settings can be preset within the monitor, eliminating the need to adjust the hydraulics each time a tool is changed.

Safety
Your Safety Is NOT Optional

Embedded Features

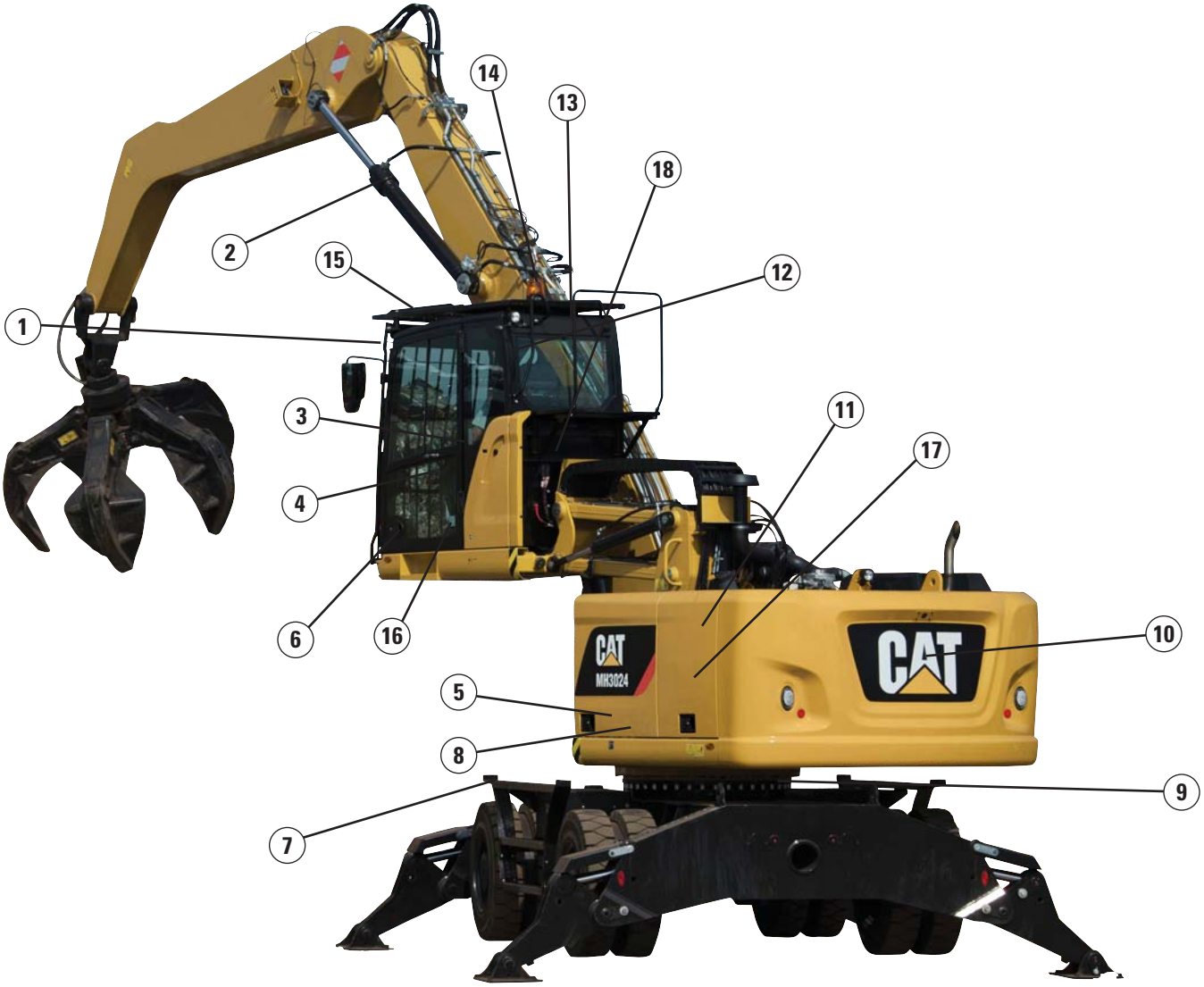
Smart embedded devices help enforce safe behavior:

- Safety seat belt and warning indicators (monitor)
- Automatic swing lock
- Automatic brake and axle lock
- Safety lever, preventing exit when the implements are not locked out
- Secondary shut off switch and battery disconnect switch
- Travel alarm
- Lowering check valves
- Quick coupler control switch, ISO 13031 compliant

Cab Ingress

We bring a solution to allow you to safely climb into the cab:

- Three long access steps, aligned with the cab entry
- Additional step integrated into the skirt, directly below the cab door
- Anti-skid plates on all walkways and steps reducing slipping hazards
- Tiltable console to make sure the way in and out is free of obstacles
- **NEW!** Direct access to the cab when it is not aligned with the chassis through optional steps on the front and rear of the undercarriage.



1) *Laminated windshield and skylight window*
2) *Lowering check valves*
3) *Safety seat belt indicator*
4) *Safety lever*
5) *Emergency shut-off switch*
6) *Automatic brake and axle lock*
7) *Punched, anti-slippery walking surfaces*
8) *Battery disconnect switch*
9) *Swing and implement electronic lock*
10) *Adjustable travel alarm*
11) *All doors equipped with gas strut cylinders*
12) *Emergency hammer and exit*
13) *Sound proofing*
14) *Beacon available*
15) *TOPS cab and top/front guards compatibility*
16) *Safety lever to lower the cab, either from the ground or directly from the cab*
17) *Foldable service platform*
18) *Advanced Cab Filtration System (optional)*

Safety Options for Specific Applications

- **Impact Resistant One-Piece Windshield and skylight**, 10 mm (0.4") thick, fulfills EN356 P5A standards.
- **High Impact Resistant fixed Windshield (two-parts) and skylight**, 26 mm (1") thick, fulfills EN356 P8B standards.
- **Advanced Cab Filtration System** – A cab filtration package reduces dust entry and air contamination. It includes:
  - an integrated air pre-cleaner, which also extends filters life
  - a fresh air filtration system with H13 and ABEK1 Hg filters against odor and gas
  - a recirculation filtration system, with a H13 filter

MH3024 Wheel Material Handler Specifications

Engine

Engine Model	Cat C7.1 ACERT [1]	
Ratings	1,550 rpm	
Engine Gross Power (Maximum)		
ISO 14396	129.4 kW	174 hp
ISO 14396 (metric)		176 hp
Net Power (Rated) [2]		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)		171 hp
80/1269/EEC	126 kW	169 hp
Net Power (Maximum)		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)		171 hp
80/1269/EEC	126 kW	169 hp
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in^3
Maximum Torque at 1,400 rpm	830 N·m	612.2 lbf-ft
Number of Cylinders	6	

[1] Meets Tier 4 Final emission standards.

[2] Rated speed 1,550 rpm. Constant power from 1,500-1,550 rpm.

- Net power advertised is the power available at the flywheel when engine is equipped with air cleaner, CEM exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed.
- No derating required up to 3000 m (9,842 ft) altitude. Automatic derating occurs after 3000 m (9,842 ft).

Transmission

Forward/Reverse		
1st Gear	10.0 km/h	6.2 mph
2nd Gear	25.0 km/h	15.5 mph
Creeper Speed		
1st Gear	3.0 km/h	1.9 mph
2nd Gear	10.0 km/h	6.2 mph
Drawbar Pull	125 kN	28,101 lbf
Maximum Gradeability at 23 500 kg (51,810 lb)	65%	

Swing Mechanism

Maximum Swing Speed	8.1 rpm	
Maximum Swing Torque	54 kN·m	39,828 lbf-ft

Undercarriage

Axle Ground Clearance*	325 mm	12.8 in
Maximum Steering Angle	35.0°	
Oscillation Axle Angle	±5.0°	
Minimum Turning Radius		
Outside of Tire	6800 mm	22.3 ft
End of VA Boom	7600 mm	24.9 ft
End of One-Piece Boom	9000 mm	29.5 ft
End of MH Boom (with 4.9 m drop nose stick)	8800 mm	28.9 ft

*Dimension for standard and MH undercarriage. For machines fitted with 11.00-20 pneumatic tires, add 35 mm (1.4 in).

Service Refill Capacities

Fuel Tank (total capacity)	330 L	87.2 gal
Diesel Exhaust Fluid Tank	34.5 L	9.1 gal
Cooling System	46.9 L	12.4 gal
Engine Crankcase	18.5 L	4.9 gal
Rear Axle Housing (differential)	14 L	3.7 gal
Front Steering Axle (differential)	10.5 L	2.8 gal
Final Drive	2.5 L	0.7 gal
Powershift Transmission	2.5 L	0.7 gal

MH3024 Wheel Material Handler Specifications

Weights

Operating Weights*	23 160-23 665 kg	49,494-52,172 lb
MH Boom (6.4 m/21'0")		
MH Undercarriage 2.75 m (9'0"), Straight (4200 mm/13'9") Stick	23 565 kg	51,952 lb
MH Undercarriage 2.75 m (9'0"), Drop Nose (4900 mm/16'1") Stick	23 160 kg	51,059 lb
MH Undercarriage 2.99 m (9'10"), Straight (4200 mm/13'9") Stick	23 665 kg	52,172 lb
MH Undercarriage 2.99 m (9'10"), Drop Nose (4900 mm/16'1") Stick	23 260 kg	51,279 lb
Standard Undercarriage, Straight (4200 mm/13'9") Stick**	23 550 kg	51,919 lb
One-Piece Boom		
Standard Undercarriage**, Industrial Stick (3300 mm/10'10")	21 485 kg	47,366 lb
VA Boom		
Standard Undercarriage**, Digging Long Stick (2800 mm/9'2")	22 340 kg	49,251 lb
Sticks***		
Digging Medium (2500 mm/8'2")**	850 kg	1,874 lb
Digging Long (2800 mm/9'2")**	895 kg	1,973 lb
Industrial (3300 mm/10'10")	515 kg	1,135 lb
Straight (4200 mm/13'9")**	1275 kg	2,811 lb
Drop Nose (4900 mm/16'1")	885 kg	1,951 lb
MH Push Blade (2.75 m/9'0")	705 kg	1,554 lb
MH Push Blade (2.99 m/9'10")	745 kg	1,642 lb
Dozer Blade	850 kg	1,874 lb
Solid Tires (delta vs. standard tires)	950 kg	2,094 lb
Counterweight	4200 kg	9,260 lb

*Operating weight includes solid tires, 4200 kg (9,260 lb) counterweight, full fuel tank, operator, four outriggers undercarriage, attachment (1400 kg/3,086 lb). Weight varies depending on configuration.

**Standard undercarriage with blade and one set of outriggers and dual pneumatic solid tires.

***Includes cylinder, bucket linkage, pins and standard hydraulic lines.

Hydraulic System

Tank Capacity	153 L	40.4 gal
System	345 L	91.1 gal

Hydraulic System: Maximum Pressure

Implement Circuit		
Normal	350 bar	5,076 psi
Heavy Lift	370 bar	5,366 psi
Travel Circuit	350 bar	5,076 psi
Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	210 bar	3,046 psi
Swing Mechanism	310 bar	4,496 psi

Hydraulic System: Maximum Flow

Implement/Travel Circuit	290 L/min	78 gal/min
Auxiliary Circuit		
High Pressure	250 L/min	66.0 gal/min
Medium Pressure	49 L/min	12.9 gal/min
Swing Mechanism	108 L/min	28.5 gal/min

Tires

11.00-20 (dual pneumatic)
10.00-20 (dual solid rubber)

Push Blade

Blade Type	Radial	
Blade Height	920 mm	3'0"
Width	2750 mm, 2990 mm	9'0", 9'10"

MH3024 Wheel Material Handler Specifications

Emissions and Safety

Engine Emissions	Tier 4 Final	
Diesel Exhaust Fluid	Must meet ISO 22241	
Fluids (optional)		
Cat Bio HYDO Advanced	Readily biodegradable	
Bio Diesel up to B20	Meets EN 14214 or ASTM D6751 with EN590 or ASTM D975 standard mineral diesel fuels	
Vibration Levels		
Maximum Hand/Arm		
ISO 5349:2001	<2.5 m/s^2	<8.2 ft/s^2
Maximum Whole Body		
ISO/TR 25398:2006	<0.5 m/s^2	<1.6 ft/s^2
Seat Transmissibility Factor		
ISO 7096:2000-spectral class EM5	<0.7	

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.15 kg (2.54 lb) of refrigerant which has a CO_2 equivalent of 1.645 metric tonnes.

Standards

Operator Protective Structure	
Top/Front Guards	FOPS (Falling Object Protective Structure) meets FOPS criteria ISO 10262:1998 and SAE J1356:2008
Cab/Sound Levels	Meets appropriate standards as listed below

Sound Performance

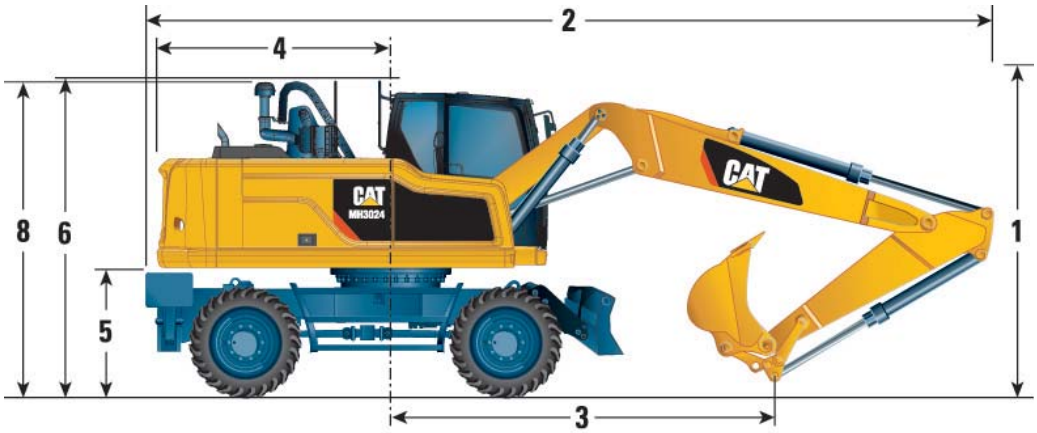
Operator Sound	
ISO 6396:2008	71 dB(A)
Spectator Sound	
ISO 6395:2008	99 dB(A)*

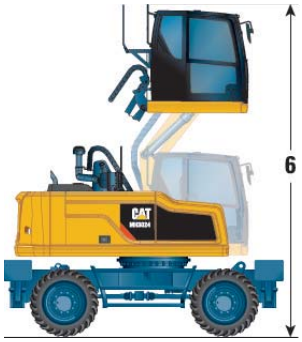
*Noise level is for a machine without the generator.

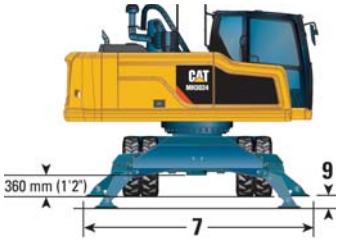
- Operator Sound – The operator sound level is measured according to the procedures specified in ISO 6396:2008, for a cab offered by Caterpillar, when properly installed and maintained and tested with the door and windows closed.
- Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2000/14/EC as amended by 2005/88/EC.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/windows open) for extended periods or in noisy environment(s).

Dimensions – With Standard Undercarriage*

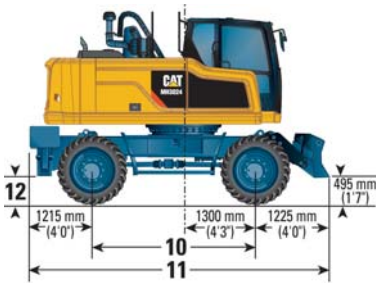
All dimensions are approximate.







Undercarriage with 1 set of outriggers and dozer blade



	Variable Adjustable Boom			One-Piece Boom		
Boom Length	**5260 mm (17'3")**			**5350 mm (17'6")**		
Stick Length	**2500 mm (8'2")**	**2800 mm (9'2")**	**3300 mm (10'10")**	**2500 mm (8'2")**	**2800 mm (9'2")**	**3300 mm (10'10")**
1 Shipping Height with Falling Object Guard (highest point between boom and cab)	3375 mm (11'1")					
2 Shipping Length	8915 mm (29'3")	8890 mm (29'2")	8940 mm (29'4")	9025 mm (29'7")	9025 mm (29'7")	9040 mm (29'8")
3 Support Point	3625 mm (11'11")	3485 mm (11'5")	3270 mm (10'9")	3480 mm (11'5")	3300 mm (10'10")	3070 mm (10'1")
4 Tail Swing Radius	2570 mm (8'5")					
5 Counterweight Clearance	1310 mm (4'4")					
6 Cab Height with Hydraulic Cab Riser						
Cab Lowered – without Falling Object Guard	3245 mm (10'8")					
Cab Lowered – with Falling Object Guard	3375 mm (11'1")					
Cab Raised – with Falling Object Guard	5775 mm (18'11")					
Cab Raised – without Falling Object Guard	5645 mm (18'6")					
7 Overall Machine Width						
Width with Outriggers on Ground	3930 mm (12'11")					
Width over Tires with Outriggers Up	2750 mm (9'0")					
Width with Blade	2750 mm (9'0")					
8 Height of Tray Group Flex	3360 mm (11'0")					
9 Maximum Outriggers Depth	120 mm (4.7")					
10 Wheel Base	2750 mm (9'0")					
11 Undercarriage Length						
With 1 Set of Outriggers Raised and Dozer Blade Raised	5190 mm (17'0")					
12 Undercarriage Clearance	325 mm (1'1")					

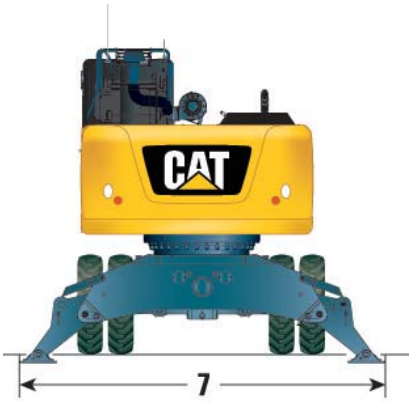
*Standard undercarriage with dozer blade and 1 set of outriggers and dual pneumatic tires.

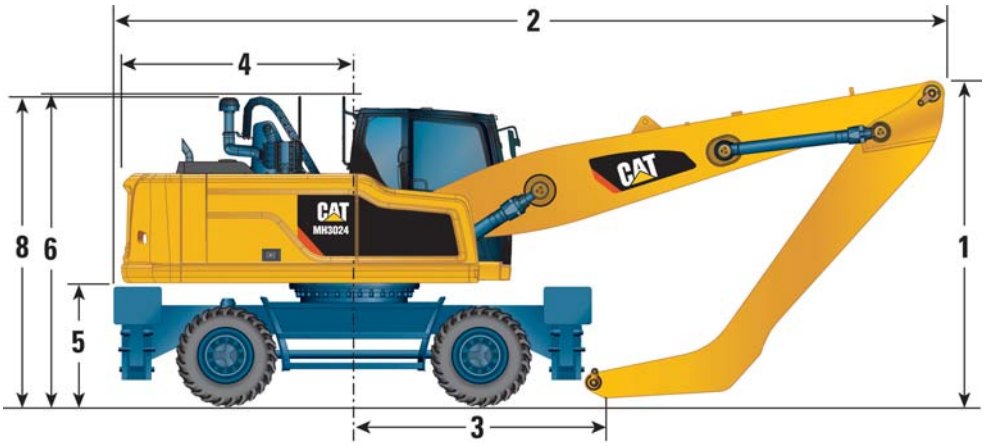
Note: Values are with 11.00-20 pneumatic tires. For machines fitted with solid tires, all vertical dimensions have to be reduced by 35 mm (1.4"). For dimension 3, add 35 mm (1.4").

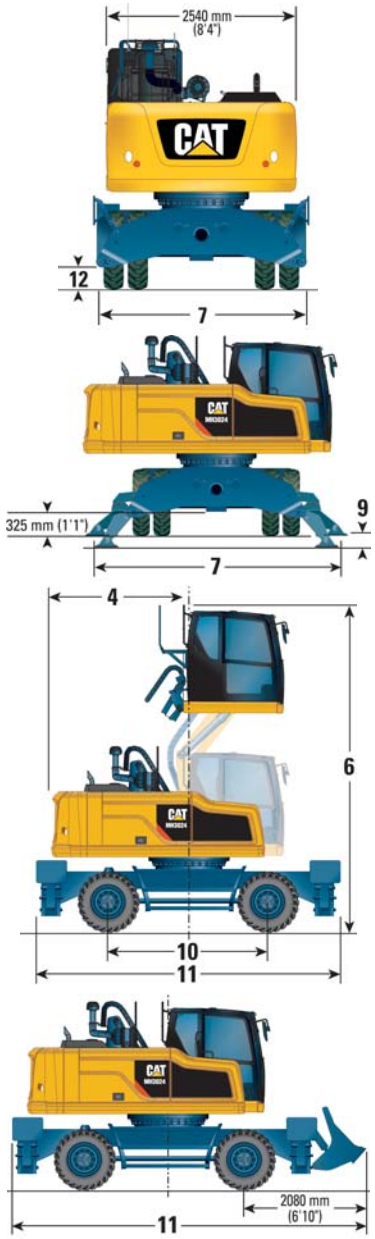
MH3024 Wheel Material Handler Specifications

Dimensions – With MH Undercarriage (with solid tires)*

All dimensions are approximate.







	MH Undercarriage 2.75 m (9'0")		MH Undercarriage 2.99 m (9'10")	
	MH Boom 6400 mm (21'0")			
Stick Length	**4200 mm (13'9")**	**4900 mm (16'1")**	**4200 mm (13'9")**	**4900 mm (16'1")**
Stick Type	**Straight**	**Drop Nose**	**Straight**	**Drop Nose**
1 Shipping Height with Falling Object Guard (highest point between boom and cab)	3340 mm (10'11")	3620 mm (11'11")	3340 mm (10'11")	3620 mm (11'11")
2 Shipping Length	9420 mm (30'11")	9280 mm (30'5")	9420 mm (30'11")	9280 mm (30'5")
3 Support Point	3230 mm (10'7")	2760 mm (9'1")	3230 mm (10'7")	2760 mm (9'1")
4 Tail Swing Radius	2570 mm (8'5")			
5 Counterweight Clearance	1275 mm (4'2")			
6 Cab Height with Hydraulic Cab Riser				
Cab Lowered – without Falling Object Guard	3210 mm (10'6")			
Cab Lowered – with Falling Object Guard	3340 mm (10'11")			
Cab Raised – with Falling Object Guard	5740 mm (18'10")			
Cab Raised – without Falling Object Guard	5610 mm (18'5")			
7 Overall Machine Width				
Width with Outriggers on Ground	4080 mm (13'5")		4360 mm (14'4")	
Width with Outriggers Up	2740 mm (9'0")		2990 mm (9'10")	
Width with the Special Front Push Blade	2750 mm (9'0")		2990 mm (9'10")	
8 Height of Tray Group Flex	3325 mm (10'11")			
9 Maximum Outriggers Depth	120 mm (4.7")		90 mm (3.5")	
10 Wheel Base	2750 mm (9'0")			
11 Undercarriage Length	5250 mm (17'3")			
With MH Undercarriage Front Push Blade	6080 mm (19'11")			
12 Undercarriage Clearance	245 mm (10")			

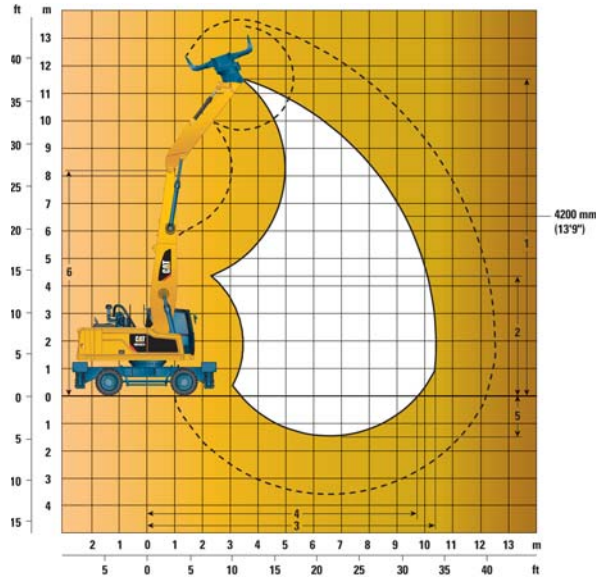
*Dimensions with MH undercarriage, outriggers front and rear, and without work tool.

When the shipping height is over 4 m (13'0"), the stick must be removed for transportation.

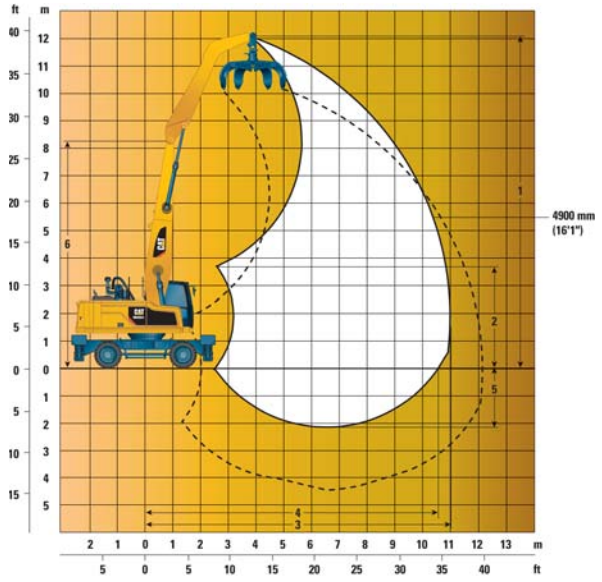
Note: Values are with 10.00-20 solid tires. For machine fitted with 11.00-20 pneumatic tires and MH Undercarriage all vertical dimensions have to be increased by 35 mm (1.4"). For dimension 9 reduce by 35 mm (1.4").

Working Ranges

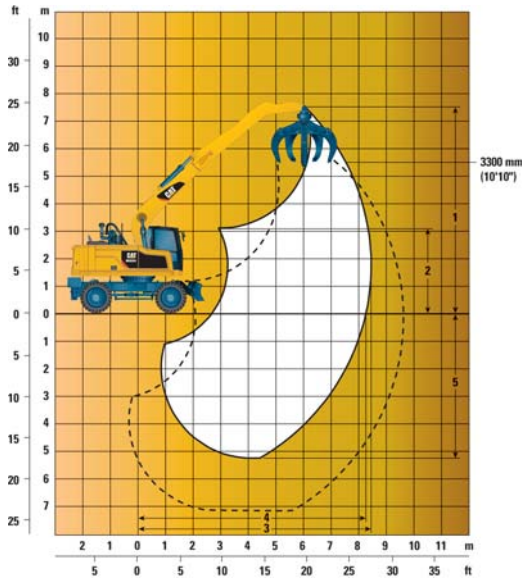
1



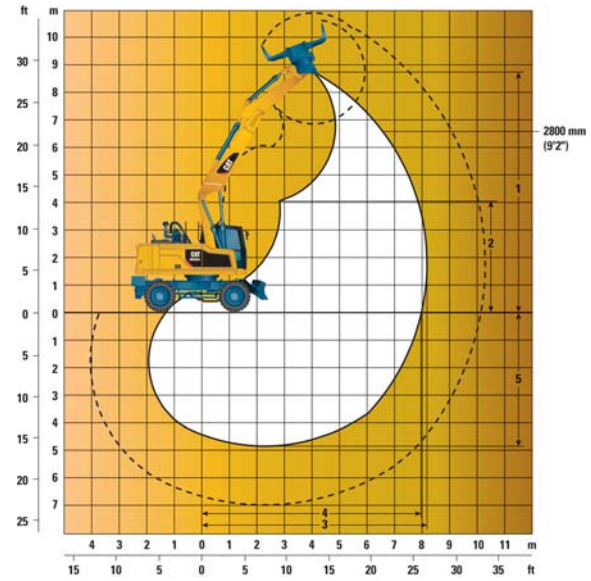
2



3



4



	1	2	3	4
Boom Type	**MH Boom**		**One-Piece Boom**	**Variable Adjustable Boom**
Boom Length	**6400 mm (21'0")**		**5350 mm (17'6")**	**5260 mm (17'3")**
Stick Length	**4200 mm (13'9")**	**4900 mm (16'1")**	**3300 mm (10'10")**	**2800 mm (9'2")**
Stick Type	**Straight**	**Drop Nose**	**Industrial**	**Straight**
1 Maximum Height	11 520 mm (37'10")	12 065 mm (39'7")	7555 mm (24'9")	8715 mm (28'7")
2 Minimum Dump Height	4330 mm (14'2")	3680 mm (12'1")	3140 mm (10'9")	4060 mm (13'3")
3 Maximum Reach	10 345 mm (33'11")	11 005 mm (36'1")	8470 mm (27'10")	8200 mm (26'11")
4 Maximum Reach at Ground Level	9720 mm (31'11")	10 570 mm (34'8")	8275 mm (27'1")	7970 mm (26'2")
5 Maximum Depth	1485 mm (4'10")	2185 mm (7'2")	5245 mm (17'1")	4880 mm (16'0")
6 Boom Pin Height	8235 mm (27'0")		—	—

All dimensions refer to stick nose pin, with solid tires.
These dimensions are independent from the undercarriage type.

MH3024 Wheel Material Handler Specifications

Work Tool Offering Guide*

	Undercarriage	Standard (2.75 m/9'0") Blade and Outriggers Down								MH (2.75 m/9'0") 2 Sets Outriggers Lowered								MH (2.99 m/9'10") 2 Sets Outriggers Lowered							
	Boom Type	One-Piece Boom			VA Boom			MH Boom		One-Piece Boom			VA Boom			MH Boom		One-Piece Boom			VA Boom			MH Boom	
	Stick Length	2500 mm (8'2")	2800 mm (9'2")	3300 mm (10'10")(1)	2500 mm (8'2")	2800 mm (9'2")	3300 mm (10'10")(1)	4200 mm (13'9")(2)	4900 mm (16'1")(3)	2500 mm (8'2")	2800 mm (9'2")	3300 mm (10'10")(1)	2500 mm (8'2")	2800 mm (9'2")	3300 mm (10'10")(1)	4200 mm (13'9")(2)	4900 mm (16'1")(3)	2500 mm (8'2")	2800 mm (9'2")	3300 mm (10'10")(1)	2500 mm (8'2")	2800 mm (9'2")	3300 mm (10'10")(1)	4200 mm (13'9")(2)	4900 mm (16'1")(3)
Material Handling Work Tools																									
Demolition and Sorting Grapple	G315B-D/R																								
	G315B-WH 800 L (1.05 yd^3)																								
	G315B-WH 1100 L (1.44 yd^3)																								
Orange Peel Grapple Horizontal Cylinders (4 or 5 Tines)	GSH15B 400 L (0.52 yd^3)	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	GSH15B 500 L (0.65 yd^3)	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	GSH15B 600 L (0.78 yd^3)	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	GSH15B 800 L (1.05 yd^3)	1.8	1.8	1.8	1.8	1.2	1.8			1.8	1.8	1.8	1.8	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.8	1.8	1.8
	GSH420/GSH520 500 L (0.65 yd^3)	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	GSH420/GSH520 600 L (0.78 yd^3)	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	GSH420/GSH520 750 L (0.98 yd^3)	1.8	1.8	1.8	1.8	1.8	1.8		1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Material Density		1.2 [T/m^3] (2,000 lb/yd^3) (less dense material)/1.8 [T/m^3] (3,000 lb/yd^3) (standard material)																							
Demolition Work Tools																									
Hydraulic Hammer	B20																								
	H115Es																								
	H120Es																								
	H130Es																								
Multi-Processor	MP318 CC Jaw																								
	MP318 D Jaw																								
	MP318 P Jaw																								
	MP318 U Jaw																								
	MP318 S Jaw																								
Pulverizer	P215																								
Scrap and Demolition Shear	S320B																								
	S325B																								
	S340B																								
Pin Grabber Coupler	Cat-PG	These couplers are available for the MH3024 (linkage stick).																							

(1) Industrial Stick
(2) Straight Stick
(3) Drop Nose Stick

Work tool is a match
Pin-on only
Boom mount
Not recommended

*Offerings not available in all areas. Matches are dependent on Wheeled Excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

Demolition and Sorting Grapple: D – Demolition shells; R – Recycling shells; WH – Waste Handling

Lift Capacities

All values are in kg, bucket cylinder and linkage installed, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (4200 kg), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriage
MH (2.75 m)

Boom
One-Piece

Stick
3.3 m Industrial

	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
7500 mm	MH (2.75 m) – stabilizers raised – solid tires													*3400	*3400	*3400	6160
	MH (2.75 m) – stabilizers lowered – solid tires													*3400	*3400	*3400	
6000 mm	MH (2.75 m) – stabilizers raised – solid tires													*3250	*3250	*3250	7310
	MH (2.75 m) – stabilizers lowered – solid tires													*3250	*3250	*3250	
4500 mm	MH (2.75 m) – stabilizers raised – solid tires							*5650	*5650	4650	4400	4400	3400	*3250	*3250	3050	8020
	MH (2.75 m) – stabilizers lowered – solid tires							*5650	*5650	*5650	*4550	*4550	*4550	*3250	*3250	*3250	
3000 mm	MH (2.75 m) – stabilizers raised – solid tires				*8050	*8050	6650	5900	5900	4500	4300	4300	3300	*3350	*3350	2800	8380
	MH (2.75 m) – stabilizers lowered – solid tires				*8050	*8050	*8050	*6450	*6450	*6450	*5600	*5600	*5600	*3350	*3350	*3350	
1500 mm	MH (2.75 m) – stabilizers raised – solid tires				8550	8550	6250	5700	5700	4300	4200	4200	3200	3550	3550	2700	8470
	MH (2.75 m) – stabilizers lowered – solid tires				*9750	*9750	*9750	*7250	*7250	*7250	*5950	*5950	*5950	*3600	*3600	*3600	
0 mm	MH (2.75 m) – stabilizers raised – solid tires	*7000	*7000	*7000	8250	8250	5950	5550	5550	4150	4150	4150	3100	3650	3650	2750	8270
	MH (2.75 m) – stabilizers lowered – solid tires	*7000	*7000	*7000	*10 600	*10 600	*10 600	*7750	*7750	*7750	*6150	*6150	5950	*4100	*4100	*4100	
–1500 mm	MH (2.75 m) – stabilizers raised – solid tires	*9800	*9800	*9800	8100	8100	5850	5450	5450	4050	4100	4100	3100	3900	3900	2950	7770
	MH (2.75 m) – stabilizers lowered – solid tires	*9800	*9800	*9800	*10 500	*10 500	*10 500	*7750	*7750	*7750	*5950	*5950	5900	*4950	*4950	*4950	
–3000 mm	MH (2.75 m) – stabilizers raised – solid tires	*13 450	*13 450	10 550	8100	8100	5850	5450	5450	4050				4550	4550	3400	6900
	MH (2.75 m) – stabilizers lowered – solid tires	*13 450	*13 450	*13 450	*9500	*9500	*9500	*7000	*7000	*7000				*5800	*5800	*5800	
–4500 mm	MH (2.75 m) – stabilizers raised – solid tires	*9900	*9900	*9900	*7200	*7200	5950							*5650	*5650	4650	5470
	MH (2.75 m) – stabilizers lowered – solid tires	*9900	*9900	*9900	*7200	*7200	*7200							*5650	*5650	*5650	

Lift Capacities

All values are in lb, bucket cylinder and linkage installed, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (9,260 lb), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriage
MH (9'0")

Boom
One-Piece

Stick
10'10" Industrial

	Undercarriage configuration	10 ft			15 ft			20 ft			25 ft						ft
25 ft	MH (9'0") – stabilizers raised – solid tires													*7,496	*7,496	*7,496	20
	MH (9'0") – stabilizers lowered – solid tires													*7,496	*7,496	*7,496	
20 ft	MH (9'0") – stabilizers raised – solid tires													*7,165	*7,165	*7,165	24
	MH (9'0") – stabilizers lowered – solid tires													*7,165	*7,165	*7,165	
15 ft	MH (9'0") – stabilizers raised – solid tires							*12,456	*12,456	*10,251	*9,700	*9,700	*7,496	*7,165	*7,165	*6,724	26
	MH (9'0") – stabilizers lowered – solid tires							*12,456	*12,456	*12,456	*10,031	*10,031	*10,031	*7,165	*7,165	*7,165	
10 ft	MH (9'0") – stabilizers raised – solid tires				*17,747	*17,747	*14,661	*13,007	*13,007	*9,921	*9,480	*9,480	*7,275	*7,385	*7,385	*6,173	27
	MH (9'0") – stabilizers lowered – solid tires				*17,747	*17,747	*17,747	*14,220	*14,220	*14,220	*12,346	*12,346	*12,346	*7,385	*7,385	*7,385	
5 ft	MH (9'0") – stabilizers raised – solid tires				*18,849	*18,849	*13,779	*12,566	*12,566	*9,480	*9,259	*9,259	*7,055	*7,826	*7,826	*5,952	28
	MH (9'0") – stabilizers lowered – solid tires				*21,495	*21,495	*21,495	*15,983	*15,983	*15,983	*13,117	*13,117	*13,117	*7,937	*7,937	*7,937	
0 ft	MH (9'0") – stabilizers raised – solid tires	*15,432	*15,432	*15,432	*18,188	*18,188	*13,117	*12,236	*12,236	*9,149	*9,149	*9,149	*6,834	*8,047	*8,047	*6,063	27
	MH (9'0") – stabilizers lowered – solid tires	*15,432	*15,432	*15,432	*23,369	*23,369	*23,369	*17,086	*17,086	*17,086	*13,558	*13,558	*13,117	*9,039	*9,039	*9,039	
–5 ft	MH (9'0") – stabilizers raised – solid tires	*21,605	*21,605	*21,605	*17,857	*17,857	*12,897	*12,015	*12,015	*8,929	*9,039	*9,039	*6,834	*8,598	*8,598	*6,504	25
	MH (9'0") – stabilizers lowered – solid tires	*21,605	*21,605	*21,605	*23,148	*23,148	*23,148	*17,086	*17,086	*17,086	*13,117	*13,117	*13,007	*10,913	*10,913	*10,913	
–10 ft	MH (9'0") – stabilizers raised – solid tires	*29,652	*29,652	*23,259	*17,857	*17,857	*12,897	*12,015	*12,015	*8,929				*10,031	*10,031	*7,496	23
	MH (9'0") – stabilizers lowered – solid tires	*29,652	*29,652	*29,652	*20,944	*20,944	*20,944	*15,432	*15,432	*15,432				*12,787	*12,787	*12,787	
–15 ft	MH (9'0") – stabilizers raised – solid tires	*21,826	*21,826	*21,826	*15,873	*15,873	*13,117							*12,456	*12,456	*10,251	18
	MH (9'0") – stabilizers lowered – solid tires	*21,826	*21,826	*21,826	*15,873	*15,873	*15,873							*12,456	*12,456	*12,456	

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

MH3024 Wheel Material Handler Specifications

Lift Capacities

All values are in kg, bucket cylinder and linkage installed, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (4200 kg), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriage
MH (2.75 m)

Boom
VA

Stick
2.8 m

	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
7500 mm	MH (2.75 m) – stabilizers raised – solid tires													*3200	*3200	*3200	5770
	MH (2.75 m) – stabilizers lowered – solid tires													*3200	*3200	*3200	
6000 mm	MH (2.75 m) – stabilizers raised – solid tires							*5150	*5150	4400				*2850	*2850	*2850	6990
	MH (2.75 m) – stabilizers lowered – solid tires							*5150	*5150	*5150				*2850	*2850	*2850	
4500 mm	MH (2.75 m) – stabilizers raised – solid tires				*6600	*6600	*6600	5750	5750	4300	*3900	*3900	3000	*2750	*2750	*2750	7730
	MH (2.75 m) – stabilizers lowered – solid tires				*6600	*6600	*6600	*5850	*5850	*5850	*3900	*3900	*3900	*2750	*2750	*2750	
3000 mm	MH (2.75 m) – stabilizers raised – solid tires				*8350	*8350	6200	5550	5550	4100	3950	3950	2900	*2750	*2750	2550	8110
	MH (2.75 m) – stabilizers lowered – solid tires				*8350	*8350	*8350	*6500	*6500	*6500	*5500	*5500	*5500	*2750	*2750	*2750	
1500 mm	MH (2.75 m) – stabilizers raised – solid tires				8050	8050	5750	5300	5300	3900	3850	3850	2800	*2900	*2900	2450	8190
	MH (2.75 m) – stabilizers lowered – solid tires				*9700	*9700	*9700	*7100	*7100	*7100	*5700	*5700	*5700	*2900	*2900	*2900	
0 mm	MH (2.75 m) – stabilizers raised – solid tires				7750	7750	5450	5150	5150	3700	3750	3750	2750	*3200	*3200	2500	7990
	MH (2.75 m) – stabilizers lowered – solid tires				*10 100	*10 100	*10 100	*7350	*7350	*7350	*5650	*5650	5600	*3200	*3200	*3200	
–1500 mm	MH (2.75 m) – stabilizers raised – solid tires	*9050	*9050	*9050	7650	7650	5400	5050	5050	3650				*3750	*3750	2750	7470
	MH (2.75 m) – stabilizers lowered – solid tires	*9050	*9050	*9050	*9550	*9550	*9550	*7000	*7000	*7000				*3750	*3750	*3750	
–3000 mm	MH (2.75 m) – stabilizers raised – solid tires	*10 900	*10 900	10 050	7750	7750	5450	5100	5100	3700				4550	4550	3300	6550
	MH (2.75 m) – stabilizers lowered – solid tires	*10 900	*10 900	*10 900	*8000	*8000	*8000	*5700	*5700	*5700				*4700	*4700	*4700	

Lift Capacities

All values are in lb, bucket cylinder and linkage installed, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (9,260 lb), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriage
MH (9'0")

Boom
VA

Stick
9'2"

	Undercarriage configuration	10 ft			15 ft			20 ft			25 ft						ft
25 ft	MH (9'0") – stabilizers raised – solid tires													*7,055	*7,055	*7,055	19
	MH (9'0") – stabilizers lowered – solid tires													*7,055	*7,055	*7,055	
20 ft	MH (9'0") – stabilizers raised – solid tires							*11,354	*11,354	*9,700				*6,283	*6,283	*6,283	23
	MH (9'0") – stabilizers lowered – solid tires							*11,354	*11,354	*11,354				*6,283	*6,283	*6,283	
15 ft	MH (9'0") – stabilizers raised – solid tires				*14,550	*14,550	*14,550	*12,676	*12,676	*9,480	*8,598	*8,598	*6,614	*6,063	*6,063	*6,063	25
	MH (9'0") – stabilizers lowered – solid tires				*14,550	*14,550	*14,550	*12,897	*12,897	*12,897	*8,598	*8,598	*8,598	*6,063	*6,063	*6,063	
10 ft	MH (9'0") – stabilizers raised – solid tires				*18,408	*18,408	*13,669	*12,236	*12,236	*9,039	*8,708	*8,708	*6,393	*6,063	*6,063	*5,622	27
	MH (9'0") – stabilizers lowered – solid tires				*18,408	*18,408	*18,408	*14,330	*14,330	*14,330	*12,125	*12,125	*12,125	*6,063	*6,063	*6,063	
5 ft	MH (9'0") – stabilizers raised – solid tires				*17,747	*17,747	*12,676	*11,684	*11,684	*8,598	*8,488	*8,488	*6,173	*6,393	*6,393	*5,401	27
	MH (9'0") – stabilizers lowered – solid tires				*21,385	*21,385	*21,385	*15,653	*15,653	*15,653	*12,566	*12,566	*12,566	*6,393	*6,393	*6,393	
0 ft	MH (9'0") – stabilizers raised – solid tires				*17,086	*17,086	*12,015	*11,354	*11,354	*8,157	*8,267	*8,267	*6,063	*7,055	*7,055	*5,512	26
	MH (9'0") – stabilizers lowered – solid tires				*22,266	*22,266	*22,266	*16,204	*16,204	*16,204	*12,456	*12,456	*12,346	*7,055	*7,055	*7,055	
–5 ft	MH (9'0") – stabilizers raised – solid tires	*19,952	*19,952	*19,952	*16,865	*16,865	*11,905	*11,133	*11,133	*8,047				*8,267	*8,267	*6,063	25
	MH (9'0") – stabilizers lowered – solid tires	*19,952	*19,952	*19,952	*21,054	*21,054	*21,054	*15,432	*15,432	*15,432				*8,267	*8,267	*8,267	
–10 ft	MH (9'0") – stabilizers raised – solid tires	*24,030	*24,030	*22,156	*17,086	*17,086	*12,015	*11,243	*11,243	*8,157				*10,031	*10,031	*7,275	21
	MH (9'0") – stabilizers lowered – solid tires	*24,030	*24,030	*24,030	*17,637	*17,637	*17,637	*12,566	*12,566	*12,566				*10,362	*10,362	*10,362	

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance. Lift capacity is calculated with VA cylinder completely extracted.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Lift Capacities

All values are in kg, bucket cylinder and linkage installed, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (4200 kg), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriages
MH (2.75 m and 2.99 m)

Boom
6.4 m MH

Stick
4.2 m Straight

	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm			9000 mm						mm
10 500 mm	MH (2.99 m) – stabilizers raised – solid tires				*8100	*8100	6800										*6200	*6200	4800	5540
	MH (2.99 m) – stabilizers lowered – solid tires				*8100	*8100	*8100										*6200	*6200	*6200	
	MH (2.75 m) – stabilizers raised – solid tires				*8100	*8100	6800										*6200	*6200	4800	
	MH (2.75 m) – stabilizers lowered – solid tires				*8100	*8100	*8100										*6200	*6200	*6200	
9000 mm	MH (2.99 m) – stabilizers raised – solid tires							5850	5850	4350							4000	4000	2950	7420
	MH (2.99 m) – stabilizers lowered – solid tires							*8100	*8100	*8100							*5300	*5300	*5300	
	MH (2.75 m) – stabilizers raised – solid tires							5850	5850	4350							4000	4000	2950	
	MH (2.75 m) – stabilizers lowered – solid tires							*8100	*8100	*8100							*5300	*5300	*5300	
7500 mm	MH (2.99 m) – stabilizers raised – solid tires							5850	5850	4350	4000	4000	2950				3100	3100	2250	8640
	MH (2.99 m) – stabilizers lowered – solid tires							*8250	*8250	*8250	*7000	*7000	6400				*4900	*4900	*4900	
	MH (2.75 m) – stabilizers raised – solid tires							5850	5850	4350	4000	4000	2950				3100	3100	2250	
	MH (2.75 m) – stabilizers lowered – solid tires							*8250	*8250	*8250	*7000	*7000	5850				*4900	*4900	4550	
6000 mm	MH (2.99 m) – stabilizers raised – solid tires				9250	9250	6800	5750	5750	4250	3950	3950	2900	2850	2850	2050	2600	2600	1850	9460
	MH (2.99 m) – stabilizers lowered – solid tires				*10 600	*10 600	*10 600	*8500	*8500	*8500	*7050	*7050	6350	5800	5800	4650	*4750	*4750	4250	
	MH (2.75 m) – stabilizers raised – solid tires				9200	9200	6800	5700	5700	4250	3950	3950	2900	2850	2850	2050	2600	2600	1850	
	MH (2.75 m) – stabilizers lowered – solid tires				*10 600	*10 600	*10 600	*8500	*8500	8500	*7050	*7050	5800	5800	5800	4250	*4750	*4750	3900	
4500 mm	MH (2.99 m) – stabilizers raised – solid tires	*14 500	*14 500	12 350	8750	8750	6350	5500	5500	4050	3850	3850	2800	2800	2800	2000	2350	2350	1650	10 000
	MH (2.99 m) – stabilizers lowered – solid tires	*14 500	*14 500	*14 500	*11 500	*11 500	*11 500	*8850	*8850	*8850	*7150	*7150	6200	5750	5750	4600	*4750	*4750	3850	
	MH (2.75 m) – stabilizers raised – solid tires	*14 500	*14 500	12 350	8750	8750	6350	5500	5500	4050	3800	3800	2800	2800	2800	2000	2350	2350	1650	
	MH (2.75 m) – stabilizers lowered – solid tires	*14 500	*14 500	*14 500	*11 500	*11 500	*11 500	*8850	*8850	8200	*7150	*7150	5700	5750	5750	4200	*4750	*4750	3500	
3000 mm	MH (2.99 m) – stabilizers raised – solid tires				8100	8100	5750	5200	5200	3750	3650	3650	2650	2750	2750	1950	2200	2200	1500	10 280
	MH (2.99 m) – stabilizers lowered – solid tires				*12 450	*12 450	*12 450	*9200	*9200	8650	*7200	*7200	6050	5650	5650	4500	*4500	*4500	3650	
	MH (2.75 m) – stabilizers raised – solid tires				8100	8100	5750	5200	5200	3750	3650	3650	2650	2750	2750	1950	2200	2200	1500	
	MH (2.75 m) – stabilizers lowered – solid tires				*12 450	*12 450	*12 450	*9200	*9200	7850	*7200	*7200	5500	5650	5650	4100	*4500	*4500	3300	
1500 mm	MH (2.99 m) – stabilizers raised – solid tires				7450	7450	5200	4900	4900	3450	3500	3500	2500	2650	2650	1850	2150	2150	1450	10 340
	MH (2.99 m) – stabilizers lowered – solid tires				*12 450	*12 450	*12 450	*9100	*9100	8300	*7000	*7000	5850	*5450	*5450	4400	*3950	*3950	3550	
	MH (2.75 m) – stabilizers raised – solid tires				7450	7450	5200	4900	4900	3450	3500	3500	2500	2650	2650	1850	2150	2150	1450	
	MH (2.75 m) – stabilizers lowered – solid tires				*12 450	*12 450	12 100	*9100	*9100	7550	*7000	*7000	5350	*5450	*5450	4050	*3950	*3950	3250	
0 mm	MH (2.99 m) – stabilizers raised – solid tires				7100	7100	4850	4700	4700	3250	3400	3400	2400	2600	2600	1800				
	MH (2.99 m) – stabilizers lowered – solid tires				*9400	*9400	*9400	*8350	*8350	8050	*6400	*6400	5700	*4800	*4800	4350				
	MH (2.75 m) – stabilizers raised – solid tires				7100	7100	4850	4650	4650	3250	3400	3400	2350	2600	2600	1800				
	MH (2.75 m) – stabilizers lowered – solid tires				*9400	*9400	*9400	*8350	*8350	7300	*6400	*6400	5200	*4800	*4800	3950				

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

MH3024 Wheel Material Handler Specifications

Lift Capacities

All values are in lb, bucket cylinder and linkage installed, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (9,260 lb), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriages
MH (9'0" and 9'10")

Boom
21'0" MH

Stick
13'9" Straight

		10 ft			15 ft			20 ft			25 ft			30 ft						
	Undercarriage configuration																			**ft**
34 ft	MH (9'10") – stabilizers raised – solid tires				*17,857	*17,857	*14,991										*13,669	*13,669	*10,582	18
	MH (9'10") – stabilizers lowered – solid tires				*17,857	*17,857	*17,857										*13,669	*13,669	*13,669	
	MH (9'0") – stabilizers raised – solid tires				*17,857	*17,857	*14,991										*13,669	*13,669	*10,582	
	MH (9'0") – stabilizers lowered – solid tires				*17,857	*17,857	*17,857										*13,669	*13,669	*13,669	
30 ft	MH (9'10") – stabilizers raised – solid tires							*12,897	*12,897	*9,590							*8,818	*8,818	*6,504	24
	MH (9'10") – stabilizers lowered – solid tires							*17,857	*17,857	*17,857							*11,684	*11,684	*11,684	
	MH (9'0") – stabilizers raised – solid tires							*12,897	*12,897	*9,590							*8,818	*8,818	*6,504	
	MH (9'0") – stabilizers lowered – solid tires							*17,857	*17,857	*17,857							*11,684	*11,684	*11,684	
25 ft	MH (9'10") – stabilizers raised – solid tires							*12,897	*12,897	*9,590	*8,818	*8,818	*6,504				*6,834	*6,834	*4,960	28
	MH (9'10") – stabilizers lowered – solid tires							*18,188	*18,188	*18,188	*15,432	*15,432	*14,109				*10,803	*10,803	*10,803	
	MH (9'0") – stabilizers raised – solid tires							*12,897	*12,897	*9,590	*8,818	*8,818	*6,504				*6,834	*6,834	*4,960	
	MH (9'0") – stabilizers lowered – solid tires							*18,188	*18,188	*18,188	*15,432	*15,432	*12,897				*10,803	*10,803	*10,031	
20 ft	MH (9'10") – stabilizers raised – solid tires				*20,393	*20,393	*14,991	*12,676	*12,676	*9,370	*8,708	*8,708	*6,393	*6,283	*6,283	*4,519	*5,732	*5,732	*4,079	31
	MH (9'10") – stabilizers lowered – solid tires				*23,369	*23,369	*23,369	*18,739	*18,739	*18,739	*15,542	*15,542	*13,999	*12,787	*12,787	*10,251	*10,472	*10,472	*9,370	
	MH (9'0") – stabilizers raised – solid tires				*20,282	*20,282	*14,991	*12,566	*12,566	*9,370	*8,708	*8,708	*6,393	*6,283	*6,283	*4,519	*5,732	*5,732	*4,079	
	MH (9'0") – stabilizers lowered – solid tires				*23,369	*23,369	*23,369	*18,739	*18,739	*18,739	*15,542	*15,542	*12,787	*12,787	*12,787	*9,370	*10,472	*10,472	*8,598	
15 ft	MH (9'10") – stabilizers raised – solid tires	*31,967	*31,967	*27,227	*19,290	*19,290	*13,999	*12,125	*12,125	*8,929	*8,488	*8,488	*6,173	*6,173	*6,173	*4,409	*5,181	*5,181	*3,638	33
	MH (9'10") – stabilizers lowered – solid tires	*31,967	*31,967	*31,967	*25,353	*25,353	*25,353	*19,511	*19,511	*19,511	*15,763	*15,763	*13,669	*12,676	*12,676	*10,141	*10,472	*10,472	*8,488	
	MH (9'0") – stabilizers raised – solid tires	*31,967	*31,967	*27,227	*19,290	*19,290	*13,999	*12,125	*12,125	*8,929	*8,377	*8,377	*6,173	*6,173	*6,173	*4,409	*5,181	*5,181	*3,638	
	MH (9'0") – stabilizers lowered – solid tires	*31,967	*31,967	*31,967	*25,353	*25,353	*25,353	*19,511	*19,511	*18,078	*15,763	*15,763	*12,566	*12,676	*12,676	*9,259	*10,472	*10,472	*7,716	
10 ft	MH (9'10") – stabilizers raised – solid tires				*17,857	*17,857	*12,676	*11,464	*11,464	*8,267	*8,047	*8,047	*5,842	*6,063	*6,063	*4,299	*4,850	*4,850	*3,307	34
	MH (9'10") – stabilizers lowered – solid tires				*27,447	*27,447	*27,447	*20,282	*20,282	*19,070	*15,873	*15,873	*13,338	*12,456	*12,456	*9,921	*9,921	*9,921	*8,047	
	MH (9'0") – stabilizers raised – solid tires				*17,857	*17,857	*12,676	*11,464	*11,464	*8,267	*8,047	*8,047	*5,842	*6,063	*6,063	*4,299	*4,850	*4,850	*3,307	
	MH (9'0") – stabilizers lowered – solid tires				*27,447	*27,447	*27,447	*20,282	*20,282	*17,306	*15,873	*15,873	*12,125	*12,456	*12,456	*9,039	*9,921	*9,921	*7,275	
5 ft	MH (9'10") – stabilizers raised – solid tires				*16,424	*16,424	*11,464	*10,803	*10,803	*7,606	*7,716	*7,716	*5,512	*5,842	*5,842	*4,079	*4,740	*4,740	*3,197	34
	MH (9'10") – stabilizers lowered – solid tires				*27,447	*27,447	*27,447	*20,062	*20,062	*18,298	*15,432	*15,432	*12,897	*12,015	*12,015	*9,700	*8,708	*8,708	*7,826	
	MH (9'0") – stabilizers raised – solid tires				*16,424	*16,424	*11,464	*10,803	*10,803	*7,606	*7,716	*7,716	*5,512	*5,842	*5,842	*4,079	*4,740	*4,740	*3,197	
	MH (9'0") – stabilizers lowered – solid tires				*27,447	*27,447	*26,676	*20,062	*20,062	*16,645	*15,432	*15,432	*11,795	*12,015	*12,015	*8,929	*8,708	*8,708	*7,165	
0 ft	MH (9'10") – stabilizers raised – solid tires				*15,653	*15,653	*10,692	*10,362	*10,362	*7,165	*7,496	*7,496	*5,291	*5,732	*5,732	*3,968				
	MH (9'10") – stabilizers lowered – solid tires				*20,723	*20,723	*20,723	*18,408	*18,408	*17,747	*14,109	*14,109	*12,566	*10,582	*10,582	*9,590				
	MH (9'0") – stabilizers raised – solid tires				*15,653	*15,653	*10,692	*10,251	*10,251	*7,165	*7,496	*7,496	*5,181	*5,732	*5,732	*3,968				
	MH (9'0") – stabilizers lowered – solid tires				*20,723	*20,723	*20,723	*18,408	*18,408	*16,094	*14,109	*14,109	*11,464	*10,582	*10,582	*8,708				

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Lift Capacities

All values are in kg, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (4200 kg), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriages
MH (2.75 m and 2.99 m)

Boom
6.4 m MH

Stick
4.9 m MH (drop nose)

Load point height	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm			9000 mm			10 500 mm			Load at maximum reach			mm
12 000 mm	MH (2.99 m) – stabilizers raised – solid tires																			*6950	*6950	*6950	3970
	MH (2.99 m) – stabilizers lowered – solid tires																			*6950	*6950	*6950	
	MH (2.75 m) – stabilizers raised – solid tires																			*6950	*6950	*6950	
	MH (2.75 m) – stabilizers lowered – solid tires																			*6950	*6950	*6950	
10 500 mm	MH (2.99 m) – stabilizers raised – solid tires							6150	6150	4650										5100	5100	3850	6700
	MH (2.99 m) – stabilizers lowered – solid tires							*6500	*6500	*6500										*5250	*5250	*5250	
	MH (2.75 m) – stabilizers raised – solid tires							6150	6150	4650										5100	5100	3850	
	MH (2.75 m) – stabilizers lowered – solid tires							*6500	*6500	*6500										*5250	*5250	*5250	
9000 mm	MH (2.99 m) – stabilizers raised – solid tires							6250	6250	4800	4350	4350	3300							3650	3650	2750	8320
	MH (2.99 m) – stabilizers lowered – solid tires							*7850	*7850	*7850	*6300	*6300	*6300							*4650	*4650	*4650	
	MH (2.75 m) – stabilizers raised – solid tires							6250	6250	4800	4350	4350	3300							3650	3650	2750	
	MH (2.75 m) – stabilizers lowered – solid tires							*7850	*7850	*7850	*6300	*6300	6250							*4650	*4650	*4650	
7500 mm	MH (2.99 m) – stabilizers raised – solid tires							6250	6250	4800	4400	4400	3350	3250	3250	2450				3000	3000	2250	9420
	MH (2.99 m) – stabilizers lowered – solid tires							*8150	*8150	*8150	*7050	*7050	6800	*5500	*5500	5050				*4400	*4400	*4400	
	MH (2.75 m) – stabilizers raised – solid tires							6250	6250	4800	4400	4400	3350	3250	3250	2450				3000	3000	2250	
	MH (2.75 m) – stabilizers lowered – solid tires							*8150	*8150	*8150	*7050	*7050	6250	*5500	*5500	4650				*4400	*4400	4300	
6000 mm	MH (2.99 m) – stabilizers raised – solid tires							6150	6150	4650	4350	4350	3300	3250	3250	2450				2600	2600	1950	10 180
	MH (2.99 m) – stabilizers lowered – solid tires							*8400	*8400	*8400	*7150	*7150	6750	6150	6150	5000				*4300	*4300	4100	
	MH (2.75 m) – stabilizers raised – solid tires							6150	6150	4650	4300	4300	3300	3250	3250	2400				2600	2600	1950	
	MH (2.75 m) – stabilizers lowered – solid tires							*8400	*8400	*8400	*7150	*7150	6200	6150	6150	4650				*4300	*4300	3800	
4500 mm	MH (2.99 m) – stabilizers raised – solid tires				9350	9350	6900	5900	5900	4450	4200	4200	3150	3150	3150	2350	2450	2450	1800	2400	2400	1750	10 680
	MH (2.99 m) – stabilizers lowered – solid tires				*11 150	*11 150	*11 150	*8850	*8850	*8850	*7350	*7350	6600	6100	6100	4950	4750	4750	3900	*4300	*4300	3800	
	MH (2.75 m) – stabilizers raised – solid tires				9300	9300	6900	5900	5900	4450	4200	4200	3150	3150	3150	2350	2450	2450	1800	2400	2400	1750	
	MH (2.75 m) – stabilizers lowered – solid tires				*11 150	*11 150	*11 150	*8850	*8850	8650	*7350	*7350	6050	6100	6100	4550	4750	4750	3600	*4300	*4300	3500	
3000 mm	MH (2.99 m) – stabilizers raised – solid tires	17 350	17 350	11 750	8700	8700	6350	5600	5600	4200	4050	4050	3000	3100	3100	2300	2450	2450	1800	2250	2250	1650	10 940
	MH (2.99 m) – stabilizers lowered – solid tires	*18 550	*18 550	*18 550	*12 350	*12 350	*12 350	*9350	*9350	9100	*7500	*7500	6400	6000	6000	4850	4750	4750	3850	*4400	*4400	3600	
	MH (2.75 m) – stabilizers raised – solid tires	17 300	17 300	11 750	8700	8700	6350	5600	5600	4150	4050	4050	3000	3050	3050	2300	2450	2450	1800	2250	2250	1650	
	MH (2.75 m) – stabilizers lowered – solid tires	*18 550	*18 550	*18 550	*12 350	*12 350	*12 350	*9350	*9350	8300	*7500	*7500	5900	6000	6000	4450	4700	4700	3550	*4400	*4400	3300	
1500 mm	MH (2.99 m) – stabilizers raised – solid tires				8050	8050	5750	5300	5300	3900	3850	3850	2850	3000	3000	2200	2400	2400	1750	2250	2250	1600	11 000
	MH (2.99 m) – stabilizers lowered – solid tires				*12 950	*12 950	*12 950	*9550	*9550	8750	*7500	*7500	6200	5900	5900	4750	*4650	*4650	3800	*4100	*4100	3550	
	MH (2.75 m) – stabilizers raised – solid tires				8000	8000	5700	5300	5300	3850	3850	3850	2850	3000	3000	2200	2400	2400	1750	2200	2200	1600	
	MH (2.75 m) – stabilizers lowered – solid tires				*12 950	*12 950	12 750	*9550	*9550	7950	*7500	*7500	5700	5850	5850	4350	*4650	*4650	3500	*4100	*4100	3250	
0 mm	MH (2.99 m) – stabilizers raised – solid tires	*3500	*3500	*3500	7550	7550	5300	5050	5050	3650	3750	3750	2700	2900	2900	2100	2350	2350	1700				
	MH (2.99 m) – stabilizers lowered – solid tires	*3500	*3500	*3500	*12 200	*12 200	*12 200	*9150	*9150	8450	*7100	*7100	6050	*5550	*5550	4650	*4000	*4000	3750				
	MH (2.75 m) – stabilizers raised – solid tires	*3500	*3500	*3500	7550	7550	5300	5050	5050	3650	3700	3700	2700	2900	2900	2100	2350	2350	1700				
	MH (2.75 m) – stabilizers lowered – solid tires	*3500	*3500	*3500	*12 200	*12 200	*12 200	*9150	*9150	7700	*7100	*7100	5550	*5550	*5550	4300	*4000	*4000	3450				
–1500 mm	MH (2.99 m) – stabilizers raised – solid tires				7350	7350	5100	4900	4900	3500	3650	3650	2600	2850	2850	2050							
	MH (2.99 m) – stabilizers lowered – solid tires				*9600	*9600	*9600	*7950	*7950	*7950	*6200	*6200	5950	*4650	*4650	4600							
	MH (2.75 m) – stabilizers raised – solid tires				7350	7350	5100	4900	4900	3500	3650	3650	2600	2850	2850	2050							
	MH (2.75 m) – stabilizers lowered – solid tires				*9600	*9600	*9600	*7950	*7950	7500	*6200	*6200	5450	*4650	*4650	4200							

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

MH3024 Wheel Material Handler Specifications

Lift Capacities

All values are in lb, work tool: none, hydraulic cab riser, MH undercarriages, with counterweight (9,260 lb), heavy lift on.

Load point height | Load over front | Load over rear | Load over side | Load at maximum reach (stick nose/bucket pin)

Undercarriages
MH (9'0" and 9'10")

Boom
21'0" MH

Stick
16'1" MH (drop nose)

Load point height	Undercarriage configuration	10 ft			15 ft			20 ft			25 ft			30 ft			35 ft						ft
39 ft	MH (9'10") – stabilizers raised – solid tires																			15,322	15,322	15,322	13
	MH (9'10") – stabilizers lowered – solid tires																			15,322	15,322	15,322	
	MH (9'0") – stabilizers raised – solid tires																			15,322	15,322	15,322	
	MH (9'0") – stabilizers lowered – solid tires																			15,322	15,322	15,322	
34 ft	MH (9'10") – stabilizers raised – solid tires							13,558	13,558	10,251										11,243	11,243	8,488	22
	MH (9'10") – stabilizers lowered – solid tires							14,330	14,330	14,330										11,574	11,574	11,574	
	MH (9'0") – stabilizers raised – solid tires							13,558	13,558	10,251										11,243	11,243	8,488	
	MH (9'0") – stabilizers lowered – solid tires							14,330	14,330	14,330										11,574	11,574	11,574	
30 ft	MH (9'10") – stabilizers raised – solid tires							13,779	13,779	10,582	9,590	9,590	7,275							8,047	8,047	6,063	27
	MH (9'10") – stabilizers lowered – solid tires							17,306	17,306	17,306	13,889	13,889	13,889							10,251	10,251	10,251	
	MH (9'0") – stabilizers raised – solid tires							13,779	13,779	10,582	9,590	9,590	7,275							8,047	8,047	6,063	
	MH (9'0") – stabilizers lowered – solid tires							17,306	17,306	17,306	13,889	13,889	13,779							10,251	10,251	10,251	
25 ft	MH (9'10") – stabilizers raised – solid tires							13,779	13,779	10,582	9,700	9,700	7,385	7,165	7,165	5,401				6,614	6,614	4,960	31
	MH (9'10") – stabilizers lowered – solid tires							17,967	17,967	17,967	15,542	15,542	14,991	12,125	12,125	11,133				9,700	9,700	9,700	
	MH (9'0") – stabilizers raised – solid tires							13,779	13,779	10,582	9,700	9,700	7,385	7,165	7,165	5,401				6,614	6,614	4,960	
	MH (9'0") – stabilizers lowered – solid tires							17,967	17,967	17,967	15,542	15,542	13,779	12,125	12,125	10,251				9,700	9,700	9,480	
20 ft	MH (9'10") – stabilizers raised – solid tires							13,558	13,558	10,251	9,590	9,590	7,275	7,165	7,165	5,401				5,732	5,732	4,299	33
	MH (9'10") – stabilizers lowered – solid tires							18,519	18,519	18,519	15,763	15,763	14,881	13,558	13,558	11,023				9,480	9,480	9,039	
	MH (9'0") – stabilizers raised – solid tires							13,558	13,558	10,251	9,480	9,480	7,275	7,165	7,165	5,291				5,732	5,732	4,299	
	MH (9'0") – stabilizers lowered – solid tires							18,519	18,519	18,519	15,763	15,763	13,669	13,558	13,558	10,251				9,480	9,480	8,377	
15 ft	MH (9'10") – stabilizers raised – solid tires				20,613	20,613	15,212	13,007	13,007	9,810	9,259	9,259	6,944	6,944	6,944	5,181	5,401	5,401	3,968	5,291	5,291	3,858	35
	MH (9'10") – stabilizers lowered – solid tires				24,581	24,581	24,581	19,511	19,511	19,511	16,204	16,204	14,550	13,448	13,448	10,913	10,472	10,472	8,598	9,480	9,480	8,377	
	MH (9'0") – stabilizers raised – solid tires				20,503	20,503	15,212	13,007	13,007	9,810	9,259	9,259	6,944	6,944	6,944	5,181	5,401	5,401	3,968	5,291	5,291	3,858	
	MH (9'0") – stabilizers lowered – solid tires				24,581	24,581	24,581	19,511	19,511	19,070	16,204	16,204	13,338	13,448	13,448	10,031	10,472	10,472	7,937	9,480	9,480	7,716	
10 ft	MH (9'10") – stabilizers raised – solid tires	38,250	38,250	25,904	19,180	19,180	13,999	12,346	12,346	9,259	8,929	8,929	6,614	6,834	6,834	5,071	5,401	5,401	3,968	4,960	4,960	3,638	36
	MH (9'10") – stabilizers lowered – solid tires	40,895	40,895	40,895	27,227	27,227	27,227	20,613	20,613	20,062	16,535	16,535	14,109	13,228	13,228	10,692	10,472	10,472	8,488	9,700	9,700	7,937	
	MH (9'0") – stabilizers raised – solid tires	38,140	38,140	25,904	19,180	19,180	13,999	12,346	12,346	9,149	8,929	8,929	6,614	6,724	6,724	5,071	5,401	5,401	3,968	4,960	4,960	3,638	
	MH (9'0") – stabilizers lowered – solid tires	40,895	40,895	40,895	27,227	27,227	27,227	20,613	20,613	18,298	16,535	16,535	13,007	13,228	13,228	9,810	10,362	10,362	7,826	9,700	9,700	7,275	
5 ft	MH (9'10") – stabilizers raised – solid tires				17,747	17,747	12,676	11,684	11,684	8,598	8,488	8,488	6,283	6,614	6,614	4,850	5,291	5,291	3,858	4,960	4,960	3,527	36
	MH (9'10") – stabilizers lowered – solid tires				28,550	28,550	28,550	21,054	21,054	19,290	16,535	16,535	13,669	13,007	13,007	10,472	10,251	10,251	8,377	9,039	9,039	7,826	
	MH (9'0") – stabilizers raised – solid tires				17,637	17,637	12,566	11,684	11,684	8,488	8,488	8,488	6,283	6,614	6,614	4,850	5,291	5,291	3,858	4,850	4,850	3,527	
	MH (9'0") – stabilizers lowered – solid tires				28,550	28,550	28,109	21,054	21,054	17,527	16,535	16,535	12,566	12,897	12,897	9,590	10,251	10,251	7,716	9,039	9,039	7,165	
0 ft	MH (9'10") – stabilizers raised – solid tires	7,716	7,716	7,716	16,645	16,645	11,684	11,133	11,133	8,047	8,267	8,267	5,952	6,393	6,393	4,630	5,181	5,181	3,748				
	MH (9'10") – stabilizers lowered – solid tires	7,716	7,716	7,716	26,896	26,896	26,896	20,172	20,172	18,629	15,653	15,653	13,338	12,236	12,236	10,251	8,818	8,818	8,267				
	MH (9'0") – stabilizers raised – solid tires	7,716	7,716	7,716	16,645	16,645	11,684	11,133	11,133	8,047	8,157	8,157	5,952	6,393	6,393	4,630	5,181	5,181	3,748				
	MH (9'0") – stabilizers lowered – solid tires	7,716	7,716	7,716	26,896	26,896	26,896	20,172	20,172	16,975	15,653	15,653	12,236	12,236	12,236	9,480	8,818	8,818	7,606				
–5 ft	MH (9'10") – stabilizers raised – solid tires				16,204	16,204	11,243	10,803	10,803	7,716	8,047	8,047	5,732	6,283	6,283	4,519							
	MH (9'10") – stabilizers lowered – solid tires				21,164	21,164	21,164	17,527	17,527	17,527	13,669	13,669	13,117	10,251	10,251	10,141							
	MH (9'0") – stabilizers raised – solid tires				16,204	16,204	11,243	10,803	10,803	7,716	8,047	8,047	5,732	6,283	6,283	4,519							
	MH (9'0") – stabilizers lowered – solid tires				21,164	21,164	21,164	17,527	17,527	16,535	13,669	13,669	12,015	10,251	10,251	9,259							

*Limited by hydraulic rather than tipping load.

Lift capacity ratings are based on ISO 10567:2007, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. The load point is the center line of the bucket pivot mounting pin on the stick. The oscillating axle must be locked. Lifting capacities are based on the machine standing on a firm uniform supporting surface. For lifting capacity including bucket and/or quick coupler, the respective weight has to be subtracted from above values. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Standard Equipment

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

ELECTRICAL

- Alternator, 115A
- Heavy Duty maintenance free batteries
- Lighting
  - Boom and stick LED working light
  - One LED light on the counterweight for the rear camera, and one on the right for the sideview camera
  - Cab LED interior dome light
  - Roading lights two front, halogen
  - Roading lights two rear, LED
  - Working LED lights, cab mounted (two front and one rear), compatible with Falling Objects Guards)
- Main shut-off switch
- Signal/warning horn

ENGINE

- Cat C7.1 ACERT Technology engine meets Tier 4 Final emission standards
- Aftertreatment technologies including the Cat Clean Emission Module (Cat CEM) package
- Air filter
- 3000 m (9,842 ft) altitude capability without de-rate
- Automatic engine speed control (AESC), including One Touch Low Idle
- Engine Idle Shutdown (EIS)
- Automatic starting aid
- Fuel filter
- Fuel/water separator with water in fuel switch
- 48° C (118.4° F) ambient cooling capability without de-rate
- Power mode selector
- Electric fuel priming pump
- Capability of running with biodiesel fuel (B20)

HYDRAULICS

- Adjustable hydraulic sensitivity
- Cat XT™-6 ES hoses
- Control circuits (standard and optional, depending on boom/stick/linkage choice):
  - Medium pressure
    - Two-way, medium pressure circuit, for rotating or tilting of attachments
- Heavy lift mode
- Load-sensing hydraulic system
- Oil cooler
- Quick disconnect couplings
- Separate swing pump
- Electric Pump Control (EPC)
- Boom Lowering Check Valve (BLCV), including overload warning device
- Stick Lowering Check Valve (SLCV)

OPERATOR STATION

- Additional color monitor for cameras, split-screen display for both cameras' view
- Adjustable armrests
- Air conditioner, heater and defroster with automatic climate control
- Beverage cup/can holder
- Bolt-on top/front guards capability
- Bottle holder
- Bottom mounted, intermittent (four speeds), parallel wiping system, covering upper and lower windshield glass
- CD/MP3 radio (12V) including speakers and 12V converter
- Coat hook
- Cruise control system
- Floor mat, washable, with storage compartment
- Fully adjustable suspension seat
- Hydraulic cab riser
- Instrument panel and gauges, full graphic and color display
  - Information and warning messages in local language
  - Gauges for fuel and DEF levels, engine coolant and hydraulic oil temperature
  - Filters/fluids change interval, working hours
  - Indicators for headlights, turning signal, low fuel, engine dial setting
  - Clock with 10-day backup battery
- Interior LED lighting with door switch
- Joysticks, pilot operated with one proportional slider
- Laminated front windshield
- Left side console, tiltable, with lock out for all controls
- Cigarette lighter (24V)
- Literature holder in right console
- Mobile phone holder
- Parking brake
- Pin code type engine start prevention, integrated into the monitor
- Power supply, 12V-10A
- Rear window (tempered glass)/emergency exit, with hammer
- Retractable seat belt, integrated into the seat
- Seat belt indicator and alarm
- Skylight, laminated glass
- Sliding door windows
- Steering column, adjustable angle and height
- Step, integrated into the skirt
- Storage area suitable for a lunch box
- Sunshade for windshield and skylight
- Safety lever, integrated into the left console
- Sealed cab, with positive filtered, variable speed ventilation

Continued on next page

MH3024 Standard Equipment

Standard Equipment

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

UNDERCARRIAGE

- Automatic brake and axle lock
- Electronic swing and travel lock
- Creeper speed
- Four wheel drive
- Heavy-duty axles, advanced travel motor, adjustable braking force and disc brake system
- Oscillating front axle, lockable, with remote greasing point
- Steps, wide, left and right
- Tool boxes, left and right, in undercarriage
- Two-speed hydrostatic transmission
- One-piece drive shaft, with 1,000 hours greasing intervals

OTHER EQUIPMENT

- Auto-lube system (implements and swing gear)
- Automatic swing brake
- Capability to add auxiliary hydraulic circuit
- Cooling package, fine mesh screen and engine air precleaner
- Cat Electronic Technician capability (ET)
- Counterweight, 4200 kg (9,260 lb)
- Door locks and cap locks with Cat one-key security system
- Mirrors, wide angle, frame and cab
- Product Link
- Cameras
  - Rear mounted wide angle camera, integrated into the counterweight
  - Right side wide angle camera, mounted on the cooling hood.
- S·O·S℠ Quick Sampling valves for engine oil, hydraulic oil and coolant
- Engine emergency shutoff switch
- Spacer rings for tires

Optional Equipment

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

AUXILIARY CONTROLS AND LINES

- Auxiliary boom and stick lines
- Control circuits (standard and optional, depending on boom/stick/linkage choice):
  - Tool control/multi function
    - One/two-way high pressure for hammer application or opening and closing of an attachment
    - Programmable flow and pressure for up to 10 work tools – selection via monitor
  - Quick coupler circuits and lines for hydraulic quick coupler (both Cat pin grabber and dedicated/CW quick couplers, controlled by a dedicated switch)
- SmartBoom

HYDRAULICS

- Cat BIO HYDO Advanced HEES biodegradable hydraulic oil

FRONT LINKAGE

- VA boom (5260 mm/17'3"):
  - Industrial stick (3300 mm/10'10")
  - Straight stick (2500 mm/8'2", 2800 mm/9'2")
- One-Piece boom (5350 mm/17'6"):
  - Industrial stick (3300 mm/10'10")
  - Straight stick (2500 mm/8'2", 2800 mm/9'2")
- Material Handling boom (6400 mm/21'0"):
  - Drop nose MH stick (4900 mm/16'1")
  - Straight MH stick (4200 mm/13'9")

ELECTRICAL

- Adjustable travel alarm
- Rotating beacon
- Generator, 15 kW (20 hp)

OPERATOR STATION

- Top/front guards
- Joystick steering
- Advanced joysticks with two proportional sliders
- High pressure auxiliary pedal
- Seat, adjustable back, with vertical and horizontal air-suspension and head rest
  - Automatic weight adjustment, mechanical lumbar support, passive climate system, seat cushion length/angle adjustment and heated seat (Comfort)
  - Automatic height and weight adjustment, active climate system, premium microfiber seat fabric, pneumatic lumbar support, seat cushion length and angle adjustment and adjustable dampening, heated and ventilated (Deluxe)
- Visor for rain protection
- Windshield
  - One-piece, impact resistant, laminated windshield and skylight (EN356 P5A, 10 mm/0.4")
  - 70/30 split, openable – two-parts split, fixed, high impact resistant, laminated windshield and skylight (EN356 P8B, 26 mm/1")
- Mirrors, electrically adjustable and heated, frame and cab

TIRES

- Dual pneumatic 11.00-20
- Dual solid rubber, 10.00-20

UNDERCARRIAGE

- MH undercarriage with four welded outriggers (2.75 m/9'0" or 2.99 m/9'10" wide)
- MH undercarriage with four welded outriggers and front mounted blade (2.75 m/9'0" or 2.99 m/9'10" wide)
- Standard undercarriage, with outriggers (front and/or rear), dozer blade (front or rear)
- Easy Cab Access Package with ladder

OTHER EQUIPMENT

- Bucket linkages
- Cat Machine Security System
- Hydraulic quick coupler
- Maximum speed 20 km/h (12.4 mph) or 25 km/h (15.5 mph)*
- Refueling pump with dedicated tray for the hose
- Waste Handling Package, adds a reversing fan and vibrating grill to the cooling protection package
- Advanced Cab Filtration System
- Attachments (see p. 26)

*25 km/h (15.5 mph) not compatible with solid tires

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

AEHQ8111
(Americas North,
Australia, New Zealand)

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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