

MH3024

Wheel Material Handler

2018



Engine

Engine Model	Cat® C7.1 ACERT™	
Emissions	EU Stage IV	
Power (Maximum)		
ISO 9249 at 1,700 rpm	126 kW	169 hp
ISO 9249 at 1,700 rpm (metric)		171 hp (PS)
ISO 14396 at 1,700 rpm (gross)	129.4 kW	174 hp
ISO 14396 at 1,700 rpm (gross) (metric)		176 hp (PS)

Weights

Operating Weight with Work Tool 21 385 kg-24 980 kg

Working Ranges (MH boom, stick 4900 mm)

Maximum Reach (stick pin)	11 005 mm
Maximum Height (stick pin)	12 065 mm

Drive

Maximum Travel Speed 25 km/h

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.

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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 Stage IV 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 CO₂ 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 Stage IV 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

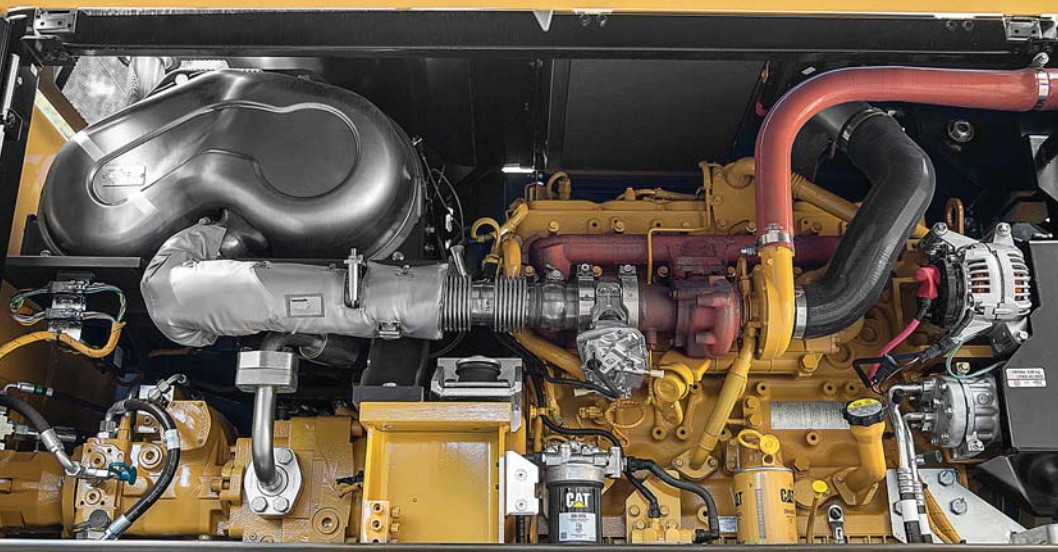
The engine can run on up to B20 biodiesel fuel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.

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



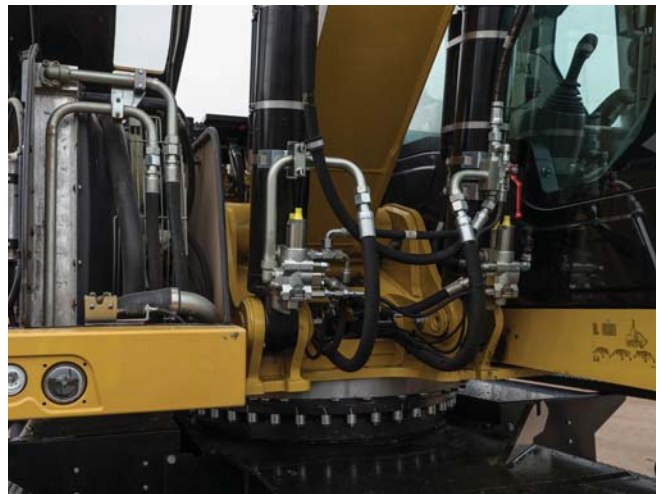
When it comes to moving material quickly, you need efficient hydraulics – the type the MH Series can deliver.

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 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 standard undercarriage, 2.75 m MH undercarriage and 2.99 m MH undercarriage.

- **NEW!** Material Handling 2.75 m 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 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.



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 Drop Nose Stick offers the reaching and lifting capabilities required for typical MH applications, while the 4200 mm Straight Stick is the best solution when additional work tool functionality is needed.

Special Applications

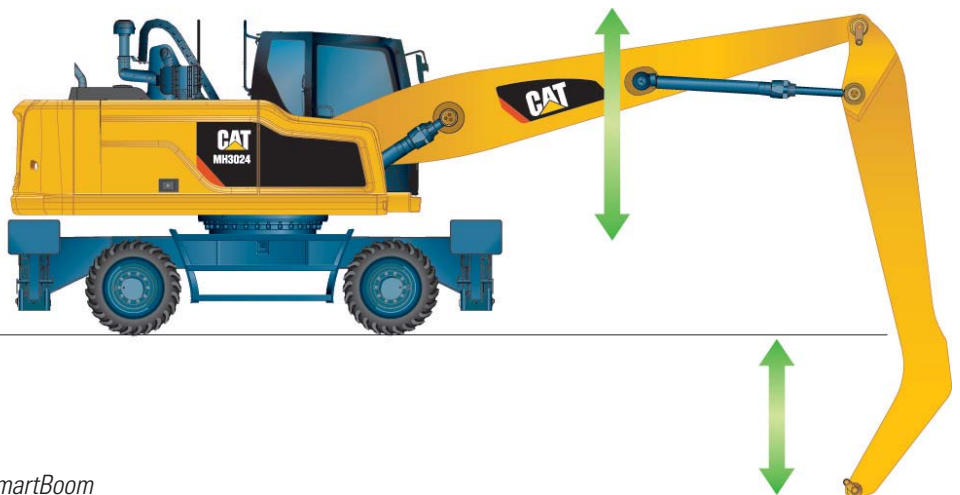
Our material handlers offer the ability to combine the hydraulic cab riser with a traditional excavator front linkage. This combination has been proven in transfer station, mining, and millyard applications.

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

SmartBoom™

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.



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)

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.

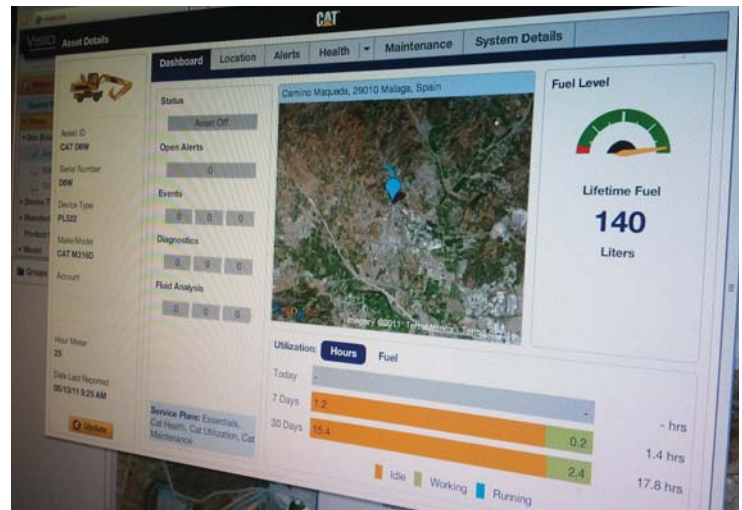


SAFETY

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 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 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 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. 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.

Clamshell Grapples

The perfect solution for loading and transferring large volumes of loose material like grain, coal, sand and gravel. These grapples are configured with several shells for different capacity options to meet your specific requirements.

Digging Grapples

Cat Digging grapples are designed to suit MH machines for digging applications where good penetration is required.

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:

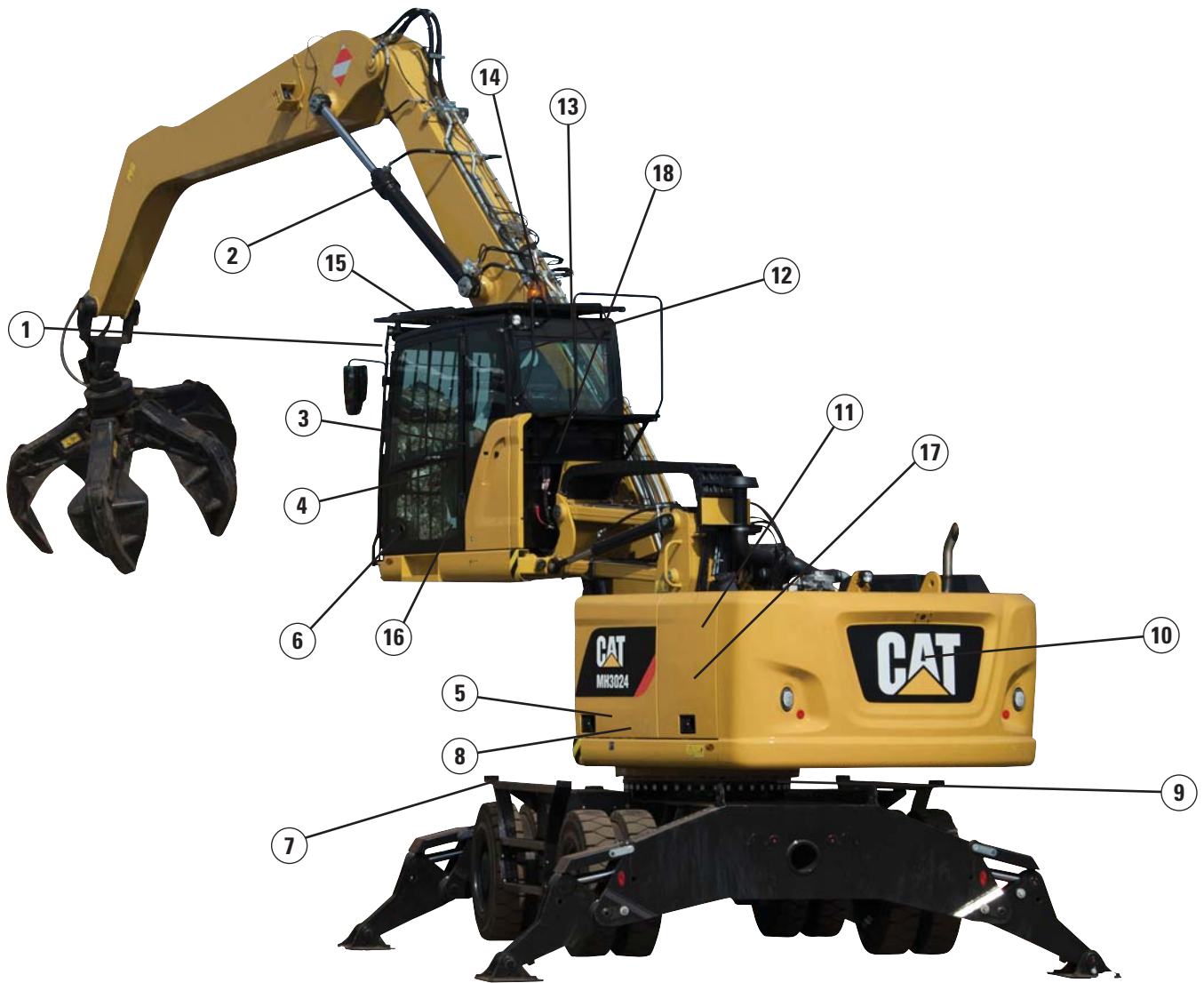
- Safety seat belt and warning indicators (monitor)
- Automatic swing lock
- Automatic brake and axle lock
- Safety lever, preventing exit when the implements are not locked out
- Secondary shut off switch and battery disconnect switch
- Travel alarm
- Lowering check valves
- Quick coupler control switch, 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
- Tilttable 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 thick, fulfills EN356 P5A standards.
- **High Impact Resistant fixed Windshield (two-parts) and skylight**, 26 mm 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 (PS)	
Net Power (Rated) ⁽²⁾		
ISO 9249/SAE J1349	126 kW	169 hp
ISO 9249/SAE J1349 (metric)	171 hp (PS)	
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 (PS)	
80/1269/EEC	126 kW	
Bore	105 mm	
Stroke	135 mm	
Displacement	7.01 L	
Maximum Torque at 1,400 rpm	830 N·m	
Number of Cylinders	6	

⁽¹⁾ Meets Stage IV 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 altitude. Automatic derating occurs after 3000 m.

Transmission

Forward/Reverse	
1st Gear	10.0 km/h
2nd Gear	25.0 km/h
Creeper Speed	
1st Gear	3.0 km/h
2nd Gear	10.0 km/h
Drawbar Pull	125 kN
Maximum Gradeability at 23 500 kg	65%

Swing Mechanism

Maximum Swing Speed	8.1 rpm
Maximum Swing Torque	54 kN·m

Undercarriage

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

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

Service Refill Capacities

Fuel Tank (total capacity)	330 L
Diesel Exhaust Fluid Tank	34.5 L
Cooling System	46.9 L
Engine Crankcase	18.5 L
Rear Axle Housing (differential)	14 L
Front Steering Axle (differential)	10.5 L
Final Drive	2.5 L
Powershift Transmission	2.5 L

MH3024 Wheel Material Handler Specifications

Weights

Operating Weights*	22 275 kg-23 665 kg
MH Boom (6.4 m)	
MH Undercarriage 2.75 m, Straight (4200 mm) Stick	23 565 kg
MH Undercarriage 2.75 m, Drop Nose (4900 mm) Stick	23 160 kg
MH Undercarriage 2.99 m, Straight (4200 mm) Stick	23 665 kg
MH Undercarriage 2.99 m, Drop Nose (4900 mm) Stick	23 260 kg
Standard Undercarriage, Straight (4200 mm) Stick**	23 390 kg
One-Piece Boom	
Standard Undercarriage**, Industrial Stick (3300 mm)	22 275 kg
VA Boom	
Standard Undercarriage**, Digging Long Stick (2800 mm)	23 130 kg
Sticks***	
Digging Medium (2500 mm)**	850 kg
Digging Long (2800 mm)**	895 kg
Industrial (3300 mm)	515 kg
Straight (4200 mm)**	1275 kg
Drop Nose (4900 mm)	885 kg
MH Push Blade (2.75 m)	705 kg
MH Push Blade (2.99 m)	745 kg
Dozer Blade	850 kg
Solid Tires (delta vs. standard tires)	950 kg
Counterweight	4200 kg

*Operating weight includes solid tires, 4200 kg counterweight, full fuel tank, operator, four outriggers undercarriage, attachment (1400 kg). 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
System	345 L

Hydraulic System: Maximum Pressure

Implement Circuit	
Normal	350 bar
Heavy Lift	370 bar
Travel Circuit	
Travel Circuit	350 bar
Auxiliary Circuit	
High Pressure	350 bar
Medium Pressure	210 bar
Swing Mechanism	310 bar

Hydraulic System: Maximum Flow

Implement/Travel Circuit	290 L/min
Auxiliary Circuit	
High Pressure	250 L/min
Medium Pressure	49 L/min
Swing Mechanism	108 L/min

Tires

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

Push Blade

Blade Type	Radial
Blade Height	920 mm
Width	2750 mm, 2990 mm

MH3024 Wheel Material Handler Specifications

Emissions and Safety

Engine Emissions	Stage IV
Diesel Exhaust Fluid	Must meet ISO 22241
Fluids (optional)	
Cat Bio HYDO Advanced	Readily biodegradable EU Flower eco-label certified
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
Maximum Whole Body	
ISO/TR 25398:2006	<0.5 m/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 of refrigerant which has a CO₂ 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

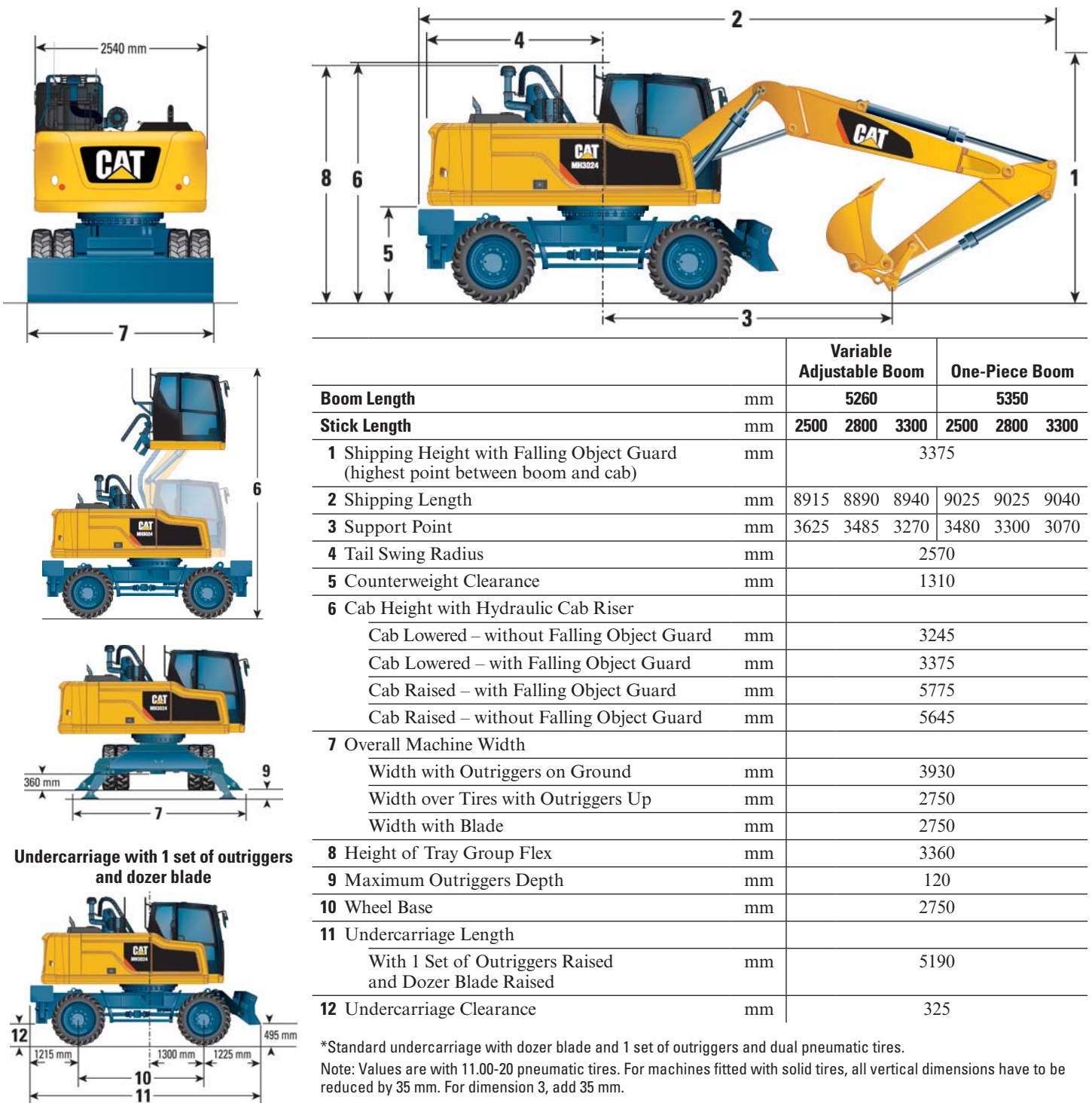
Operator Sound	
ISO 6396:2008	71 dB(A)
Spectator Sound	
ISO 6395:2008	99 dB(A)*

- *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).

MH3024 Wheel Material Handler Specifications

Dimensions – With Standard Undercarriage*

All dimensions are approximate.



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

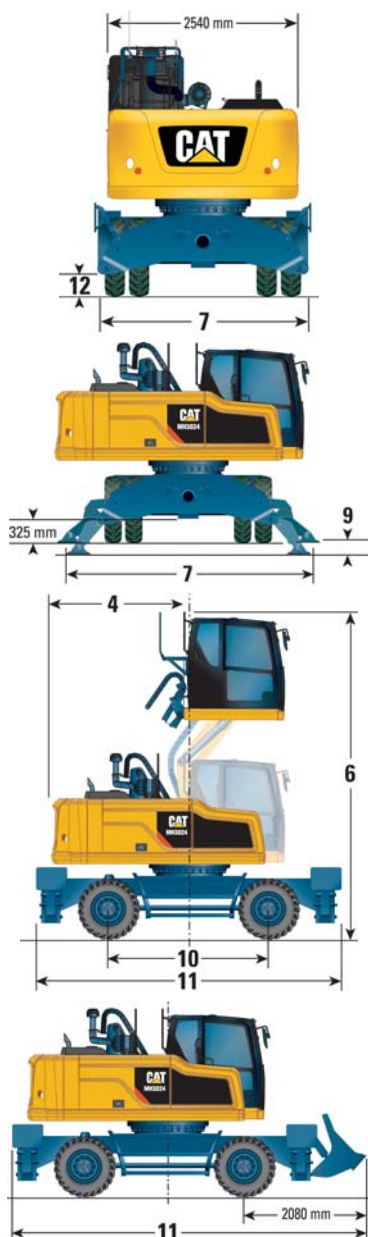
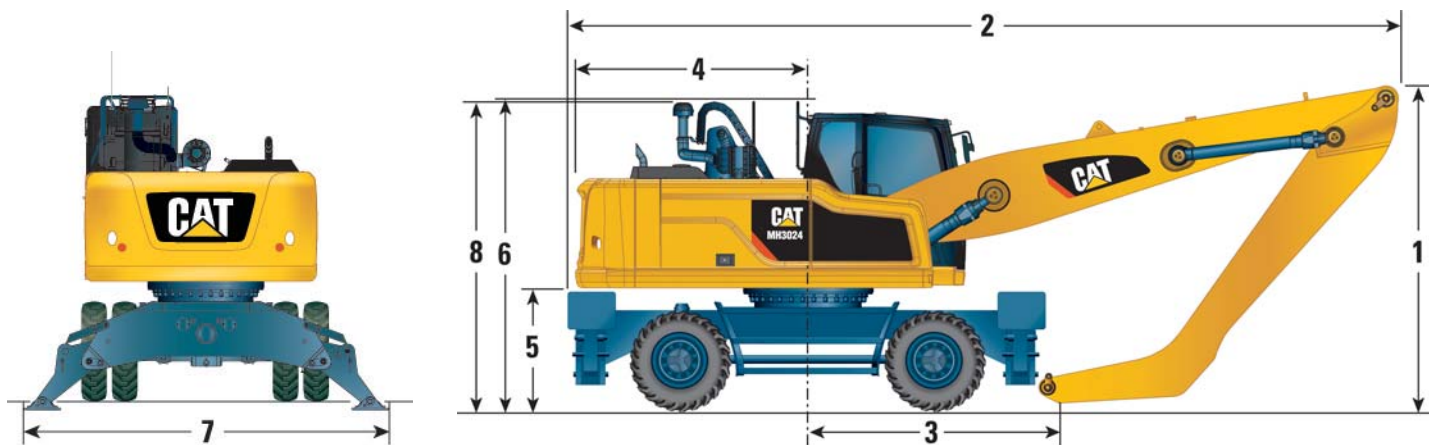
*Standard undercarriage with dozer blade and 1 set of outriggers and dual pneumatic tires.

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. For dimension 3, add 35 mm.

MH3024 Wheel Material Handler Specifications

Dimensions – With MH Undercarriage (with solid tires)*

All dimensions are approximate.



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

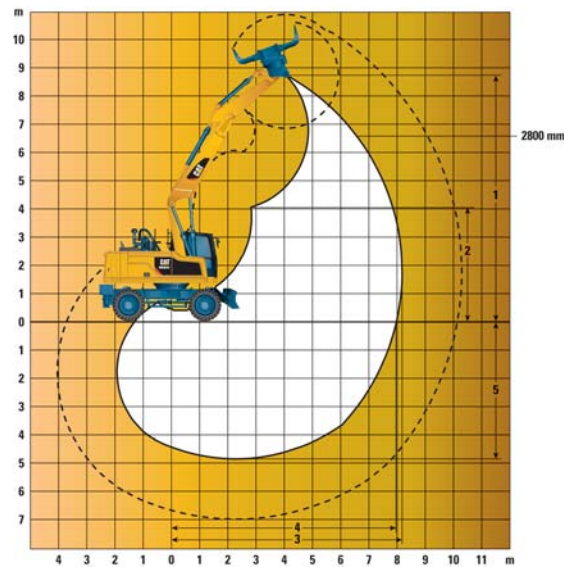
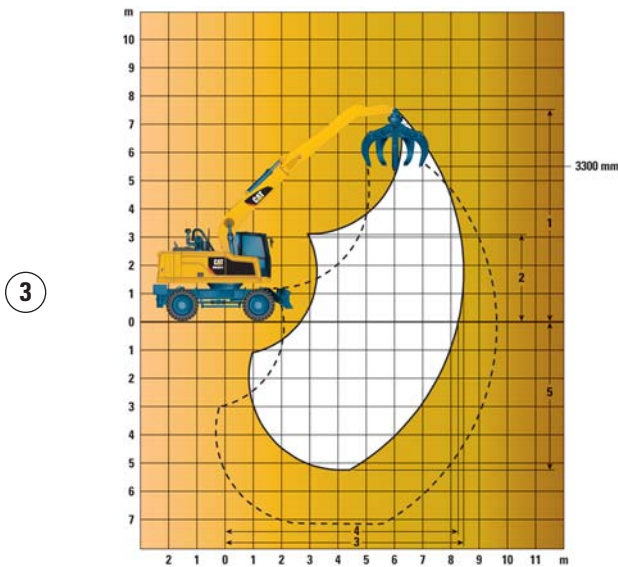
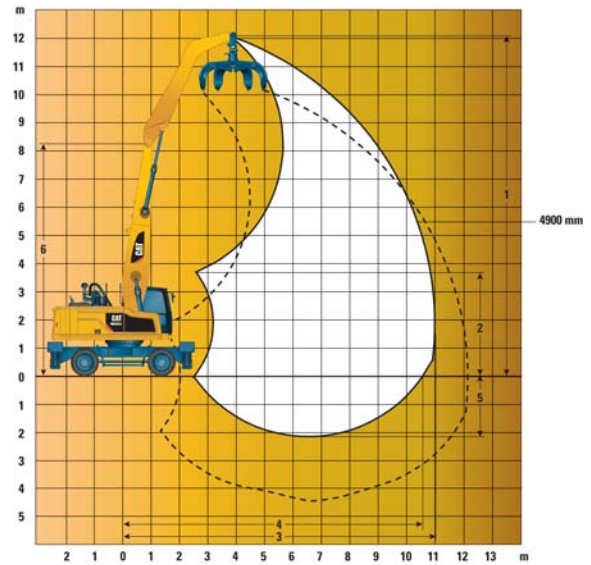
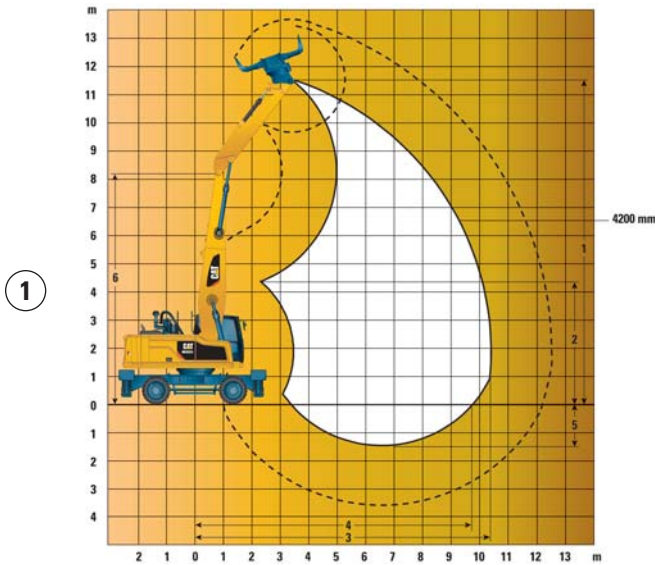
*Dimensions with MH undercarriage, outriggers front and rear, and without work tool.

When the shipping height is over 4 m, 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. For dimension 9 reduce by 35 mm.

MH3024 Wheel Material Handler Specifications

Working Ranges



		①	②	③	④
Boom Type		MH Boom		One-Piece Boom	Variable Adjustable Boom
Boom Length		6400		5350	5260
Stick Length	mm	4200	4900	3300	2800
Stick Type		Straight	Drop Nose	Industrial	Variable Adjustable
1 Maximum Height	mm	11 520	12 065	7555	8715
2 Minimum Dump Height	mm	4330	3680	3140	4060
3 Maximum Reach	mm	10 345	11 005	8470	8200
4 Maximum Reach at Ground Level	mm	9720	10 570	8275	7970
5 Maximum Depth	mm	1485	2185	5245	4880
6 Boom Pin Height	mm	8235	8235	—	—

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) Blade and Outriggers Lowered									MH (2.75 m) 2 Sets Outriggers Lowered						MH (2.99 m) 2 Sets Outriggers Lowered											
	Boom Type			VA Boom			MH Boom (6.4 m)			One-Piece Boom			VA Boom			MH Boom (6.4 m)			One-Piece Boom			VA Boom			MH Boom (6.4 m)		
	Stick Length			2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾
Material Handling Work Tools																											
Demolition and Sorting Grapple	G315 GC																										
	G315 GC fixed CAN																										
	G315B-D/R																										
	G315B-D/R fixed CAN																										
	G315B-WH 800 L																										
	G315B-WH 1100 L																										
Orange Peel Grapple Horizontal Cylinders (4 or 5 Tines)	GSH15B 400 L																										
	GSH15B 500 L																										
	GSH15B 600 L																										
	GSH15B 800 L																										
	GSH420/GSH520 500 L																										
	GSH420/GSH520 600 L																										
Orange Peel Grapple Vertical Cylinders (5 Tines)	GSV520/GSV520GC 400 L																										
	GSV520/GSV520GC 500 L																										
	GSV520/GSV520GC 600 L																										
	GSV520/GSV520GC 750 L																										
Clamshell Grapple	CTV15 1000 L																										
	CTV15 1200 L																										
	CTV15 1500 L																										
Material Density		1.2 [T/m ³] (less dense material)/1.8 [T/m ³] (standard material)																									

⁽¹⁾ Industrial Stick

⁽²⁾ Straight Stick

⁽³⁾ Drop Nose Stick

Work tool is a match

Pin-on or dedicated coupler

Pin-on only

Over the front only with dedicated coupler

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.

Fixed CAN: CW quick coupler adapter plates

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

MH3024 Wheel Material Handler Specifications

Work Tool Offering Guide*

Undercarriage	Standard (2.75 m) Blade and Outriggers Lowered						MH (2.75 m) 2 Sets Outriggers Lowered						MH (2.99 m) 2 Sets Outriggers Lowered											
	One-Piece Boom			VA Boom			MH Boom (6.4 m)		One-Piece Boom			VA Boom			MH Boom (6.4 m)		One-Piece Boom			VA Boom			MH Boom (6.4 m)	
Boom Type	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾
Stick Length	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	2500 mm	2800 mm	3300 mm ⁽¹⁾	4200 mm ⁽²⁾	4900 mm ⁽³⁾
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																							
Crusher	P315																							
Pulverizer	P215																							
Scrap and Demolition Shear	S320B																							
	S325B																							
	S340B																							
Compactor Plate	CVP75																							
Pin Grabber Coupler	Cat-PG	These couplers are available for the MH3024 (linkage stick).																						
Dedicated Quick Coupler	CW-30	These couplers are available for the MH3024 (linkage stick).																						
	CW-30s	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 or dedicated coupler

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.

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


















Standard (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	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	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			

*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


















Standard (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		

*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.

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.



Undercarriages

MH (2.75 m and 2.99 m)

Boom 6.4 m MH

Stick 4.2 m Straight

Load point height	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm			9000 mm			Load at maximum reach (stick nose/bucket pin)			mm
		Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	Load over front	Load over rear	Load over side	
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.

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
 - Rooding lights two front, halogen
 - Rooding 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 Stage IV emission standards
- Aftertreatment technologies including the Cat Clean Emission Module (Cat CEM) package
- Air filter
- 3000 m 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 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

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
- 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·SSM Quick Sampling valves for engine oil, hydraulic oil and coolant
- Engine emergency shutoff switch
- Spacer rings for tires

MH3024 Optional Equipment

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):
 - Industrial stick (3300 mm)
 - Straight stick (2500, 2800 mm)
- One-Piece boom (5350 mm):
 - Industrial stick (3300 mm)
 - Straight stick (2500, 2800 mm)
- Material Handling boom (6400 mm):
 - Drop nose MH stick (4900 mm)
 - Straight MH stick (4200 mm)

ELECTRICAL

- Adjustable travel alarm
- Rotating beacon
- Generator, 15 kW

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)
 - 70/30 split, openable – two-parts split, fixed, high impact resistant, laminated windshield and skylight (EN356 P8B, 26 mm)
- 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 or 2.99 m wide)
- MH undercarriage with four welded outriggers and front mounted blade (2.75 m or 2.99 m 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 or 25 km/h*
- 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 not compatible with solid tires

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