



Cat[®] MH3027

Wheel Material Handler

Safe and Comfortable

Safety begins before you move material. Optional ground-level access to the cab – whether the cab is in front, behind or to the side of the machine – makes it easy for operators to get to work.

- A cab riser that can reach 5.5 m (18'0") (eye level) in approximately eight seconds, combined with joysticks in lieu of a steering wheel, makes for unsurpassed cab visibility
- Safety valves located in the cab and at ground level manually lower the cab in the event of power loss
- Numerous electrical safety sensors ensure machine components are in the correct position to promote safe operation
- Standard rearview camera on counterweight and optional sideview camera enhances visibility to worksite
- Stick limiter prevents work tool from coming into close proximity to the operator station
- Optional front and top cab guards protect operator from debris
- Longest stabilizers in the industry ensure a safe and stable lifting platform

More Power, Less Fuel

Moving material takes strength. Moving material efficiently takes a smart, fuel-efficient design.

- Cat[®] C7.1 Turbo Assist engine with ACERT[™] Technology produces up to 129 kW (173 hp) and meets U.S. EPA Tier 4 Final emission standards
- Significantly oversized cooling system (rated for 202 kW [275 hp]) features a variable speed auto-reversing hydraulic driven fan motor – programmable from the cab to meet specific demands or purge debris at specified time intervals
- Boom regeneration valve regenerates the flow of oil from the head end of the boom cylinder to the rod end of the cylinder during “boom down” operation, saving energy
- High-capacity hydraulic cooling system keeps operating temperatures low for longer component life, higher efficiency and lower repair cost
- A dedicated closed loop swing system provides swing priority at all times providing improved power management and performance
- Intelligent load sensing hydraulic system cuts fuel consumption by automatically directing the right amount of flow/pressure and also reduces heat generation
- Electro hydraulic joystick controls provides easy joystick effort to work quickly and efficiently while conserving fuel

Built for Production

One machine, two possible front configurations: drop nose or straight stick. Choose the one that's right for your operation.

- Long life and robust designed boom and stick top and side plates are built from single plates of steel to eliminate the need for internal baffles and cross boom weld joints
- The new tapered frame design evenly distributes loads, reduces stresses throughout the frame for superior machine stability and lifting capability
- Feathered welds and strengthened connections add to structural quality of front linkage
- Enhanced sorting ability through the proprietary solid state generator control
- True four wheel mechanical drive provides excellent maneuvering performance even on unimproved terrain
- The fully-integrated swing bearing support structure eliminates the traditional riser ring; resulting benefits include improved load paths, increased bearing support, reduced number of welded joints, and maximized frame torsional resistance.
- Machine operation switches are located in two organized modules to speed up operator productivity and ease of operation

Easy to Service

The easier it is to run maintenance checks and perform routine service, the faster you return to work.

- Cat Product Link[™] remote monitoring helps you take the guesswork out of asset management
 - The MH3027 comes equipped with the new PLE641 hardware with 3G capability
- Ease of access to components and primary service points through convenient service panels and platforms on the sides and top of the machine
- Spacious, accessible compartments
- Centralized hydraulic test ports
- Machine operating system alerts operator and equipment maintenance staff of urgent maintenance tasks
- Hydraulic hoses and electrical wiring labeled to ease maintenance
- Automatic lubrication system is factory set, improving machine life and reducing operating costs
- Less maintenance with greaseless bearings in the cab riser linkage and stabilizers



Cat MH3027 Wheel Material Handler (Preliminary Specifications)

Engine		
Engine Model	Cat C7.1 ACERT	
Emissions	Tier 4 Final	
Net Power (ISO 9249)	129 kW	173 hp
Bore	105 mm	4.13"
Stroke	135 mm	5.31"
Fuel Capacity	416 L	110 gal
Displacement	7 L	427 in³
Cylinders	6 in-line	
Maximum Torque @ 1,400 rpm	1.03 kN·m	758.2 lbf·ft

Weights		
Operating Weight	28 500 kg	62,832 lb
Boom – Long	2553 kg	5,628 lb
Stick – Long	1257 kg	2,771 lb
Boom – Straight (waste)	2238 kg	4,933 lb
Stick – Straight (waste)	1244 kg	2,742 lb

Swing Mechanism		
Swing Speed	8.2 rpm	
Swing Torque	84 kN·m	62,000 lbf·ft
Swing System	Closed loop hydrostatic system with electro-proportional controls	
Maximum Swing Pump Flow	140 L/min	37 gal/min

Transmission		
Maximum Travel Speed	20 km/h	12.4 mph
Creeper Speed	5.3 km/h	3.3 mph
Maximum Gradeability	35%	

Service Refill Capabilities		
Fuel Tank	416 L	110 gal
Diesel Exhaust Fluid Tank	22.71 L	6.0 gal
Cooling System	39 L	10.3 gal
Engine Crankcase with Filter	18.5 L	4.9 gal
Wheel Hub (each)	1.6 L	0.4 gal
Hydraulic Tank	163 L	43.1 gal
Hydraulic System (including tank)	474 L	125.2 gal

Outriggers		
Ground Penetration	88 mm	3.5"

Undercarriage		
Ground Clearance at Lowest Point	306 mm	12"
Oscillation Axle Angle	±4 degrees	
Minimum Turning Radius (inside)	6.4 m	21'0"

Hydraulic System: Maximum Pressure		
Implement Circuit	31 716 kPa	4,600 psi
Travel Circuit	33 095 kPa	4,800 psi
Auxiliary Circuit – Medium Pressure		
Factory Setting	15 168 kPa	2,200 psi
Maximum Allowable Relief Setting	17 237 kPa	2,500 psi
Swing Circuit	37 921 kPa	5,500 psi

Hydraulic System: Maximum Flow		
Implement Circuit	519 L/min	137 gal/min
Auxiliary Circuit – High Pressure	208 L/min	55 gal/min
Auxiliary Circuit – Medium Pressure	76 L/min	20 gal/min
Operating Temperature	60-73° C	140-164° F

Dimensions		
All dimensions are approximate.		
Shipping Height Cab to Ground	3588 mm	11'9"
Shipping Height Cab to Platform	3173 mm	10'5"
Shipping Length	11 256 mm	37'0"
Counterweight Clearance	1440 mm	4'9"
Cab Clearance – Lowered to Ground*	242 mm	9.5"
Cab Height		
Transportation	3314 mm	10'10"
Raised to Top of FOGS Guard	5883 mm	19'2"
Wheel Base	2794 mm	9'2"
Undercarriage Width	2950 mm	9'8"
Stabilizer Width on Ground	4693 mm	15'5"
Undercarriage Length	5732 mm	18'10"
Shipping Width	3075 mm	10'1"

*Factory set at 242 mm (9.5") – adjustable through the operating system to be lower or higher.

Working Ranges				
	Drop Nose		Straight Stick	
Boom Length	7.7 m	25'2"	6.7 m	22'1"
Stick Length	6.0 m	19'10"	5.0 m	16'7"
Maximum Height	13.5 m	45'0"	12.0 m	40'0"
Maximum Reach	13.6 m	44'8"	11.9 m	38'11"
Maximum Depth	3.0 m	10'0"	3.0 m	10'0"

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