



Cat[®] MH3022

Wheel Material Handler

2017

We know that when it comes to material handling equipment, your success depends on productivity and low operating costs. The MH3022 is a purpose-built material handler, designed for industrial and recycling applications that call for safe, quality and reliable products.

Performance

- **Powerful and efficient** – Cat[®] C7.1 ACERT[™] engine meets U.S. EPA Tier 4 Final/EU Stage IV emission standards. Emissions technology is transparent – no action required from the operator and no stopping for regeneration.
- **Dedicated swing pump** – allows faster and smoother combined movements.
- **Refined hydraulic system** – provides increased precision and speed, while preserving fuel consumption.

Efficiency

- **Fuel consumption** – reduced up to 10%*, with no impact on your productivity to lower operating costs.
- **Built-in fuel savers** – eliminate waste thanks to Auto Engine Speed Control, Engine Idle Shutdown and enhanced Eco Mode.
- **High cooling efficiency** – axial fan keeps operating temperatures and costs low.

Safety

- **Blue Angel certified** – with low vibrations and sound levels.
- **Options for specific applications** – Thicker high impact and impact resistant windshields fulfill respectively the EN356 P8B and P5A standards. A cab pre-filtration package reduces dust entry and air contamination.
- **Great visibility** – Large glass areas, LED lights for all working lights and cameras, with both displays split on the same screen.

Ease of Operation

- **Enjoy integrated technologies** – They act transparently. Features like the Auto Brake and Axle Lock or Automatic Travel lock remove some of the tasks you had to do.
- **Smart technologies** – They help boost your productivity while making operation easier: try the optional SmartBoom[™] or Joystick steering.
- **Our cabs are unique** – It's a cab just for you where everything can be adjusted, from the seat to the work tools controls assignment on joysticks and pedal.

Maintenance

- **Ground level access** – for routine maintenance items like fuel and engine oil filters or fluid taps.
- **Reduced maintenance** – Automatic features like electric lift pump and lubrication system along with long greasing intervals.

Versatility

- **Various configurations** – from excavators' flexible offering to MH dedicated solutions. Two MH Boom lengths, straight or drop nose stick and various undercarriages to meet your needs.
- **Various Waste Handling (WH) Packages options** – The "fine mesh" package protects the cooling hood from dust and includes an engine air pre-cleaner. The adjustable reversing fan and vibrating grill of the WH package add more protection.
- **Various attachments** – to tackle all kinds of jobs, from various grapple types to the 15 kW Cat Generator.

Cat Connect Technology

- **Product Link[™]** connects owners to their equipment, providing access to machine data such as location, hours, fuel consumption, idle time and events, and diagnostic codes.

*Versus previous D MH Series.



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Engine		
Engine Model	Cat C7.1 ACERT	
Emissions	Tier 4 Final/Stage IV	
Maximum Gross (ISO 14396)	129.4 kW	174 hp (176 hp/PS*)
Maximum Net (ISO 9249/SAE J1349)	126 kW	169 hp (171 hp/PS*)
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in ³
Cylinders	6 in-line	
Maximum Torque @ 1,400 rpm	830 N·m	612.0 lbf·ft
*Metric values.		

Swing Mechanism		
Swing Speed	8.5 rpm	
Maximum Swing Torque	54 kN·m	39,828 lbf·ft

Transmission		
Maximum Travel Speed (2nd gear)	25 km/h	16 mph
Creeper Speed (2nd gear)	10 km/h	6.2 mph
Maximum Gradeability (23 000 kg/50,706 lb)	68%	

Service Refill Capabilities		
Fuel Tank	330 L	87 gal
Cooling System	46.9 L	12.3 gal
Diesel Exhaust Fluid Tank	34.5 L	9.1 gal
Hydraulic Tank Capacity	153 L	40.4 gal
Hydraulic System Capacity	253 L	66.8 gal

Undercarriage		
Axle Clearance (standard undercarriage)	360 mm	14.2 in
Oscillation Axle Angle	±5 degrees	

Maximum Dimensions (approximate)		
Maximum Shipping Height	3620 mm	11'11"
Maximum Shipping Width	2990 mm	9'10"

Hydraulic System: Maximum Pressure			
Implement Circuit (Normal/Heavy Lift)	35 000/ 37 000 kPa	5,076/ 5,366 psi	
Travel Circuit	35 000 kPa	5,076 psi	
Auxiliary Circuit			
Medium Pressure	21 000 kPa	3,046 psi	
High Pressure	35 000 kPa	5,076 psi	
Swing Mechanism	31 000 kPa	4,496 psi	

Hydraulic System: Maximum Flow			
Implement/Travel Circuit	288 L/min	76 gal/min	
Auxiliary Circuit – High Pressure	250 L/min	66 gal/min	
Auxiliary Circuit – Medium Pressure	49 L/min	13 gal/min	
Swing Mechanism	108 L/min	28.5 gal/min	

Weights		
Operating Weights*	21 500- 24 500 kg	47,399- 54,013 lb

With MH Boom (6400 mm/20'1")		
MH Undercarriage and Straight Stick	23 670 kg	52,183 lb
MH Undercarriage and Drop Nose Stick	23 250 kg	51,257 lb
Standard Undercarriage and Straight Stick	22 730 kg	50,111 lb
Narrow Undercarriage and Drop Nose Stick	22 340 kg	49,251 lb

With Short MH Boom (5350 mm/17'6")		
Narrow Undercarriage and Straight Stick	22 540 kg	49,692 lb

With One-Piece Boom		
Standard Undercarriage and Industrial Stick	21 650 kg	47,730 lb

Counterweights		
Standard	3700 kg	8,157 lb
Optional	4200 kg	9,259 lb

*With solid tires, standard counterweight, MH undercarriage, full fuel tank, operator and work tool (1400 kg/3,086 lb). Weight varies depending on configuration.

Working Ranges – without Work Tool								
	MH Boom				Short MH Boom			
Boom Length	6.40 m (20'1")				5.35 m (17'6")			
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in
Stick Length	4200	13'9"	4900	16'1"	4200	13'9"	4900	16'1"
Maximum Height	11 520	37'9"	12 065	39'0"	10 445	34'3"	11 020	36'2"
Maximum Reach	10 345	33'11"	11 005	36'1"	9325	30'7"	9990	32'9"
Maximum Depth	1485	4'10"	2185	7'2"	1655	5'5"	2325	7'7"

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