

# MH3050

MATERIAL HANDLER



**Engine Power (ISO 14396)**  
**Maximum Operating Weight**

259 kW (347 hp)  
50 000 kg (110,250 lb)

Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.



# CAT® MH3050

## MOBILITY AND STABILITY

The Cat® MH3050 offers superior performance within its size class. A wide undercarriage and stabilizer footprint keep the machine sturdily in place, while the boom and stick options to provide up to 18 m (59'1") reach. The MH3050 combines components from next generation Cat excavators with the material handler cab to bring you maximized productivity, enhanced comfort, and the reliability you expect from your machine.



### NEXT GENERATION MATERIAL HANDLERS

The line of Cat material handlers offers more choices than ever for your business.

- + LOWER OPERATING AND MAINTENANCE COSTS
- + INCREASED OPERATOR EFFICIENCY AND VISIBILITY
- + MORE IN-CAB COMFORT

Ready to help you make your business stronger, Cat next generation material handlers give you new ways to get the most work done at a cost that fits your business.



## SUPERIOR PERFORMANCE

A reach offering up to 18 m (59'1") lets you move more material without repositioning the machine while a wide undercarriage helps provide 360 degree stability. Add the optional 25 kw generator, with fully integrated controls, for safe magnet operation.

## PROVEN RELIABILITY

The MH3050 is built from proven components designed to withstand the toughest applications. Count on your machine to provide the durability and reliability you expect from Cat products.

## ENHANCED COMFORT

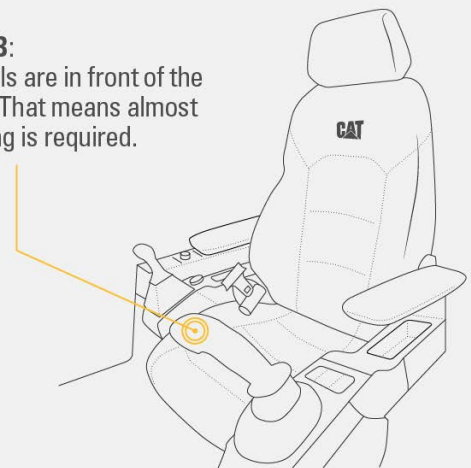
Standard, easy-to-use technologies help make day-to-day tasks easy. An ergonomic cab featuring a heated and ventilated seat, joystick steering and electro-hydraulic controls keeps operators comfortable all shift long.

## WE'VE GOT YOUR BACK.

**BACK PAIN IS ONE OF THE MOST COMMON REASONS PEOPLE MISS WORK.\***

### NEW CAB:

All controls are in front of the operator. That means almost no twisting is required.



**OLD CAB:** 2,000+ twists a year to reach controls in back of cab that can strain your back.

ASSUME 1 TWIST PER HOUR  
 1 TWIST x 8-HOUR WORKDAY = 8 TWISTS PER DAY  
 8 TWISTS x 5 WORKDAYS PER WEEK = 40 TWISTS PER WEEK  
 40 TWISTS x 52 WEEKS PER YEAR = **2,080 TWISTS PER YEAR**

\*SOURCE: [HTTPS://WWW.NINDS.NIH.GOV/DISORDERS/PATIENT-CAREGIVER-EDUCATION/FACT-SHEETS/LOW-BACK-PAIN-FACT-SHEET](https://www.ninds.nih.gov/disorders/patient-caregiver-education/fact-sheets/low-back-pain-fact-sheet)

# STRONG. PRODUCTIVE. EFFICIENT. BUILT TO LAST

## FUEL SAVING PERFORMANCE

The MH3050 features a high-efficiency, hydraulically driven cooling fan that runs only when you need it. An advanced hydraulic system provides the optimum balance of power and efficiency while providing the control you need.

## STRENGTH WHERE IT MATTERS

Count on your machine to withstand wear throughout the years. Boom, sticks, and other high-stress areas are reinforced with thick multi-plate fabrications to ensure quality and reliability. The upper frame uses specially designed mountings to support the heavy-duty cab and the lower frame is reinforced to enhance component durability.

## RELIABLE IN ANY ENVIRONMENT

The MH3050 has a standard high-ambient temperature capability of 52°C (125°F) and a cold start capability of -32°C (-25°F). The material handler can work up to 2300 m (7,550 ft) above sea level without derating. A standard auto reversing fan allows you to work in dusty environments.



# LOW MAINTENANCE COSTS



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## DO MORE. PAY LESS.

With extended and more synchronized maintenance intervals, you get more done at a lower cost. Consolidated filter locations make service faster.

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## INFORMATION AT YOUR FINGERTIPS

View operating information such as fuel levels and critical service alerts on the in-cab touchscreen monitor. Your machine's filter life and maintenance intervals are also trackable on the in-cab monitor.

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## NEW LONGER-LASTING FILTERS

The hydraulic oil filter provides improved filtration performance, with anti-drain valves to keep oil clean when the filter is replaced, and lasts up to 50% longer than previous filter designs.

# ERGONOMIC CAB DESIGN

MAKES HARD WORK EASY

Comfort and movement efficiency help keep you productive and alert all shift long. A tip-up left console lets you get in and out of the cab easily, and the seat is wide and adjustable for operators of virtually any size.

## KEYLESS PUSH TO START

The MH3050 uses a keyless push-button engine start. This adds security for the machine by using operator ID codes to limit and track machine access. Codes can be entered manually or via an optional Bluetooth® key fob.

## TOUCHSCREEN MONITOR

Most machine settings can be controlled through the high-resolution 254 mm (10") touchscreen monitor. It offers 42 languages and is easy to read from the seat.



## COMFORT WHERE IT MATTERS

The premium cab features a 254 mm (10") LED touchscreen monitor, an automatic suspension, heated, and ventilated premium seat.

## CUSTOMIZABLE JOYSTICKS

Joystick functions can be customized through the monitor. Joystick pattern as well as control response can be set to match operator preference. All preferences are saved with the operator ID.

Make operating easier with the touch of a joystick button. Additional auxiliary relays allow you to power on or turn off a CB radio and additional beacon light without taking your hands off the joysticks.

## REDUCE OPERATOR FATIGUE

### ERGONOMIC LAYOUT

Controls are easy to reach, allowing you to operate comfortably with minimal twists and turns. Joystick steering is standard, allowing you to move the machine with minimal effort.

### REDUCED CAB VIBRATIONS

Work more comfortably with reduced cab vibrations from advanced viscous mounts.

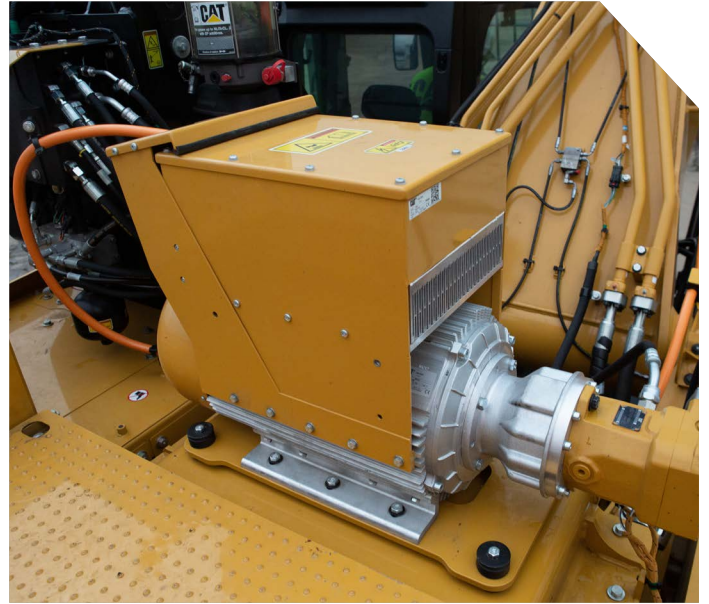
### BLUETOOTH CONNECTION

Bluetooth-integrated radio allows for seamless mobile phone connection to listen to music and podcasts and for hands-free calling.

# DO MORE

VERSATILITY KEEPS YOU  
PRODUCTIVE AND PROFITABLE

Cat material handlers are designed and built for your demanding industry. These powerful machines deliver fast, mobile, and efficient performance.



## CAT PAYLOAD

Cat Payload helps you achieve precise load targets to improve your operating efficiency. Pick up a load of material – with a grapple, clamshell, or magnet attachment and get a real-time weight estimate.

## POWER WHEN YOU NEED IT

Equip your machine with an optional 25 kW generator for magnet operation. Generator controls are fully integrated into the cab monitor.



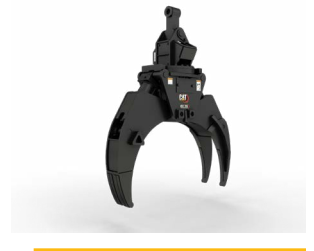
**GSH – ORANGE PEEL  
GRAPPLES**



**GSV – ORANGE PEEL  
GRAPPLES**



**CLAMSHELL GRAPPLES**



**FORESTRY GRAPPLES**

## INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

Easily expand the performance of your machine by using Cat attachments. Each Cat attachment is designed to fit the weight and horsepower of Cat material handlers for improved performance, safety, and stability. Complete attachment guides can be found in the technical specifications documents.

# SAFETY FEATURES

LOOK OUT FOR YOUR PEOPLE AND EQUIPEMNT



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## STANDARD 2D E-FENCE

Standard 2D E-Fence automatically stops machine motion using boundaries you set through the monitor for the entire working envelope – above, below, sides, and front. E-Fence protects equipment from damage. Automatic boundaries even help prevent operator fatigue by reducing overswinging.

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## SECURE START

Use your PIN code on the monitor or the optional Bluetooth key fob to enable the push-button start feature.

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## CAB AVOIDANCE

Like an invisible barrier around the tip over protective structure (TOPS)-certified cab, standard cab avoidance helps prevent your attachment from coming into contact with the cab.

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## UPPER PLATFORM ACCESS

Multiple access points provide easy, safe, and quick access to the upper service area and cab. The machine steps use anti-skid punch plate to prevent slipping. The cab features a working-at-height tie-off provision for increased safety.

## SEE THE JOBSITE AROUND YOU

Enlarged windows and improved machine layout increase visibility from the seat of the cab. Standard rearview and right-side-view cameras always keep operators aware of their surroundings. An optional 360° visibility feature is also available. Powerful, long-lasting LED lights consume minimal power, keeping you safe while working in the dark. Choose between a fixed, one-piece, laminated P5A or P8B glass windshield to protect you from debris falling toward the cab. The premium cab helps block outside noise.



# CAT LINK TECHNOLOGY

## TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

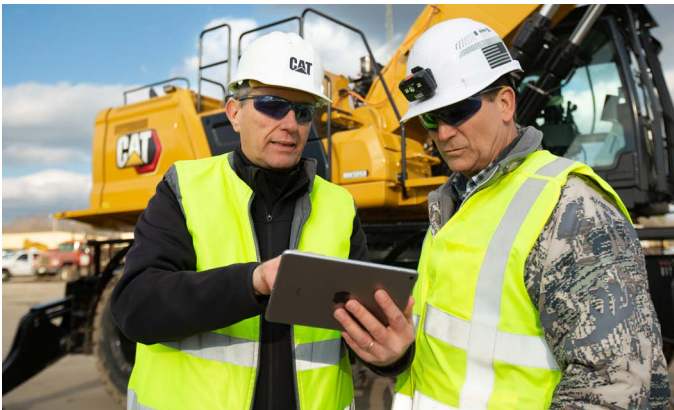
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Cat Link telematics technology helps take the complexity out of managing your jobsites by gathering data generated by your equipment, materials, and people and serving it up to you in customizable formats.



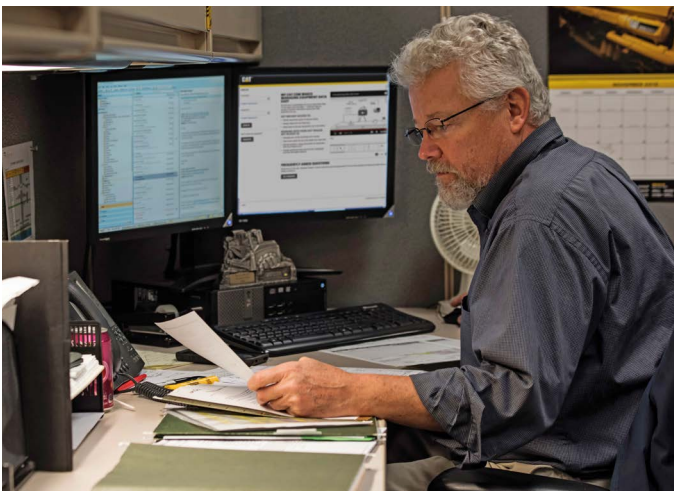
### **PRODUCT LINK™**

Product Link™ collects data automatically and accurately from your assets – any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.



### **VISIONLINK®**

Access information anytime, anywhere with VisionLink®. Use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business without paying for extras you don't want. Subscriptions are available with cellular or satellite reporting (or both).



### **REMOTE SERVICES**

Remote Services is a suite of technologies that improve your jobsite efficiency.

- + **Remote troubleshoot** allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote troubleshoot helps ensure the technician arrives with the correct parts and tools the first time, eliminating additional trips to save you time and money.
- + **Remote flash** updates on-board software without a technician being present, potentially reducing update time by as much as 50%.
- + The **Cat app** helps you manage your assets – at any time – right from your smartphone. You can see your fleet location, hours, and other information. You will get critical alerts for required maintenance, and you can even request service from your local Cat dealer.

# TECHNICAL SPECIFICATIONS

See [cat.com](http://cat.com) for complete specifications.

ENGINE		
Engine Model	Cat® C9.3B	
Engine Power (ISO 14396:2002)	259 kW	347 hp
Net Power (ISO 9249:2007)	258 kW	346 hp
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Displacement	9.3 L	568 in <sup>3</sup>

- The net power advertised is the power available at the flywheel when the engine is equipped with alternator, air cleaner, aftertreatment, and fan at minimum speed.
- The Cat C9.3B meets U.S. EPA Tier 4 Final and EU Stage V emission standards.

TRANSMISSION		
Maximum Travel Speed	18 km/h	11.2 mph
Drawbar Pull	182 kN	40,915 lb/ft

HYDRAULIC SYSTEM		
Maximum Pressure – Implements	31 000 kPa	4,496 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	29 400 kPa	4,264 psi

WEIGHTS		
Minimum Operating Weight	48 000 kg	105,800 lb
Maximum Operating Weight	50 000 kg	110,250 lb

SERVICE REFILL CAPACITIES		
Fuel Tank	600 L	158.5 gal
Diesel Exhaust Fluid (DEF) Tank	80 L	21.1 gal
Cooling System	40 L	10.6 gal
Engine Oil	32 L	8.5 gal
Hydraulic Tank	186 L	49.1 gal
Hydraulic System (including tank)	423 L	111.7 gal
Rear Axle - Housing (differential)	40 L	10.6 gal
Front Steering Axle (differential)	40 L	10.6 gal
Final Drive (each)	4.5 L	1.2 gal
Powershift Transmission	3 L	0.8 gal

SWING MECHANISM		
Swing Speed	10 rpm	
Maximum Swing Torque	143 kN•m	51,800 lb-ft

DIMENSIONS		
<b>Boom</b>	<b>MH Boom 10.95 m (35'11")</b>	
<b>Stick</b>	<b>Industrial 8.3 m (27'3")</b>	
Shipping Height with falling objects guards (FOGS)	3720 mm	12'2"
Shipping Length	14 840 mm	48'8"
Machine Length	6850 mm	22'6"
Tail Swing Radius	3520 mm	11'7"
Counterweight Clearance	1630 mm	5'4"
Cab Height – Lowered	3670 mm	12'0"
Cab Height – Lowered with FOGS	3720 mm	12'2"
Cab Height – Raised	6260 mm	20'6"
Cab Height – Raised with FOGS	6310 mm	20'8"
Wheel Base	3400 mm	11'2"
Shipping Width	3490 mm	11'5"
Ground Clearance	310 mm	1'0"
Undercarriage Length	6750 mm	22'2"
Upper Frame Width (including handrails)	3110 mm	10'2"

WORKING RANGES		
<b>Boom</b>	<b>MH Boom 10.95 m (35'11")</b>	
<b>Stick</b>	<b>Industrial 8.3 m (27'3")</b>	
Maximum Height	19 030 mm	62'5"
Minimum Dump Height	5330 mm	17'6"
Minimum Reach	2590 mm	8'6"
Maximum Reach	18 060 mm	59'3"
Maximum Depth	5760 mm	18'11"
Boom Pin Height	13 470 mm	44'2"

AIR CONDITIONING SYSTEM
The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.25 kg of refrigerant which has a CO <sub>2</sub> equivalent of 1.787 metric tonnes (1.970 tons).

# STANDARD & OPTIONAL EQUIPMENT

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

BOOMS AND STICKS	STANDARD	OPTIONAL
10.95 m (35'11") Straight MH boom	•	
8.3 m (27'3") Industrial stick	•	
CAB	STANDARD	OPTIONAL
Advanced sound-suppressed TOPS cab	•	
Premium cab: air suspension heated and ventilated seat	•	
Height-adjustable console	•	
10" touchscreen monitor	•	
Keyless push-to-start engine control	•	
Bluetooth integrated radio with USP ports and speakers	•	
Tilt-up left-side console	•	
Fixed one-piece laminated windshield and roof window (P5A glass)		•
Fixed two-piece laminated windshield and roof window (P8B glass)		•
LED dome lights	•	
CAT TECHNOLOGY	STANDARD	OPTIONAL
Cat® Product Link™	•	
Cat Payload	•	
2D E-fence and cab avoidance	•	
Remote Flash and Troubleshoot capability	•	
ELECTRICAL SYSTEM	STANDARD	OPTIONAL
LED lights on boom, stick and cab	•	
Maintenance-free batteries	•	
LED chassis light (left hand and right hand) and counterweight	•	
Centralized electrical disconnect switch	•	
Programmable time delay LED working lights	•	
Generator, 25 kW with wiring to stick nose		•
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Automatic lubrication system for implement and swing system	•	
S•O•S <sup>SM</sup> sampling ports	•	
QuickEvac maintenance ready	•	
Grouped location for engine oil and fuel filters	•	

ENGINE	STANDARD	OPTIONAL
Cat C9.3B Turbo diesel engine	•	
Automatic engine speed control	•	
Three selectable modes: Power, Smart, Eco	•	
52°C (125°F) high-ambient capability	•	
-32°C (-25°F) cold start capability	•	
Electric fuel priming pump	•	
Double element air filter with integrated precleaner	•	
On-demand hydraulic cooling fan with auto-reverse function	•	
Cooling door with integrated fine mesh screen		•
HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Electronic main control valve	•	
Automatic hydraulic oil warm up	•	
Automatic swing brake	•	
Boom and stick regeneration circuits	•	
Boom and stick lowering check valves	•	
Fine swing capability	•	
Element type main hydraulic filter	•	
SmartBoom™	•	
2-slider joysticks	•	
Cat BIO HYDO™ Advanced biodegradable hydraulic oil		•
Joystick steering	•	
Pattern changer	•	
SAFETY AND SECURITY	STANDARD	OPTIONAL
Rear- and right-side-view cameras	•	
360° visibility		•
Travel alarm		•
Secondary engine shutoff switch	•	
UNDERCARRIAGE AND STRUCTURES	STANDARD	OPTIONAL
9000 kg (19,850 lb) counterweight	•	
12.00-24 solid rubber tires		•
14.00-24 solid rubber tires		•
All-wheel drive	•	
Automatic brake/axle lock	•	
Creep speed	•	
Heavy-duty axles, advanced disc brake system, and travel motor with adjustable braking force	•	
Lockable, oscillating front axle with remote greasing point	•	

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

For additional information, refer to the Technical Specifications brochures available at [www.cat.com](http://www.cat.com) or your Cat dealer.

For more complete information on Cat products, dealer services and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com).

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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[www.cat.com](http://www.cat.com) [www.caterpillar.com](http://www.caterpillar.com)

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Build Number: 07C  
(Eur, N Am)

