

PM310 | PM312 | PM313

COLD PLANERS



Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA

Gross Power (SAE J1995:2014)	256 kW (343 hp)
Engine Power (ISO 14396:2002)	253 kW (339 hp)

Milling Width

PM310	1000 mm (39.4 in)
PM312	1225 mm (48.2 in)
PM313	1300 mm (51.2 in)

See Technical Specifications for detailed engine emissions information.



ASPHALT MILLING MACHINES DESIGNED JUST FOR YOU

Every Cat® cold planer was developed with input from milling contractors like you and the payoff is immediate:

- + INCREASED PRODUCTIVITY
- + LOWER OPERATING COSTS
- + SERVICE AND SUPPORT FROM THE CAT DEALER NETWORK



THE CAT® PM310, PM312 & PM313

COLD PLANERS

The **PM310, PM312 AND PM313** are equipped to deliver efficient production with the milling precision you need to stay competitive. With three milling widths and options available for enhanced versatility, you can customize your machine to suit numerous applications. Whether milling highway approaches, shoulders or urban streets, a configuration is available to help you meet your job requirements.



COMFORTABLE OPERATION

An ergonomically adjustable work area puts intuitive controls at your fingertips for operation while seated or standing. A 14-button ground-level keypad and optional display gives supporting personnel access to numerous machine controls.

MILLING PRECISION

Integrated technology and Cat System K rotors help achieve excellent cutting patterns and profiles. Cat track or wheeled undercarriages offer smooth operation and a balance between traction, speed and maneuverability.

LOW COST OF OWNERSHIP

Maintenance-free track components and extended service intervals not only reduce downtime but decrease the amount of labor needed and parts replaced over the life of the machine.



A fuel-efficient engine and effective conveyor system provide the power and performance needed to keep up with the demands of grinding through pavement hour after hour.

FUEL-EFFICIENT POWER

The Cat 9.3B engine offers increased power density with improved electronic, fuel, and air systems to deliver the power needed to help you meet production goals. Engine Idle Speed Management helps maximize fuel efficiency and reduce greenhouse gas emissions by elevating engine speed to an intermediate idle to complete specific tasks and returning to low idle when finished. Variable speed cooling fans operate at the lowest possible speed for optimal cooling. Features like Automatic Load Control and multiple rotor speed selections optimize demand on the engine for smooth and efficient operation.

EFFICIENT MATERIAL REMOVAL

High-capacity conveyors with a wide opening and seamless belt efficiently remove milled material. Belt speed can be adjusted to match material type and production rate for outstanding discharge control. The belt reverses for faster clean out, while magnetic vinyl covers provide quick access to inspect and clean the rollers.

BETTER TRACTION FOR OPTIMAL MANEUVERABILITY AND CONTROL

Wheel or track undercarriage options offer a balance of traction, speed and maneuverability. The articulating right rear leg maximizes stability and traction in demanding cuts while enhancing flush cutting capability when needed. For specific applications, an optional ballast weight kit is available to increase productivity.

ENHANCED MOBILITY

Four steering modes with advanced alignment and tracking provide steering precision. A wheeled undercarriage offers enhanced travel speed on the jobsite, and features four 660 mm (25.9 in) diameter and 260 mm (10.2 in) wide solid rubber tires.

TRACKS INSPIRED FROM A LEGACY

The optional track undercarriage system leverages proven designs from Cat 307 and 308 mini excavators. A well-engineered track geometry provides high tractive effort and better load distribution when milling deep cuts or through hard materials.

ADVANCED PROPEL SYSTEM

Dual displacement motors connected in a cross-drive pattern and an Automatic Traction Control system provide additional traction to help reduce track slip in the most challenging applications. To help optimize production, the automatic load sensing on the rotor adjusts milling speed to prevent stalls and keep you moving forward as quickly as possible.

INCREASE VERSATILITY

The articulating right rear leg allows you to choose the position based on application. When maximum stability is needed for extra traction in demanding cuts, it can be positioned outboard of the cutting chamber. Position the leg inboard in front of the rotor chamber for enhanced flush cutting capability and to extend the sliding operator station for improved visibility.



CONSISTENT MILLING PATTERNS

MADE EASY

Automated speed controls allow operators to easily maintain and achieve a milling pattern that meets visual or measured specifications in a wide variety of applications.



SAVE AND RECALL MILLING SPEED

Maintaining your milling speed is key to achieving a consistent cutting pattern. Once a rotor speed is selected and pattern is established, a push of the Cruise Control button stores the propel speed and repeatedly returns to that same speed throughout the day. This is particularly useful when finishing a cut and starting again in a different position.



TAKE A BREAK

Standby/Resume pauses major machine functions and lowers engine speed to conserve fuel and helps reduce greenhouse gas emissions during truck exchanges. When ready to resume milling, a push of a button brings the machine back up to production at the same speed as before to maintain the same cutting pattern.

SPEED CONTROL WITH THE PUSH OF A BUTTON

Choose rotor and milling speed to achieve the desired pattern.



Press and hold **Cruise Control** button for two seconds to save your milling speed.



During truck exchanges, press the **Standby/Resume** button to pause the machine.



Press **Standby/Resume** again to continue milling at the same speed.



For each new cut, press the **Cruise Control** button to return to the saved milling speed.





IMPROVE ACCURACY WITH AUTOMATED FEATURES

Take the guesswork out of producing accurate and repeatable cutting results by using automated features within the integrated Cat GRADE with Grade and Slope system. The machine displays allow easy access to adjust elevation, slope settings and sensors through the highly intuitive touchscreen interface. An optional display can be added to the operator station or on the back of the machine to enable interaction with the grade system from the ground level.



PLUNGE-CUT CAPABILITY

Adjust the speed at which the rotor drops into the cut for optimal machine control. Save your settings to reduce set up time for the next job.



OBSTACLE JUMP

Easily clear obstacles in the cutting path using the obstacle jump feature, accessible from both the operator station and ground level controls.



AUTOMATED CUT TRANSITION

Set and automate grade and slope transitions for tapered start or end cuts over a specified distance, eliminating the need for complicated calculations. Inputs can be saved and recalled for future projects.

3D 3D MILLING CAPABLE

Cat cold planers can be enhanced with full 3D milling operation to meet job specifications (additional hardware required).

ALL-DAY COMFORT

The work area can be set up for operator preference and working position. Touchscreen displays provide access to gauge cluster, operating information, remote camera feeds, machine controls and diagnostics.

SIMPLE CONTROLS

Whether in the operator station or on the ground, the easy-to-use controls are grouped by function with intuitive icons. A 14-button ground level keypad gives supporting personnel access to adjust leg height, sideplates, moldboard, water spray and lighting. All operator controls are backlit for low-light environments.

COMFORTABLE OPERATOR STATION

A suspension seat provides maximum comfort and moves backwards for additional space. The right-side adjustable arm rest can be raised, lowered and/or slid forward and backward to find the ideal operating position, whether seated or standing. Frequently used controls and propel lever are positioned on the armrest for operator efficiency and ergonomics.

The sliding operator station extends up to 215 mm (8.5 in) increasing visibility to the right side cutting edge.

An optional hydraulically powered canopy with integrated side extension and handrail-mounted windscreen help protect the operator from the elements.





CLEANER WORK ENVIRONMENT

Cat cold planers are designed with optional dust ventilation and spray bar systems to maximize dust removal from the working area, keeping the air cleaner for the crew and surrounding environment. Exhaust can be better directed up and away when milling close to buildings or ground personnel with the optional and stowable exhaust diverter.

ENHANCED VISIBILITY

Work areas around the machine are illuminated with wide-dispersion LED or halogen lighting options to keep you working day or night.

Visibility to both cutting edges, conveyor and rear of the machine can be enhanced with up to four optional remote cameras viewable through the main touchscreen display at the operator station.



FLUSH CUT ASSISTANCE

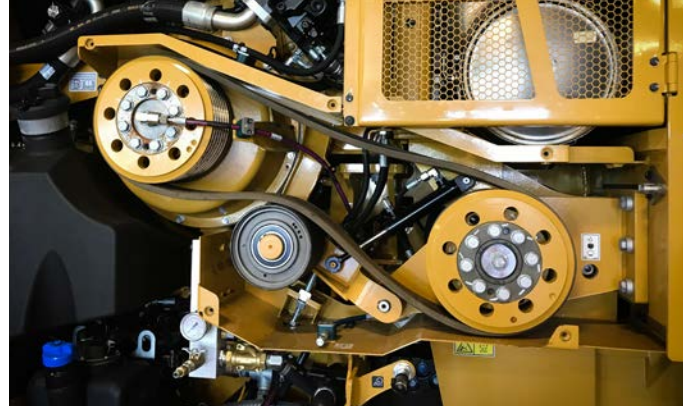
Cut closer to obstacles on either side using an optional remote camera with an adjustable on-screen guidance line, viewable on the touchscreen display on the main operator console.

DURABLE AND DEPENDABLE CUTTING SYSTEM

The robust cutting system is designed to withstand the toughest applications and built to last with heavy steel construction and reinforced alloys to resist abrasion.

DURABILITY DESIGNED IN

The rotor drive system features a heavy-duty dry clutch, dual stage belt drive and automatic belt-tensioning to prevent slippage. A reinforced cutting chamber enhances durability to areas exposed to high abrasion.



REDUCED WEAR AND MAINTENANCE

Hardened steel bolt-on wear skis run the full length of side plates and a reversible wear shoe on the anti-slab assembly reduces wear and maintenance. The System K rotor toolholders, base blocks and kicker paddles are built from high strength alloy steel that's abrasion resistant for extended life.



PRECISE CONTROL

Hydraulically controlled anti-slab, moldboard and side plates give you the adjustability you need. The moldboard applies adjustable downpressure to improve cut cleanup and minimize sweeping, while the side plates function as averaging skis for grade control. Visible indicators from the ground and operator station make it easy to know where the rotor is at various depths.



CAT SYSTEM K ROTORS

OPTIMIZE CUTTING CAPABILITY

Engineered specifically for Cat cold planers, Cat System K rotors feature efficient material flow, an excellent cutting pattern and are designed to simplify maintenance. System K rotors are available in numerous bit spacings to match your application needs.



**MULTIPLE
WAYS TO
REMOVE BITS**



**TAPERED
DUAL-RETENTION
TOOLHOLDER**



**KICKER
PADDLES**



EASY BIT REMOVAL

System K rotors were designed to make changing cutter bits easier and faster. Bits can be removed through the radial access hole, chisel points, or the block, depending on what is easiest for you.

FASTENER-FREE TOOLHOLDER

A tapered dual-retention design secures the toolholders to the rotor without retaining pins, bolts or setscrews, speeding up replacement and eliminating the need for fasteners or torquing.

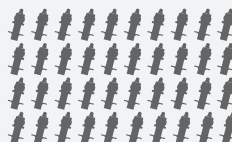
DIAMOND BITS

For bituminous applications without obstacles such as interstates or motorways, consider Cat Diamond bits. They stay sharp up to 40 times longer than conventional carbide teeth, reducing fuel and operating costs.

**DIAMOND BITS
STAY SHARP
UP TO
40x
LONGER**

REDUCES OPERATING COSTS

1 = UP TO **40**
CAT 540 DIAMOND BIT TYPICAL 35 g CARBIDE BITS



**LOWERS
FUEL USAGE
UP TO
12.5%**



Average life and exact tonnage is impacted by local aggregate and operating technique. Comparison between typical 35 g carbide bits and Cat 540 diamond bits.

Regular service and maintenance is key to keeping your machines functioning at optimum levels. The PM310, PM312 and PM313 were designed with long maintenance intervals, large service doors, and easy access to critical components and systems. Track undercarriage components are maintenance-free with easy to replace track pads. When time to replace high wear components, your Cat dealer is ready to help with service, repair kits and convenient parts availability.



TIME SAVERS

Features that make service quick and easy.

Ground-level controls and an optional hydraulically-operated rotor turning device simplify bit removal and replacement.

High and low pressure washdown options connect to the onboard water tank for convenient clean-up.

During maintenance and service, the accessory drive system allows for convenient operation of select machine functions without needing to start the engine.

CAT EQUIPMENT MANAGEMENT TECHNOLOGY TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

Cat equipment management 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.



VISIONLINK®

VisionLink takes the guesswork out of managing your entire fleet – regardless of size or equipment manufacturer.* Review equipment data from your desktop or mobile device to maximize uptime and optimize assets. With interactive dashboards, VisionLink makes it easier for operations of all sizes to make informed decisions that lower costs, simplify maintenance, and improve safety and security on your jobsite. With different subscription-level options, your Cat dealer can help you determine what you need to connect your fleet and manage your business.

- + 24/7 Fleet Monitoring
- + Mixed Fleet Management
- + Optimize Fleet Utilization
- + Track Assets by Location
- + View Asset Health Status
- + Review Inspection Reports
- + Assign Maintenance Tasks
- + Minimize Downtime
- + Request Service and Order Parts
- + Download Summary Reports

* Data field availability can vary by equipment manufacturer.



REMOTE SERVICES**

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 troubleshooting ensures the technician arrives with the correct parts and tools the first time, eliminating additional trips to save you time and money.

Remote Flash allows you to update onboard software without a technician being present, allowing you to initiate software updates when convenient, increasing your overall operating efficiency.

** Must be within cell range coverage.

Caterpillar releases products, services and technologies in each region at different time intervals. Please verify with your local Cat dealer for technology availability and specifications.

TECHNICAL SPECIFICATIONS

ENGINE	
Engine Model	Cat® C9.3B
Cylinders	6
Emissions	Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA
Gross Power – SAE J1995:2014	256 kW 343 hp
Engine Power – ISO 14396:2002	253 kW 339 hp
Build Number	02C
Maximum Milling Speed	33 m/min 108 ft/min
Maximum Travel Speed – Track	5.5 km/h 3.4 mph
Maximum Travel Speed – Wheel	7.5 km/h 4.7 mph

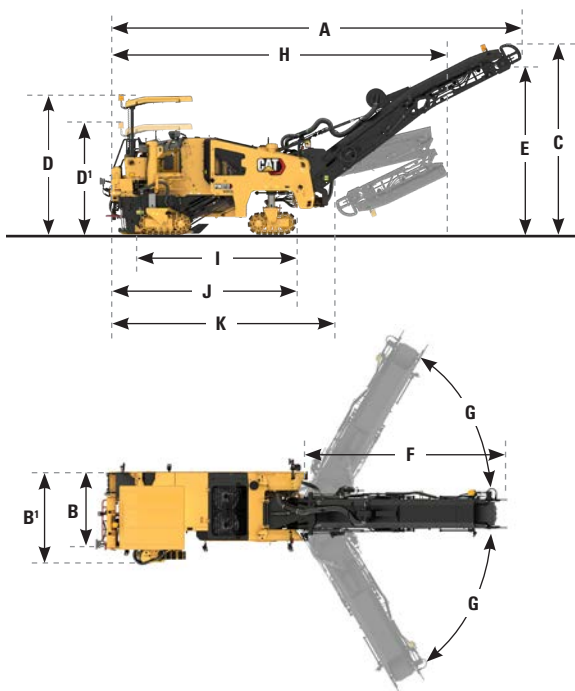
SERVICE REFILL CAPACITIES	
Fuel Tank	522 L 137.9 gal
Cooling System	64 L 16.9 gal
Engine Oil	30 L 7.9 gal
Hydraulic Oil	55 L 14.5 gal
Water Tank	1260 L 332.9 gal

CUTTING SYSTEM	
Milling Width	
PM310	1000 mm 39.4 in
PM312	1225 mm 48.2 in
PM313	1300 mm 51.2 in
Number of Bits (15 mm spacing)	
PM310	91
PM312	106
PM313	111
Maximum Cutting Depth	330 mm 13.0 in
Rotor Speeds	97 / 109 / 121 rpm
Minimum Left Cutting Radius – Track	4.14 m 13.58 ft
Minimum Left Cutting Radius – Wheel	4.23 m 13.88 ft
Minimum Right Cutting Radius – Track	1.92 m 6.30 ft
Minimum Right Cutting Radius – Wheel	2.00 m 6.56 ft

	WEIGHTS		
	PM310	PM312	PM313
Operating Weight – Track	20 924 kg 46,131 lbs	21 213 kg 46,766 lbs	21 267 kg 46,886 lbs
Operating Weight – Wheel	20 218 kg 44,574 lbs	20 507 kg 45,209 lbs	20 561 kg 45,330 lbs
Transport Weight – Track	20 516 kg 45,230 lbs	20 804 kg 45,865 lbs	20 859 kg 45,986 lbs
Transport Weight – Wheel	19 810 kg 43,673 lbs	20 098 kg 44,309 lbs	20 153 kg 44,429 lbs

Weights shown are approximate and include:

- Operating weight includes base machine with 75 kg (165 lb) operator, all standard equipment, power canopy, dust abatement system, high pressure wash system, 15 mm rotor, 510 kg (1124 lb) ballast kit, pneumatic compressor, 50% water, 50% fuel and full operating fluids.
- Transport weight includes base machine, all standard equipment, power canopy, dust abatement system, high pressure wash system, 15 mm rotor, 510 kg (1124 lb) ballast kit, pneumatic compressor, empty water, full fuel and other operating fluids.



DIMENSIONS	
A Overall Length	11.11 m 36.45 ft
B Machine Width (leg in)	2.18 m 7.15 ft
B' Machine Width (leg out)	2.54 m 8.33 ft
C Machine Height (rotor at scratch)	5.15 m 16.90 ft
D Height to Optional Canopy	3.75 m 12.30 ft
E Maximum Truck Clearance	4.70 m 15.42 ft
F Conveyor Length	7.08 m 23.23 ft
G Conveyor Swing	±60° from center

SHIPPING DIMENSIONS	
H Transport Length (conveyor folded)	9.32 m 30.58 ft
B' Transport Width (leg out)	2.54 m 8.33 ft
D' Transport Height (rotor at scratch and canopy lowered)	3.00 m 9.84 ft
I Length (track to track)	4.26 m 13.98 ft
Length (wheel to wheel)	3.88 m 12.73 ft
J Length of Machine (rear to front track)	5.04 m 16.54 ft
Length of Machine (rear to front wheel)	4.70 m 15.42 ft
K Length of Base Machine	5.90 m 19.36 ft

STANDARD & OPTIONAL EQUIPMENT

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

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
Sliding operator station	●	
Suspension seat	●	
Ground control keypad	●	
Ergonomically adjustable armrest	●	
High-resolution LCD touchscreen display	●	
12-volt power receptacle	●	
Additional high-resolution LCD touchscreen display		○
Powered canopy		○
Windscreen		○
Exhaust diverter		○

CAT CONNECT TECHNOLOGY	STANDARD	OPTIONAL
Remote Flash	●	
Remote Troubleshoot	●	
Cat Grade with Grade and Slope	●	
VisionLink® telematics	●	
Sonic grade control sensors		○
High-resolution LCD touchscreen display (for ground level grade controls)		○

CONVEYOR	STANDARD	OPTIONAL
Dust abatement system		○
Hydraulic folding conveyor		○

ROTOR SYSTEM	STANDARD	OPTIONAL
Automatic plunge-cut	●	
Automatic grade and slope transition feature	●	
Obstacle jump	●	
Three cutting speeds	●	
System K Rotor – Coarse (18 mm)		○
System K Rotor – Standard (15 mm)		○
System K Rotor – Fine (8 mm)		○
Diamond bits		○
Pneumatic bit removal tool		○
Tool holder extractor		○
Rotor turning device (with pendant control)		○
510 kg (1124 lb) ballast kit		○

POWERTRAIN	STANDARD	OPTIONAL
Engine Idle Speed Management	●	
High capacity cooling system	●	
Automatic Load Control	●	
Wheel undercarriage		○
Track undercarriage		○

HYDRAULIC SYSTEM	STANDARD	OPTIONAL
Traction control	●	
Cat Bio HYDO™ Advanced biodegradable hydraulic oil		○
High ambient hydraulic oil		○

SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Ports for Scheduled Oil Sampling (S-O-S SM)	●	
Platform-level engine oil dipsticks	●	
1260 L (332.9 gal) onboard water tank	●	
Side water fill valve	●	
Water spray system	●	
Air compressor		○
Accessory drive system		○
High pressure washdown		○
Low pressure washdown		○
Additional water spray system (dust control)		○

SAFETY AND SECURITY	STANDARD	OPTIONAL
Platform handrails	●	
Signaling/warning horn	●	
Halogen work lighting		○
Wide dispersion LED work lighting		○
Warning beacon (fixed)		○
LED roading lights		○
Truck signal lights		○
Remote cameras (rear back up, front conveyor, left and/or right cutting edges, magnetic mount)		○



For more complete information on Cat products, dealer services and industry solutions, visit us on the web at 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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(Brazil MAR-1, equivalent to
U.S. EPA Tier 3 and EU Stage IIIA)

