



# Cat<sup>®</sup> PM310, PM312, PM313

## Cold Planers

***Cat<sup>®</sup> PM310, PM312 and PM313 Cold Planers with integrated Cat GRADE and the latest System K rotors deliver performance, productivity and cutting precision. A comfortable operator environment puts intuitive controls at your fingertips, while long service intervals and easy maintenance access simplifies service. While designed for a single operator, the PM300-Series include added features for supporting ground personnel. Many options are available to enhance machine versatility when optimum maneuverability or high production capabilities are required.***

***Not all features available in all regions. Consult your Cat dealer for specific configurations available in your region.***

### Efficient Performance

- Cat<sup>®</sup> C9.3B engine meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA and offers increased power density with improved electronic, fuel, and air systems
- Engine Idle Speed Management and multiple rotor speeds optimize output and demand on the engine
- Variable speed cooling fans operate at the lowest possible speed for optimal cooling
- Automatic load sensing on the rotor adjusts milling speed to prevent stalls and optimize production

### Optimal Maneuverability and Control

- Robust propel system features dual displacement motors at each leg post, utilizing a cross-drive pattern for additional traction in straight cuts
- Automatic traction control helps reduce track slip and maintain consistent speed in the most challenging applications
- Articulating right rear leg maximizes stability and traction in demanding cuts while enhancing flush cutting capability when needed
- Optional ballast weight kit available to increase productivity in specific applications
- Wheel or track undercarriage options offer a balance of traction, speed and maneuverability
- Reliable track undercarriage option leverages proven designs from Cat 307 and 308 mini excavators and an automatic tensioning system to ensure consistent performance and longer track life
- Ability to electronically switch between rotor speeds during operation

### Highly Effective Material Removal

- High-capacity conveyors provide efficient removal of milled material with outstanding discharge control
- A wide opening and seamless belt effectively clear the rotor chamber
- Adjust the belt speed to match material type and production rate
- The belt reverses for quick clean out, while magnetic vinyl covers provide quick access to inspect and clean the rollers

### Durable and Dependable Cutting System

- The rotor drive system features a heavy-duty dry clutch, dual stage belt drive and automatic belt-tensioning to prevent slippage
- Reinforced cutting chamber offers enhanced durability
- Hardened full length side plate skis and anti-slab shoes reduce wear and maintenance

### High Production System K Rotors Optimize Cutting Capability

- Cat System K rotors feature efficient material flow with an excellent cutting pattern for numerous applications
- A tapered dual-retention design secures toolholders in place without a retaining pin, bolt or setscrew, speeding up replacement and eliminating the need for fasteners or torquing
- Toolholders, base blocks and kicker paddles are built from high strength alloy steel that's abrasion resistant for extended life
- Optional diamond bits can extend replacement intervals up to 40 times longer than conventional carbide bits



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## Comfortable Work Environment

- Operate in comfort with a standard suspension seat, adjustable right arm console and intuitive, ergonomic controls
- A sliding operator station extends up to 215 mm (8.5 in) to provide improved visibility to the cutting edge
- Work day or night with backlit keypads and illuminate the work area around the machine with wide-dispersion LED or halogen lighting options
- Touchscreen displays provide access to gauge cluster, operating information, grade and slope, remote camera feeds, machine controls and diagnostics
- A 14-button ground level keypad and optional touchscreen display gives supporting personnel access to adjust leg height, side plates, moldboard, water spray and lighting
- Connect up to four optional remote cameras to enhance visibility to the cutting edges, conveyor, and rear of the machine
- Cut closer to obstacles on either side using optional remote cameras with adjustable on-screen guidance lines
- An optional hydraulically powered canopy with extendible wing and handrail-mounted windscreen protect the operator from sun, wind, and rain
- Better direct exhaust up and away when milling close to buildings or ground personnel with the optional and stowable exhaust diverter
- Maximize dust removal from the working areas with the optional dust abatement system

## Boost Precision with Integrated Cat Technology

- Achieve accurate, repeatable and automatic cutting precision with the integrated Cat Grade and Slope system
- The optional grade control display can be positioned in the operator station or on the back of the machine to enable interaction with the grade system from the ground level
- Obtain full control of grade and slope from any machine display
- Easily adjust grade control values and sensors through the highly intuitive touchscreen interface
- Adjust the speed at which the rotor drops into the cut for optimal machine control
- Set and automate transitions into/out of cuts and save settings for future jobs
- Clear obstacles in the cutting path with ease using the obstacle jump feature
- Enhance for full 3D milling operation (additional hardware required)

## Simplified Service, Low Maintenance Costs

- Maintenance is easier with large service doors for access to critical components
- Maintenance-free track components and easy to replace track pads lower service costs
- Standard ground-level controls and an optional hydraulically operated rotor turning device simplify bit removal and replacement
- The accessory drive system allows use of select machine functions when the engine is turned off
- Electrical system wiring is color-coded and numbered for easy identification and wrapped in a protective, abrasion-resistant nylon braid for longer life
- Monitor fluid conditions with regular sampling to help extend change intervals up to 500 hours engine oil, 6000 hours hydraulic oil and 12000 hours coolant
- Electronic Control Modules (ECMs) monitor machine systems to alert the operator of performance issues
- VisionLink® takes the guesswork out of managing your entire fleet—regardless of size or equipment manufacturer\*—by providing maintenance needs, machine hours, location, fuel usage, idle time, diagnostic codes, and more through interactive dashboards on your mobile device or desktop, helping you make informed decisions that lower costs, simplify maintenance, and improve safety and security on your jobsite
- 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\*\*
- Remote Troubleshoot allows your Cat dealer to perform diagnostic testing on your connected machine remotely\*\*
- Convenient parts availability, dealer locations and service repair kits simplify ordering of high wear components

*\* Data field availability can vary by equipment manufacturer and is provided through an application programming interface (API).*

*\*\* Must be within cell range coverage.*

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>OPERATOR ENVIRONMENT</b>			<b>POWERTRAIN</b>		
Sliding operator station	✓		Engine Idle Speed Management	✓	
Suspension seat	✓		High capacity cooling system	✓	
Ergonomically adjustable arm rest	✓		Automatic Load Control	✓	
Ground control keypad	✓		Wheel undercarriage		✓
High-resolution LCD touchscreen display	✓		Track undercarriage		✓
Additional high-resolution LCD touchscreen display		✓	<b>HYDRAULIC SYSTEM</b>		
12-volt power receptacle	✓		Traction control	✓	
Powered canopy		✓	Cat Bio HYDO™ Advanced biodegradable hydraulic oil		✓
Windscreen		✓	High ambient hydraulic oil		✓
Exhaust diverter		✓	<b>SERVICE AND MAINTENANCE</b>		
<b>CAT® CONNECT TECHNOLOGY</b>			Ports for Scheduled Oil Sampling (S-O-S <sup>SM</sup> )	✓	
Remote Flash	✓		Platform-level engine oil dipsticks	✓	
Remote Troubleshoot	✓		1260 L (332.9 gal) onboard water tank	✓	
Cat Grade with Grade and Slope	✓		Side water fill valve	✓	
VisionLink® telematics	✓		Water spray system	✓	
Sonic grade control sensors		✓	Air compressor		✓
High-resolution LCD touchscreen display (for ground level grade controls)		✓	Accessory drive system		✓
<b>CONVEYOR</b>			High pressure washdown		✓
Dust abatement system		✓	Low pressure washdown		✓
Hydraulic folding conveyor		✓	Additional water spray system (dust control)		✓
<b>ROTOR SYSTEM</b>			<b>SAFETY AND SECURITY</b>		
Automatic plunge-cut	✓		Platform handrails	✓	
Automatic grade and slope transition feature	✓		Signaling/warning horn	✓	
Obstacle jump	✓		Halogen work lighting		✓
Three cutting speeds	✓		Wide dispersion LED work lighting		✓
Rotor turning device (with pendant control)		✓	Warning beacon (fixed)		✓
System K Rotor – Coarse (18 mm)		✓	LED roading lights		✓
System K Rotor – Standard (15 mm)		✓	Truck signal lights		✓
System K Rotor – Fine (8 mm)		✓	Remote cameras (rear back up, front conveyor, left and/or right cutting edges, magnetic mount)		✓
Diamond bits		✓			
Pneumatic bit removal tool		✓			
Tool holder extractor		✓			
510 kg (1124 lb) ballast kit		✓			

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## Technical Specifications

Engine		
Engine Model	Cat C9.3B	
Cylinders	6	
Emission Standards	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 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.

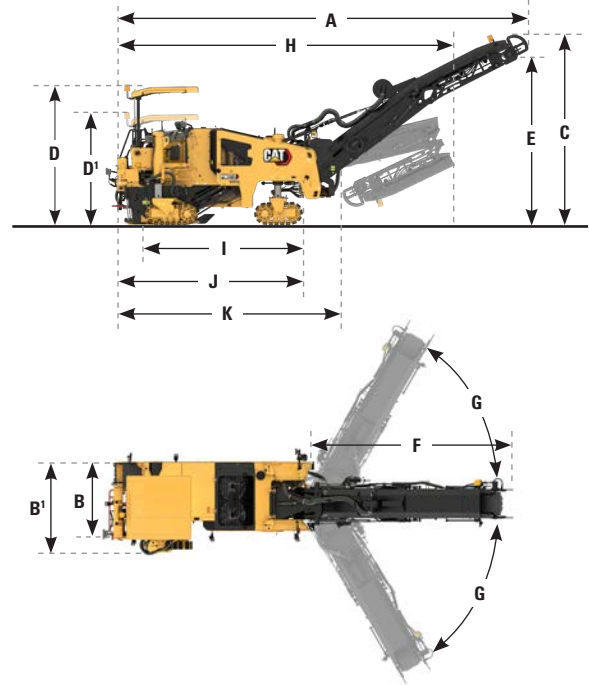
## Technical Specifications

### Operating Dimensions

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

### Shipping Dimensions

<b>H</b>	Transport Length (conveyor folded)	9.32 m	30.58 ft
<b>B'</b>	Transport Width (leg out)	2.54 m	8.33 ft
<b>D'</b>	Transport Height (rotor at scratch and canopy lowered)	3.00 m	9.84 ft
<b>I</b>	Length (track to track)	4.26 m	13.98 ft
	Length (wheel to wheel)	3.88 m	12.73 ft
<b>J</b>	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
<b>K</b>	Length of Base Machine	5.90 m	19.36 ft



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## Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit [www.caterpillar.com/en/company/sustainability.html](http://www.caterpillar.com/en/company/sustainability.html).

### ENGINE

- The Cat 9.3B meets Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA emission standards.
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels\* up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)
  - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

*\*Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.*

### PAINT

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
  - Barium < 0.01%
  - Cadmium < 0.01%
  - Chromium < 0.01%
  - Lead < 0.01%

### SOUND PERFORMANCE

With cooling fan speed at 70% of maximum value:  
(EN 500-2:2006+A1:2008, Annex A)

Operator Sound Pressure Level – 94 dB(A)  
Exterior Sound Power Level – 111 dB(A)

- Hearing protection may be needed when operating with an open operator station for extended periods or in a noisy environment.

### OILS AND FLUIDS

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

### FEATURES AND TECHNOLOGY

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  - Advanced hydraulic systems balance power and efficiency
  - Adjustable rotor speeds allow for milling at lower engine speeds
  - Engine Idle Speed Management keeps the machine idle at lowest possible RPM
  - Variable speed cooling fans operate at the lowest speed for optimal cooling
  - System K rotor efficiently removes material and reduces drag
  - The Standby/Resume feature pauses machine functions and lowers engine speed during truck exchanges
  - Extended maintenance intervals reduce fluid and filter consumption
  - Diamond bits stay sharper up to 40 times longer than conventional carbide and reduce cutting resistance
  - Remote Flash

### RECYCLING

- The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage (Track Undercarriage)
Steel	79.95%
Iron	7.44%
Nonferrous Metal	4.00%
Mixed Metal	0.55%
Mixed-Metal and Nonmetal	1.14%
Plastic	3.64%
Rubber	0.94%
Mixed Nonmetallic	0.01%
Fluid	1.06%
Other	0.72%
Uncategorized	0.55%
Total	100%

- A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714 (Earthmoving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused or both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following value in the table may vary.

Recyclability – 95%



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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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QEHQ3141-02 (11-2023)  
Build Number: 02C  
(Brazil MAR-1, equivalent to  
U.S. EPA Tier 3 and EU Stage IIIA)

