

PM-565B

Cold Planer



Cat® 3408E HEUI Diesel Engine

Gross Power	466 kW	625 hp
Standard Cutting Width	2100 mm	83"
Maximum Cutting Depth	305 mm	12"

Diesel Engine

Caterpillar® 3408E HEUI diesel engine.

Ratings at	RPM	kW	hp
Gross power	2100	466	625
Net power	2100	450	603

The following ratings apply at 2100 RPM when tested under the specified standard conditions.

- Air conditions of 25°C (77°F) and 99 kPa (29.32" Hg) dry barometer.
- 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30°C (86°F) [ref. a fuel density of 838.9 g/L (7.001 lb/U.S. gal)].
- Net power advertised is the power available at the flywheel when the engine is equipped with air cleaner, muffler and alternator.
- No derating required up to 1500 m (4921') altitude.

Net Power	Kw	hp	Ps
EEC 80/1269	450	603	—
ISO 9249	450	603	—
SAE J1349 Jan90	445	596	—
DIN 70020	—	—	625

Dimensions

Bore	137 mm	5.4"
Stroke	152 mm	6"
Displacement	18.01 liters	1099 cu. in.

- Dual element dry-type air cleaner with primary and secondary elements has an automatic dust ejector and service indicator.
- 24-volt direct electric starting system with 100 amp alternator and two Caterpillar maintenance-free batteries.

Hydraulic System

- Pumps for track drive, rotor drive, conveyor system, auxiliary hydraulics and fan are installed on the engine mounting pad.
- Hydraulic oil cooler adjacent to radiator.
- Three-micron filtration on pressure side of auxiliary flow; three-micron filtration on return flow.
- Quick connect fittings for checking system pressures.

Service Refill Capacities

	Liters	Gallons
Fuel tank	946	250
Cooling system	151	40
Crankcase	45	12
Rotor clutch sump	35	9.2
Hydraulic system	132	35
Water spray system	3787	1000

Dimensions

Operating

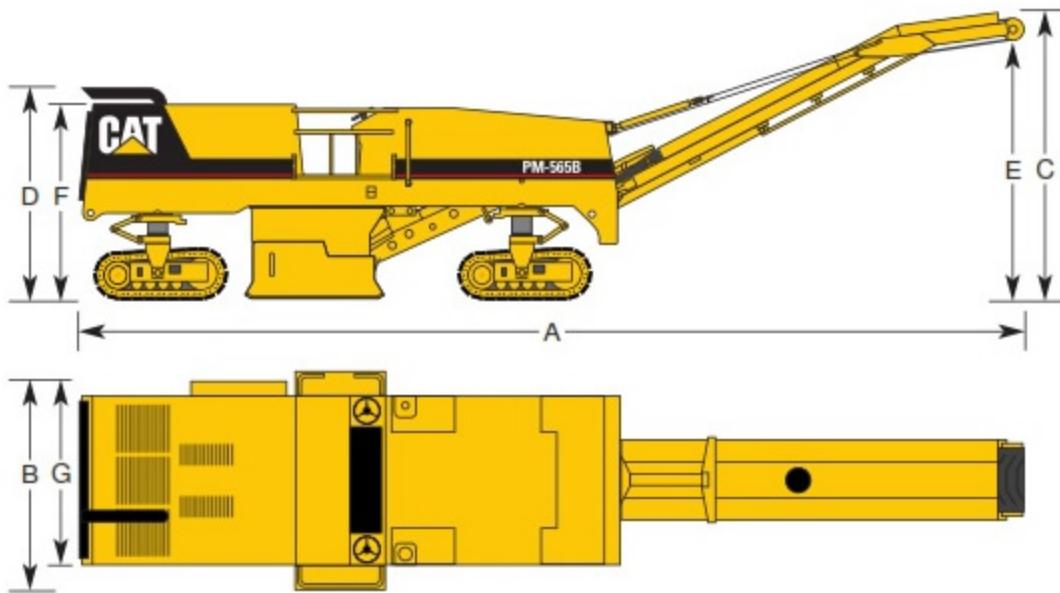
A Length (conveyor up)	15.1 m	49' 5"
B Width	2.79 m	9' 2"
C Maximum height	5.04 m	16' 6"
D Minimum height	3.22 m	10' 7"
E Maximum truck clearance	4.75 m	15' 7"
Rotor ground clearance	305 mm	12"
Weight (full water tank)	38 595 kg	85,100 lb
On front tracks	20 455 kg	45,100 lb
On rear tracks	18 140 kg	40,000 lb

Conveyor

Discharge conveyor swing	45 degrees right or left
Conveyor width (collecting)	1020 mm
Conveyor width (discharge)	915 mm

Shipping

Length		
Base machine	8.25 m	27'
With conveyor (down)	15.7 m	51' 6"
F Maximum height	2.98 m	9' 9"
G Width	2.56 m	8' 5"
Weight (empty water tank)	34 330 kg	75,690 lb
On front tracks	17 800 kg	39,250 lb
On rear tracks	16 530 kg	36,440 lb



Brakes

Service brake features

- Closed-loop hydrostatic drive provides dynamic braking during operation.

Parking brake features

- Button-actuated, spring-applied, hydraulically released multiple disc type brakes on all four tracks.
- Propel pump is stroked when parking brake is engaged. Propel lever must be returned to neutral after brake is released before machine will propel.

Propel System

- Four 2045 mm (80.5") long x 348 mm (14") wide tracks.
- Hydrostatic drive with hydraulic flow provided by variable displacement piston-type pump.
- Infinitely variable machine speed determined by propel lever.
- Load sensing system matches propel speed to load on rotor.

Speeds (forward and reverse):

Operating	40 mpm – 132 fpm
Travel	6.0 km/hr – 3.7 mph

Rotor Drive System

- One ten-rib, high tensile strength drive belt drives the rotor through a gear reducer inside the mandrel.
- Heavy-duty Caterpillar wet clutch mounts directly to the engine.
- Clutch oil is routed through a separate filter and oil cooler and is used to lubricate upper and lower drive housings.
- Hydraulically powered automatic drive belt tensioner.
- Single caliper with dual disc brake installed on PTO drive shaft.

Water Spray System

- Centrifugal pump supplies water to spray nozzles for dust control and cool cutting tools.
- Automatic water spray system operates only when the rotor is engaged and machine is moving forward to save water.
- System includes gauges to monitor water pressure, a low water level indicator and water control valves to conserve water usage.
- Water tank can be filled from the top of the machine or at ground level.

Rotor Housing

- Large discharge opening clears out the rotor housing fast for increased production and reduced tool wear.
- Side plates have a wear-resistant ski for reduced wear and longer life.
- Floating moldboard with adjustable down pressure standard.
- A panel on the rear door can be removed to windrow the milled material directly behind the machine.
- Height control for rotor and moldboard located at operator's station and at two ground level control stations.

Steering

- Hydraulic steering with two steering wheels on operator's console.
- Double acting hydraulic cylinders on front and rear tracks.
- Four steering modes with automatic realignment of rear tracks: front tracks only, rear tracks only, crab and coordinated steering.

Turning Radius:

Minimum	4.66 m	15' 4"
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Rotor Assembly

- Triple-wrap flighting provides optimum tool spacing for high production.
- Bolt-on tool holders enables quick and simple replacement of breakaway tool holders without welding.
- Cutting tools are drive-in, knock-out style for fast replacement.
- Rotor mandrel is liquid-filled to dissipate surface heat and cool the internal drum drive gear reducer.

Cutting width	2100 mm	83"
Cutting depth	305 mm	12"
Diameter (to tool tips)	1168 mm	46"
Number of tools		170

Conveyor System

- Raise, lower and swing controlled from operator's station and at two ground level control stations.

Collecting Conveyor:

Length	3.74 m	12' 3"
Width	1020 mm	40"
Speed	189 mpm	620 fpm

Discharge Conveyor:

Length	8.31 m	27' 3"
Width	915 mm	36"
Max. speed	231 mpm	760 fpm
Speed w/boost	293 mpm	960 fpm
Swing		45°

Grade Control System

- Electronic over hydraulic grade and slope system with manual, automatic and calibrate modes.
- Two sonic grade sensors and an on-board cross slope sensor standard.
- Grade sensors read any reference between 457 mm (18") and 1400 mm (55") from bottom of sensor.
- Constant display of rotor height and slope at ground level and operator's stations.
- Controller has built-in diagnostics to simplify troubleshooting.