

PM-565B

Cold Planer

CAT[®]



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 |

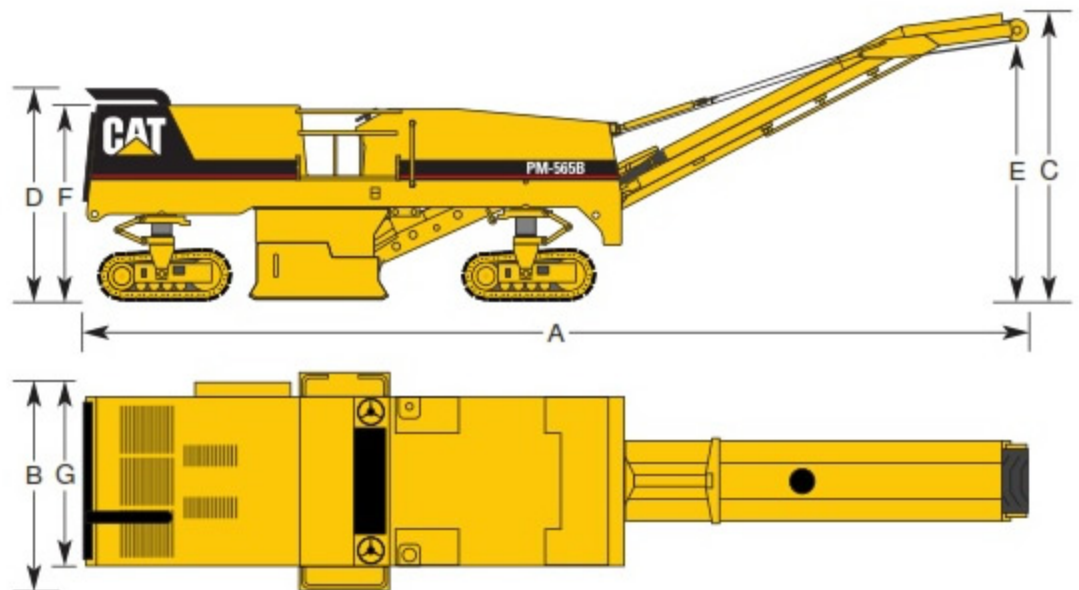
Conveyor

| | | |
|-----------------------------|--------------------------|-----|
| Discharge conveyor swing | 45 degrees right or left | |
| Conveyor width (collecting) | 1020 mm | 40" |
| Conveyor width (discharge) | 915 mm | 36" |

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 destroyed when parking brake is engaged. Propel lever must be returned to neutral after brake is released before machine will propel.

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 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 |

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 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.

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° |

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.

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" |
|---------|--------|--------|

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.