



Montana Department of Transportation Bridge Bureau Approved Construction Equipment List

This form is used for analyses for Bridge Approval Only.

Make **Model**

Combination Type **If Other (Specify)**

Select Axle Type

Select # of Axles

Insert Weight (lbs)

	Axle Groups	Feet	Inches
	<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments

Vehicle configuration, weights and specifications on following pages. Approved statewide on non-load posted Bridges, using operating weights, when centerlining and soloing bridges at 10mph. For vehicle movement on Bridges with structural reduced capacity see, Br201.38, here: <https://www.mdt.mt.gov/business/contracting/bridge/bridge-specials.aspx>

Diesel Engine

Caterpillar® 3408E HEUI diesel engine.
EPA emissions certified through 2001.

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 ft.) altitude.

Net Power	Kw	Hp	Ps
Caterpillar	450	603	—
EEC 80/1269	450	603	—
ISO 9249	450	603	—
SAE J1349 (JAN90)	445	596	—
DIN 70020	—	—	625

Gross Power	Kw	Hp	Ps
ISO 3046-2	447	600	608

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 batteries.

Hydraulic System

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

Service Refill Capacities

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

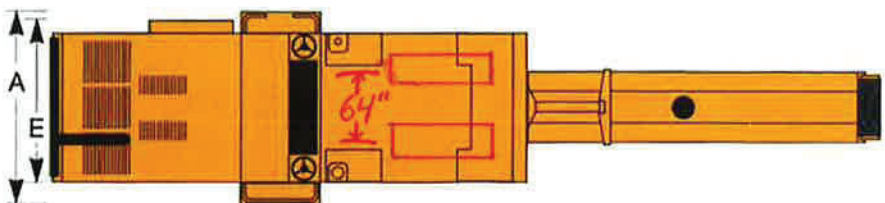
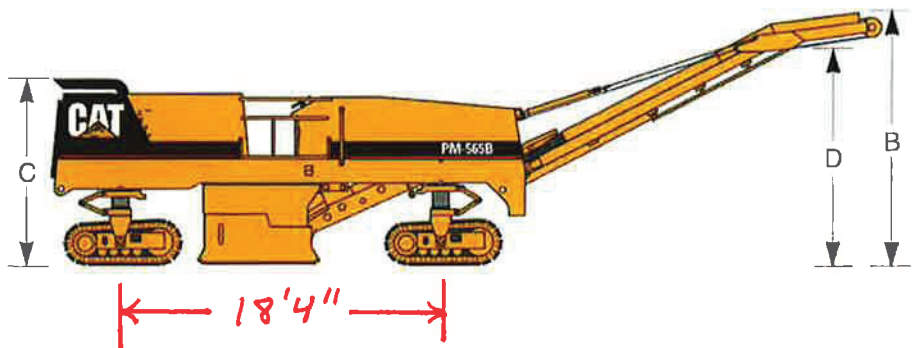
Dimensions

Operating

Length (conveyor up)	14,50 m	47' 6"
Width (A)	3151 mm	10' 4"
Maximum Height (B)	4535 mm	14' 11"
Minimum Height (C)	3224 mm	10' 7"
Maximum Truck Clearance (D)	3963 mm	13'
Rotor Ground Clearance	305 mm	12"
Weight (full water tank)	38 000 kg	83,600 lb
On front tracks	19 800 kg	43,600 lb
On rear tracks	18 200 kg	40,000 lb

Shipping

Length		
Base machine	8250 mm	27'
With conveyor (down)	15,07 m	49' 5"
Maximum height (C)	2981 mm	9' 9"
Width (E)	2,5 m	8' 2"
Weight (empty water tank)	33 566 kg	74,000 lb
On front tracks	17 122 kg	37,746 lb
On rear tracks	16 444 kg	36,254 lb



Front tracks to back tracks = 18'4"

Track Width Separation - Center to Center = 64"