MONTANA Department of Transportation

MDT-BRG-015 04/23

Montana Department of Transportation
Bridge Bureau
Approved Construction Equipment List

mdtacel@mt.gov

Make: Caterpillar

Model: PM 822

Equipment Type: Milling Machine

Contractor Modifications: none

Interstate Approval Conditions

Approval Type	crossing only
Speed:	10 mph
Weight:	80,910 lb or less
Traffic:	no traffic on bridge
Location Restrictions:	centerline

Non-Interstate Approval Conditions

Approval Type	denied
Speed:	denied
Weight:	denied
Traffic:	denied
Location Restrictions:	denied

Comments:

Equipment configuration, weights and specifications on following pages. Approval does not apply to load posted bridges. No other construction equipment is allowed on the bridge at the same time as the Cat PM 822.

TECHNICAL SPECIFICATIONS

ENGINE	
Engine Model	Cat® C18 twin-turbo
Cylinders	6
Emissions	
U.S. EPA Tier 4 Final, EU Stage V	
Gross Power – SAE J1995:2014	601 kW 806 hp
Engine Power – ISO 14396:2002	595 kW 798 hp
U.S. EPA Tier 2, EU Stage II equivalent	
Gross Power – SAE J1995:2014	576 kW 772.4 hp
Engine Power – ISO 14396:2002	569 kW 763 hp
Build Number	02B
Maximum Milling Speed	100 m/min 328 ft/min
Maximum Travel Speed	5.9 km/h 3.7 mph

CUTTING SYSTEM	
PM820 Milling Width	2010 mm 79.1 in
PM820 Number of Bits (15 mm spacing)	170
PM822 Milling Width	2235 mm 88.0 in
PM822 Number of Bits (15 mm spacing)	185
PM825 Milling Width	2505 mm 98.6 in
PM825 Number of Bits (15 mm spacing)	203
Maximum Cutting Depth	330 mm 13.0 in
Rotor Speeds	100 / 109 / 118 rpm
Minimum Left Cutting Radius	2.00 m 6.56 ft
PM820 Minimum Right Cutting Radius	2.00 m 6.56 ft
PM822 Minimum Right Cutting Radius	1.80 m 5.91 ft
PM825 Minimum Right Cutting Radius	1.50 m 4.92 ft

MACHINE WEIGHT	
PM820 Operating Weight	36 130 kg 79,653 lb
PM820 Transport Weight	32 230 kg 71,055 lb
PM822 Operating Weight	36 700 kg 80,910 lb
PM822 Transport Weight	32 800 kg 72,312 lb
PM825 Operating Weight	37 500 kg 82,673 lb
PM825 Transport Weight	33 600 kg 74,075 lb

Weights shown are approximate and include:
- Operating weight includes coolants, lubricants, full fuel tank, full water tank and 75 kg (165 lb) operator.
- Transport weight includes coolants, lubricants, 50% full fuel tank and empty water tank.

SERVICE REFILL CAPACITIES	
Fuel Tank	1108 L 292.7 gal
Cooling System	104 L 27.5 gal
Engine Oil	65 L 17.2 gal
Hydraulic Oil	113 L 29.9 gal
Water Tank	3400 L 898.2 gal

DIMENSIONS	
A Overall Length (conveyor raised)	14.52 m 47.64 ft
B PM820 Maximum Machine Width	3.11 m 10.20 ft
PM822 Maximum Machine Width	3.11 m 10.20 ft
PM825 Maximum Machine Width	3.36 m 11.02 ft
B[1] PM820 Minimum Machine Width	2.52 m 8.27 ft
PM822 Minimum Machine Width	2.74 m 8.99 ft
PM825 Minimum Machine Width	3.01 m 9.88 ft
C Maximum Height (conveyor raised)	5.23 m 17.16 ft
D Height to Optional Canopy	4.05 m 13.29 ft
E Height (canopy lowered/no canopy)	3.00 m 9.84 ft
F Maximum Truck Clearance	4.86 m 15.94 ft
G Conveyor Length	8.38 m 27.49 ft
H Conveyor Swing	±60° from center

SHIPPING DIMENSIONS	
I Transport Length	12.43 m 40.78 ft
B[1] PM820 Transport Width	2.52 m 8.27 ft
PM822 Transport Width	2.74 m 8.99 ft
PM825 Transport Width	3.01 m 9.88 ft
E Transport Height (canopy lowered)	3.00 m 9.84 ft
J Length (track to track)	6.69 m 21.95 ft
K Length of Machine (front track to rear)	7.32 m 24.02 ft
L Length of Base Machine	8.33 m 27.33 ft



