

Model CPM50 Reference Information

Available Pallet Sizes Model CPM50:

- 18.5” x 42” x .44” (470 mm x 1,070 mm x 11 mm)
- 21.62” x 42” .44” (550 mm x 1,070 mm x 11 mm)
- 27- 9/16” x 42” x .44” (700 mm x 1,070 mm x 11 mm)

Location Specifications:

(see P.L.O. if available otherwise locations must be provided and approved by Customer)

1. Main Pumping Unit
2. Hydrostatic Pumping Unit
3. Lube Pumping Unit
4. Main Control Panel
5. Push-Button Station (Opposite of Return)
6. Air Control Panel (Opposite of Return)

Model CPM 50 Block Machine Performance Parameters:

Estimated Production Output @ 100% efficiency

Note: Production Figures listed below are average and will vary for the individual plant as determined by quality and consistency of aggregate and materials, plant and equipment conditions and experience and skill of plant personnel.

Table 1: Producing Standard 8” x 8” x 16” (200mm x 200mm x 400mm) Hollow Core Block.

Pallet Size (Front to Back)	Cycles / Min. (Production)	Sec. / Cycle (Production)	Sec. / Cycle (Kiln Sizing)
18-1/2” (470 mm)	8.0	7.5	6.5
21-5/8” (550 mm)	7.5	8.0	7.0
27-9/16” (700 mm)	7.0	8.6	7.6

Table 2: Various Product Types

Pallet Size (Front to Back)	Std. Cored Block Sec. / Cycle	Solid Block Sec. / Cycle	Paver on Flat Sec. / Cycle	Brick on End Sec. / Cycle
18-1/2" (470 mm)	7.5	8.5	9.5	9.5
21-5/8" (550 mm)	8.0	9.0	10.0	10.0
27-9/16" (700 mm)	8.6	9.6	10.6	10.6

Table 3: Cycles / Shift (8 hours @ 100% Efficiency), with Various Product Types

Pallet Size (Front to Back)	Std. Cored Block Cycles / Shift	Solid Block Cycles / Shift	Paver on Flat Cycles / Shift	Brick on End Cycles / Shift
18 1/2" (470 mm)	3,840	3,390	3,030	3,030
21 5/8" (550 mm)	3,600	3,200	2,880	2,880
27- 9/16" (700 mm)	3,360	3,000	2,720	2,720

Note: Products / Shift = (Cycles / Shift) * (Product / Cycle)

i.e. (3,840 Cycles / Shift) * (5 Product / Cycle) = **19,200 Product / Shift**

Table 4: Special Equipment Products

Pallet Size (Front to Back)	Standard Product Sec. / Cycle	w/ Core Puller Sec./ Cycle	w/ Front Feed Drawer Sec. / Cycle	w/ FFD and Dbl. Compression Sec. / Cycle
18 - 1/2" (470 mm)	7.5	9.0	9.0	12.0
21 - 5/8" (550 mm)	8.0	9.8	9.8	13.0
27 - 9/16" (700 mm)	8.6	10.8	10.8	14.2

Oil Type and Quantity Model CPM50:

1. Main Pumping Unit
 - 2,000 PSI (136 BAR) Operating Pressure
 - Chevron Type AW68 or Equivalent Oil
 - 200 Gallons (760 liters)

2. Hydrostatic Vibrator Drive Pumping Unit
 - 3500 PSI (237 BAR) Acceleration Pressure
 - 2500 PSI (169 BAR) Deceleration Pressure
 - Chevron Type AW46 or Equivalent Oil
 - 25 Gallons (95 liters)

3. Lube Pumping Unit
 - 30 PSI (8.8 BAR) Operating Pressure
 - Chevron type AW46 or Equivalent Oil
 - 10 Gallons (38 liters)

4. Hose Routing
 - Specify: in trench, on floor, overhead
 - Length (up, over, down) etc.
 - _____
 - _____
 - _____
 - _____

Hydraulic Piping Requirements Model CPM50:

- **Working Pressure: 2,000 PSI (136 BAR)**
 - Hose: use SAE 100R13, Parker 78C, 1- 1/2” (38 mm) I.D. 20,000 PSI Burst, 5,000 PSI Working Pressure
 - Pipe: use ASTM A53 Grade B Pickled and Oiled 1- 1/2” (38 mm) Dia. Schedule 80
- **Return:**
 - Hose: use SAE 100R2, Parker 381, 1 – 1/2” (38 mm) I.D. 2,500 PSI Working Pressure
 - Pipe: use ASTM A53 Grade B Pickled and Oiled 2” (50 mm) Dia. Schedule 40

Air Requirements Model CPM50:

- 20 SCFM Air at 125 PSI (566 Liter per minute at 8.6 Bar) Required

Power Requirements Model CPM50:

- Main Pumping Unit:
 - 40 HP (30 kW) Hydraulic Pump Motor
 - 40 HP (30 kW) Hydraulic Pump Motor
 - 3 HP (2.24 kW) Oil Cooling Fan Motor
 - 3 HP (2.24 kW) Oil Circulating Motor
 - Tank Heater 1.0 kW
- Vibrator Lube Pump Unit:
 - 1 ½" HP (1.2 kW) Lube Pump Motor
- Hydrostatic Pumping Unit:
 - 50 HP (37.3 kW) Hydrostatic Pump Motor
 - 1/3 HP (0.25 kW) Oil Cooling Fan Motor
 - Tank Heater 1.5 kW
- Material Meter Belt:
 - 5 HP (3.37 kW) Material Meter Belt, Optional

Weight of Equipment CPM 50:

- Note: Refer to Drawing D300-0-456 for Dimension Specifications
- For Mounting Pad Specifications:
 - Refer to Drawing D-300-0-463 for 18- 1/2” Pallets
 - Refer to Drawing D-300-0-461 for 21- 5/8” Pallets
 - Refer to Drawing D-300-0-464 for 27-9/16” Pallets

Machine Section	18-1/2” Pallet (470 mm)	21 - 5/8” Pallet (550 mm)	27 – 9/16” Pallet (700 mm)
Center Section No Load	31,130 lbs. 14,150 kgs.	31,130 lbs. 14,150 kgs.	31,130 lbs. 14,150 kgs.
Center Section Live Load	33,880 lbs. 15,400 kgs.	36,590 lbs. 16,632 kgs.	39,978 lbs. 18,172 kgs.
Rear Section No Load	7,760 lbs. 3,527 kgs.	8,381 lbs. 3,809 kgs.	9,157 lbs. 4,162 kgs.
Rear Section Live Load	8,813 lbs. 4,006 kgs.	9,518 lbs. 4,326 kgs.	10,400 lbs. 4,427 lbs.
FFD Section No Load	6,500 lbs. 2,954 kgs.	7,020 lbs. 3,191 kgs.	7,670 lbs. 3,486 kgs.
FFD section Live Load	7,340 lbs. 3,336 kgs.	7,927 lbs. 3,603 kgs.	8,661 lbs. 3,937 kgs.
Core Puller No Load	3,400 lbs. 1,545 kgs.	3,672 lbs. 1,669 kgs.	4,012 lbs. 1,824 kgs.
Core Puller Live Load	3,400 lbs. 1,545 kgs.	3,672 lbs. 1,669 kgs.	4,012 lbs. 1,824 kgs.

- 2,680 lbs. (1,218 kgs.) Compression Beam (Top Beam)
- 3,770 lbs. (1,714 kgs.) Stripper Beam (Bottom or Main Beam)
- 800 lbs. (364 kgs.) Main Electrical Control Panel
- 2,700 lbs. (1,227 kgs.) Main Pumping Unit (no oil)
- 1,500 lbs. (682 kgs.) Hydrostatic Drive Pumping Unit (no oil)
- 150 lbs. (68 kgs.) Lube Pumping Unit (no oil)