

Palmer No-Bake CoreMaker™

CM-Series Core Blowers (No Bake and Cold Box)

PALMER
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CM-25



CM-100 with RFID

Our Customers Are Blowing: Exhaust Manifolds, Vanes and Volutes, Small Molds, Pump Components, Machine Base Components.

Benefits

- High productivity with amazing simplicity.
- Available for air setting or cold box binder systems.
- Works great with wooden dump boxes, shell tooling, cold box tooling. Ideal for low volume work, replacing oil sand core making systems, and where shell tooling is too expensive.
- Simple, rugged design ensures long life.
- Does not require intricate venting in the no-bake version.
- No scrubber required with air setting binders.
- Cores & molds produced on the same machine with swivel mixer.
- Dual resin systems available to make no-bake and cold box cores with one machine.

Features

- Super-duty clamping table and cylinders.
- Fill timer for control of any continuous mixer.
- Warning timer and buzzer for advance notice of work time expiration for air set systems.
- 120V, heavy-duty components, and fabrication.
- The simplest, most cost effective method to blow cores.
- Spare parts are available from industrial supply houses or from Palmer's extensive inventory.
- M-Series continuous mixer is mounted on a swivel such that bench cores and sizeable molds can be produced on the side of the machine.

Available Sizes

CM-25 30 lb Max Blow (13 kg)

CM-50 58 lb Max Blow (26 kg)

CM-100 120 lb Max Blow (54 kg)

CM-300 350 lb Max Blow (159 kg)

CM-500 600 lb Max Blow (272 kg)

Components Overview

Primary Fabrication - The Palmer CoreMaker is designed around a backbone of heavy wall steel tubing for absolute machine rigidity. With full clamping pressure, the machine is very rigid. The blowing area is completely enclosed to minimize blown sand and safety issues generally associated in blown core areas.

Blow Chamber - The heart of the CoreMaker is its blow chamber. Specially designed for use with air setting binders, the blow chamber's unique geometry prevents sand and resin buildup within. Super heavy construction ensures long life. Unit requires very little cleaning.

Clamping Table - The clamping table is a heavy-duty, die set typically used for stamping operations. The unit features 1 3/4" thick steel plates. Two 6" bore cylinders provide for both the motion of the table and the holding pressure needed for blowing. A cleanout tube is located integrally into the clamping table for easy cleaning at the end of a blow cycle. Unit purges into a 5 gallon pail below the clamping table.

Pneumatic System - The highly effective CM-Series features a simple to operate and easy to maintain pneumatic system. Basic, off-the-shelf solenoids control the entire system. The unit includes a surge tank to reduce demands on the plant air system and ensure consistently dense cores. The CM-300 and CM-500 are hydraulically operated.

Control System - The CoreMaker is fitted with a high quality electrical control system featuring standard OEM components and complete control integration. A smart relay is used to control all timing functions. Timer settings: mixer run timer, resin system work timer, warning buzzer timer. The cold box version features a PLC upgrade to control all system operating times.

Safety Interlock - The CoreMaker has three safety devices to prevent operator injury. In order to clamp the table, the unit's door must be closed and two palm switches pressed. This ensures that operator's hands/arms stay out of the moving mechanism and aid in eye injury prevention by forcing the door to be closed for machine activity.

Options to Consider

RFID - (Radio Frequency Identification Tags) is available for both CoreMaker versions. Program it once and forget it.

Cold Box

- A cold box core blowing machine designed specifically for the small foundry with short run requirements. Ultra simple and low cost.
- Includes: dosing pump, temperature controlled purge air heater, swivel gassing head with replaceable / modifiable gas head.
- Fully Automatic Cycle - Clamp, Blow, Swing Gassing Head In, Clamp, Gas, Release - Operator Programmable Process Times.
- System can be specified for use with CO2 gassed resin systems.

Other Options to Consider

- Low sand alarms and interlocks.
- Integral conveyor for large or hard to handle core boxes.
- Core box clamping arrangements for loose and fixed tooling

Scrubbers

- 99.9% 2,500 to 6,000 CFM for amines and SO2.