

# PIPELINE CONTINUOUS MIXERS

*Superior blending and mixing of diverse solids*

The Franklin Miller PCM is an ultra-compact pipe mounted device that intensively mixes, homogenizes, emulsifies and blends additives and base liquids, or uncoalesced substances directly in fully enclosed pipe systems.

Process problems can be quickly remedied with the PCM. Mounts easily on existing piping like an ordinary valve, eliminating the need for major plant modifications or special mixing vessels. The unit is straight thru requiring no bends or offsets in piping. Mounts on any angle of inclination; horizontal, vertical, or oblique. Head loss is minimal. Invaluable where space and headroom are at a premium.

The PCM is several mixers in one. Several mixing head designs can be interchangeably installed provide mixing capabilities for a broad range of substances. The unit's design allows for tandem mounting of two or more units for double mixing action.



*Handles Diverse Materials*

*Economical Alternative to Mixing Vessels*

*Increases Yields and Production*

*Improves Purity, Uniformity & Recovery*

*Fits in Tight Plant Locations*

## How the PCM Works

The entire flow passes into the mixing chamber where it is intensively activated by a unique spherical impeller. Either discharge baffles or a ported stator are used to optimize retention of the flow in the mixing chamber. With only a fraction of the horsepower of batch mixing, this design yields efficient mixing over a broad range of substances.



**Franklin Miller**  
THE SIZE  
REDUCTION  
SPECIALISTS

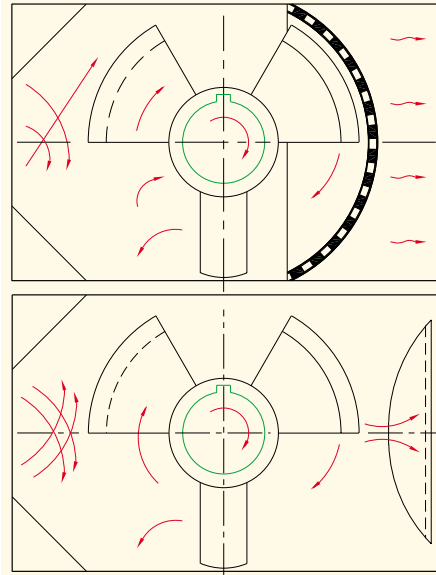
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**Construction:**

The Franklin Miller PCM is ruggedly constructed for smooth, trouble free operation. The unit's motor is direct coupled with a flexible coupling to the unit's main shaft. The mixing head consists of a single rotating impeller and a stator. The unit has smooth interior surfaces for sanitary applications and easy cleaning. All parts in the PCM-inline mixers are readily removable for repair or replacement. The entire interior cylindrical surface has a replaceable liner. Stator/rotor arrangements are interchangeable.

**Options**

- Belt Drives
- Variable Speed Drives
- Stainless Steel Construction
- Monel or Iconel
- Control Systems
- Special Interior Coatings
- Special Seal Designs



**Flow Pattern A:**  
The spherical vaned impeller accelerates the flow over the inlet baffle. The flow is retained in the mixing chamber by a ported stator.

**Flow Pattern B:**  
Similar to above except retention in the mixing chamber is governed by a discharge baffle as well as an inlet baffle.

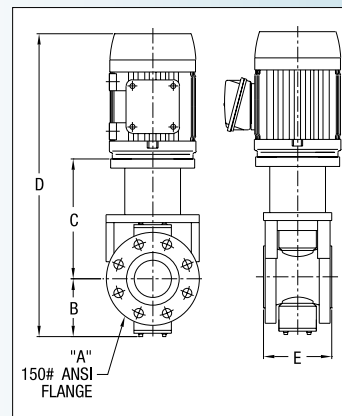
**Variable Frequency Control**

A Variable Frequency Control System is available for the PCM. The control can act as the unit starter as well as allowing the operator to precisely control unit rotational speed to further optimize mixing results.



M-8000 iwth special low speed drive and 8 inch flanges.

**Configurations:**



Standard PCM is supplied with single mechanical seals suitable for a wide variety of liquids up to 159 psi. A variety of other seals can be supplied to suit special requirements, including packings, double mechanical seals, gas and air seals, and seals for extra high pressure and temperature applications.

The PCM is normally supplied with a direct coupled motor with unit operating at motor speed. The versatile body design allows for special belt drives, variable speed drives or shaft speeds for special application requirements.

The PCM is available in 3" thru 48" pipe sizes in carbon and T304 and T316 Stainless Steel. Special materials, such as monel or iconel, can be supplied. Interior coating for extremely abrasive or corrosive substances can also be supplied.

MODEL	A	B	C	D	E	SPEED	HP
M-3000	3" (76mm)	4" (102mm)	10" (254mm)	24.625" (625mm)	5.5" (140mm)	3600	1.5
M-4000	4" (102mm)	5" (127mm)	10" (254mm)	25.625" (651mm)	6" (152mm)	3600	2
M-6000	6" (152mm)	6" (152mm)	10.5" (267mm)	29.25" (743mm)	7" (178mm)	1750	3
M-8000	8" (203mm)	7" (178mm)	10.5" (267mm)	31.25" (794mm)	8" (203mm)	1750	5
M-1000	10" (254mm)	8.5" (216mm)	12" (305mm)	35.875" (911mm)	10" (254mm)	1750	7.5
M-1200	12" (305mm)	10" (254mm)	12" (305mm)	38.375" (975mm)	12" (305mm)	1750	10
M-1400	14" (356mm)	12" (305mm)	14" (356mm)	47.563" (1208mm)	14" (356mm)	1750	15

Consult factory for certified drawings.

Call one of our customer service representatives to discuss your particular application.