

METER MIX DISPENSING SYSTEMS

The proper meter mix and dispensing process is key to dispense two components adhesives and encapsulants. Shot-size accuracy and range, adjustable flow rate and consistent ratio are critical aspects of a two components meter mix dispensing system.

MM1000 Positive Rod Displacement Meter Mix Dispensing Systems

MM1000 offers a simple, convenient and easy-to-use meter mix system that is low in cost and maintenance. It is a fixed ratio, positive rod displacement metering system that is able to meter, mix and dispense with good ratio and volumetric consistency.

MM1000 is suitable for processing most 2-component materials with low to medium viscosity without introduction of air bubbles. It is also designed to be used with standard disposable static mixers. Typical applications are Encapsulation, Bonding, Sealing and Potting of electrical and electronic components such as transformers and etc.

Standard Specifications

- Single acting positive displacement Action
- Low to medium viscosity
- Mixing disposable static mixer
- Built-in top mounted material reservoir
- Shot size: 1cc to 60cc, (1:1 ratio)
- Reservoir: 5-litre each
- Mix ratio 1:1 to 1:6**
- Low Level Sensor (Optional)

**Customised to Customer's Specification



MM4000GP Gear Pump Meter Mix System

MM4000GP offers a high precision meter mix dispense system that utilizes gear pumps to provide a continuous dispensing of mixed material with precisely controlled flow rate and mixing ratio. It is powered by servo motors. Together with PC and touch screen, it allows user to easily vary a wide range of parameters to cater to different flow rates, mixing ratio, material pot-life and viscosity to suit every application and process requirement. This is an ideal system for processes that require dispensing of constant profile such as gasketing and sealing applications.

MM4000GP is a floor-standing system completes with handling systems such as rotary table and conveyor system.

Standard Specifications

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| <ul style="list-style-type: none"> Precision Gear Pumps PLC controls with Touch screen Low to High Viscosity Can handle packaging in Cans, Drums or Pails Disposable static mixer Shot size: 0.2cc and above (1:1 ratio) | <ul style="list-style-type: none"> Variable Mix Ratio/Flow rate Repeatability below 2% Power 220VAC, 50/60Hz Mix ratio 1:1 to 1:10 Low Level Sensor, Dynamic Mixer, Auto Solvent Rinsing, Degassing and Agitation (Optional) |
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MM5000LA Servo-Motor Driven Meter Mix System

MM5000LA is a meter mix dispense system that utilizes motorized linear actuators to provide accurate mixing ratio and dispensing volume. The metering actuators are driven by individual servo motors, thus providing the flexibility for user to fine-tune the mixing ratio and flow rate of individual material. This also translates to a smooth flow of material from the mixing head, making this system a suitable choice when dispensing a smooth profile for sealing and gasketing applications.

Standard Specifications

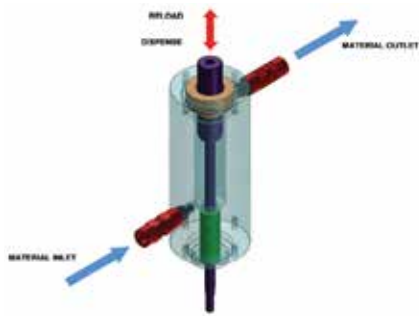
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| <ul style="list-style-type: none"> Positive Displacement Piston pump Driven by Motors PLC controls with Touch screen Low to High Viscosity Handle packaging in Cans, Drums or Pails Mixing: Disposable static mixer Mixing ratio from 1:1 to 1:10 | <ul style="list-style-type: none"> Shot size: 0.01cc and above (1:1 ratio) Flexible Flow rate/dispense volume Repeatability below 2% Power 220VAC, 50/60Hz Low level sensor, Dynamic Mixer, Auto Solvent Rinsing, Degassing and Agitation (Optional) |
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Metering Methods

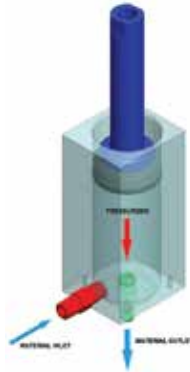
Positive Rod Displacement

This method uses a solid rod to displace fluid as it moves in and out of a cylinder into which material is fed. Metering is accurate with good repeatability as the rod displaces a fixed amount for each stroke. The ratio can be changed by simply replacing one of the rods with a different diameter.



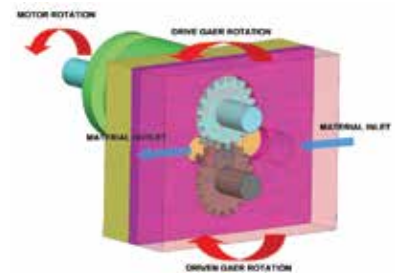
Piston Displacement

The piston displacement method works by attaching a piston to the end of a rod, with which material is pushed out positively from the cylinder. The size of the piston determines the ratio and dispensing amount for each stroke. The dispensing amount can be set by the movement of this rod during the dispensing cycle.



Precision Gear Metering

This method uses the gear size and rotation speed to determine the ratio and dispensing amount. As such, these factors can be changed very easily by changing the rotation speed. The precision gear metering system provides a continuous flow of material without reloading.



Mixing Methods

Static Mixer

Static mixers come in a wide range of size and number of mixing elements. These mixers are disposables, thus providing a maintenance free mixing solution. Mixing is effective upon selecting the correct diameter and number of mixing elements.

Dynamic Mixer

With a motor driving a rotor shaft within the chamber, metered fluids are mixed thoroughly when they are fed into the chamber. The dynamic mixer comes with a flushing port to allow solvent to be purged through the chamber to prevent mixed materials from curing when it remains within the chamber beyond the pot life.

Feeding Methods

Gravity Feed Tanks

A common feeding method for meter-mix dispensing systems for materials with low-medium viscosity materials. This method involves the mounting of small tanks above the dispensing system to allow the material to feed the system without the need to pressurize the tank.

Pressure Pumps

A method designed to allow high viscosity material to be dispensed directly from cans in varying sizes. These pumps can also be configured to include level sensors and alarms.

Pressure Tanks

This method facilitates a continuous supply of material to the dispensing system without the need for frequent refilling. These tanks are available in sizes ranging from 3L to 40L and above and can be configured to incorporate the following options:

- Top and Bottom Ported
- Agitators for filled materials
- Vacuum for degassing
- Level Sensors and Alarms
- Heating
- Stainless Steel or Galvanized

Distributor