



## TSM50FR & TSM120FR METER MIX SYSTEMS

The TSM50FR and TSM120FR are fixed ratio metering, mixing and dispensing machines are pneumatically powered and digitally controlled utilizing PLC, HMI touch screen technology enabling a wide range of electrical accessories and easy robot interface.

These meter mix systems employ a parallel drive system with positive displacement pump technology to ensure repeatable, accurate volumetric metering, mixing and dispensing of low to medium viscosity two-part resin systems.

These compact machines are simplistic in its format and flexible in its design to accommodate a range of optional extras to suit the wide range of available resins and differing customer application needs.

The TSM50FR is capable of dispensing (depending on ratio) mixed material from 2 to 50cc. The TSM120FR will dispense from 5 to 120cc to within +/- 1% volumetric accuracy. The TSM50FR is a low cost investment and an economical solution to what is often inefficient and hazardous process.

These meter mix systems can be used in bonding, encapsulation, potting, sealing and insulating applications for all industries.

### Key Features & Benefits

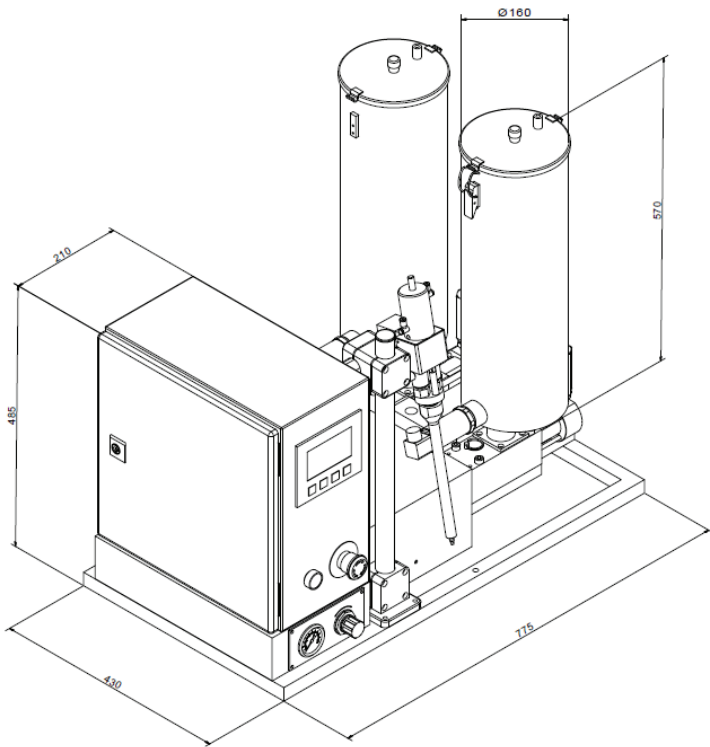
- Volumetric metering and mixing
- Accurate and repeatable up to  $\pm 1\%$
- Fix ratio from 1:1 to 10:1
- PLC, HMI touch screen
- Adjustable shot size

### Typical Applications

- Bonding
- Encapsulation and Potting
- Sealing
- Insulating

## SPECIFICATIONS

	<b>TSM50FR</b>	<b>TSM120FR</b>
MIX RATIO OPTIONS	1:1, 2:1, 4:1	1:1, 2:1, 4:1, 10:1
SHOT SIZE RANGE	2 - 50 CC	5 - 120 CC
MAXIMUM VISCOSITY	150,000 cps. (self-level)	150,000 cps. (self-level)
ACTIVATION	FOOT SWITCH & PLC	FOOT SWITCH & PLC
METERING REPEATABILITY	+/- 1%	+/- 1%
OPERATING PRESSURE	100 psi	100 psi
MIXING	DISPOSABLE STATIC MIXERS	DISPOSABLE STATIC MIXERS
TANK CAPACITY OPTIONS	3, 5, 7, 10 Liter	3, 5, 7, 10 Liter
MECHANISM	PARALLEL DRIVE, POSITIVE DISPLACEMENT	PARALLEL DRIVE, POSITIVE DISPLACEMENT
CONTROLL PANEL	DIGITAL, HMI TOUCH SCREEN	DIGITAL, HMI TOUCH SCREEN
POWER (DIGITAL)	SINGLE PHASE 110V & 220V	SINGLE PHASE 110V & 220V
DIMENSION (W X D X H)	30.5" X 16.9" X 22.4" (775 X 430 X 570 mm)	30.5" X 16.9" X 22.4" (775 X 430 X 570 mm)
WEIGHT	88 lbs (40 kg)	110 lbs. (50kg)



## EQUIPMENT

	<b>Standard Features</b>	<b>Optional Features</b>
Tanks	<ul style="list-style-type: none"> <li>10 L SS tank with clamped, sealed lid and moisture trap</li> <li>5 L SS tank with clamped, sealed lid and moisture trap</li> <li>3 L SS tank with clamped, sealed lid and moisture trap</li> <li>7L polyethylene reservoir</li> </ul>	<ul style="list-style-type: none"> <li>Low level sensor with visual and audible alarm</li> <li>Tank stirrer electric, control on HMI</li> <li>Tank stirrer pneumatic</li> <li>Tank heater with built in thermostat and power cable. Off/On via HMI</li> </ul>
Metering Pumps	<ul style="list-style-type: none"> <li>Part 'A' pump is EN40 anti-abrasive pump tube and glass filled nylon piston.</li> <li>Part 'B' pump 303 stainless steel pump tube</li> </ul>	<ul style="list-style-type: none"> <li>Part B pump EN40 anti-abrasive pump tube and glass filled nylon piston</li> </ul>
Mixing Head	<ul style="list-style-type: none"> <li>1/4BSP stainless steel 4/4 or 4/2 port machine mounted</li> </ul>	<ul style="list-style-type: none"> <li>Hand held, trigger operated 5/3 or 5/3/5/ ported</li> <li>Ratio check blocks</li> <li>Seal cap</li> </ul>
Hoses	<ul style="list-style-type: none"> <li>Standard length x 1/8 or 1/4 or 3/8 or 1/2 inch bore PTFE lined stainless steel braided, m/s end fittings, from pump to machine mounted mixer</li> </ul>	<ul style="list-style-type: none"> <li>1/8 or 1/4 or 3/8 or 1/2 inch bore PTFE lined m/s SS end fittings 2 or 3 meters long</li> <li>Heated and temperature controlled hose</li> </ul>
Machine Control	<ul style="list-style-type: none"> <li>PLC, HMI touch screen</li> <li>Full Shot / Operator control</li> <li>Stalled shot, pumps inch down the pump tube against closed mixer</li> <li>LSA shot size control, limit switch on movable lead-screw Foot pedal actuation</li> <li>Anti -gel timer on HMI Shot counter repeater on HMI</li> </ul>	<ul style="list-style-type: none"> <li>Kinecheck shot speed control</li> <li>Re-circulation after NRV back to reservoir</li> <li>Service kit for pump and mixing head</li> <li>Hand held trigger actuated if hand held</li> <li>I/O integration</li> </ul>

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