



The **RimMix** series

A universally useful PUR metering machine capable of dispensing into open or closed mould



The Rim-Mix range of low pressure metering machines represents a major advancement in low pressure mixing technology and is available in a wide range of outputs to cover all applications.

Polyurethane is a thermosetting process resulting from accurate metering and mixing of a polyol and an isocyanate component at the correct temperature, ratio and output. The reaction takes place, polymerisation occurs, pressure and heat dissipate. By calculating the weight of the part to be produced and knowing the reaction time of the material - the "cream time" - it is possible to calculate the pour time thus establishing the optimum working output of the machine.

The Rim-Mix series has been designed to ensure maximum reliability, excellent mixing capability and metering accuracy. The controls have been designed with the operator in mind for simple easy operation and maintenance procedures.

Now with Eco Mode

Each Rim-Mix incorporates an eco-mode – switching automatically to lower recirculation speed, reducing power consumption and increasing machine productivity



Boom balance arrangement

The Rim-Mix standard mix head support is by boom balance; alternatives are available depending on customer requirements.

Chemical component vessels

Silica gel breather on isocyanate and polyol tanks reduces moisture ingress. Standard fittings for optional equipment including capacitance level probe and agitator. Each tank is flanged and fitted with removable lid for manual loading.



Pump metering group

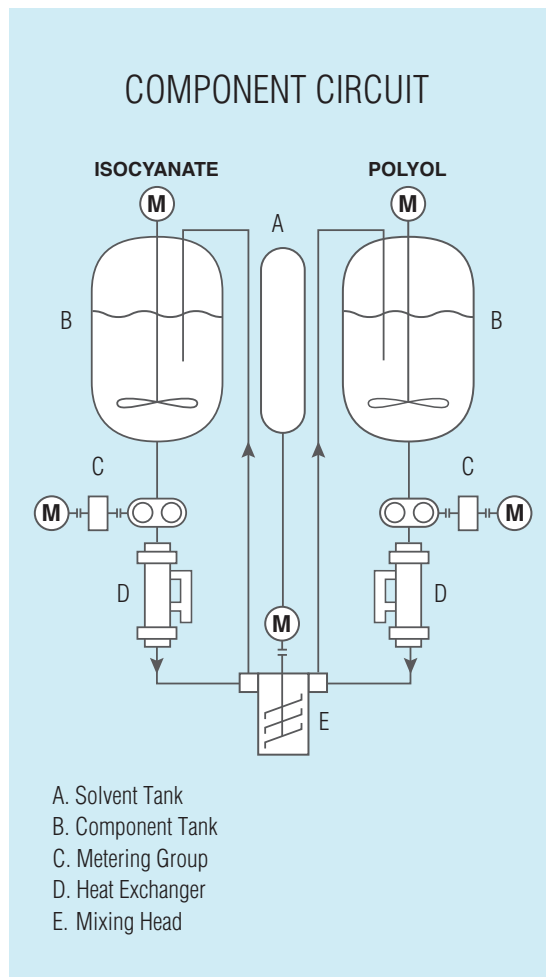
Accurate component metering by high precision volumetric gear pump with Viton double rotary shaft seal. Maximum working pressure 15bar. Output adjusted by variable speed inverter monitoring and controlling the pump. Chemical component ratio variation 1:4 to 4:1 via inverter.



Temperature conditioning

Stainless steel tube nest heat exchanger fitted to the Rim-Mix range maintains chemical component temperature, viscosity and quality.





Operator interface panel

Operator interface panel includes manual air blast, emergency stop and programme selector enabling step by step programming at independent outputs and ratio of polyol to isocyanate.

Mass flow meter

Optional upgrade for closed loop control for self-correcting chemical metering output operating in conjunction with frequency controller for motor speed optimisation.



Dynamic series - Dispensing head

A mix head of simple robust design provides the operator with a rapid switch from recycle to pour. The ability to adjust pressure directly at the mix head ensures quality mixing without surge.



The D Series of multi component mix heads are available with mechanical mixers of a variety of designs and are specified depending on process material.

| MODEL | 1:1 ratio | | 2:1 ratio | |
|---------|-----------|-----------|-----------|-----------|
| | min g/sec | max g/sec | min g/sec | max g/sec |
| D 2-2 | 8 | 40 | 10 | 30 |
| D 12-2 | 40 | 250 | 50 | 187 |
| D 40-2 | 165 | 660 | 125 | 500 |
| D 80-2 | 460 | 1840 | 340 | 1366 |
| D 300-2 | 1260 | 5040 | 938 | 3750 |



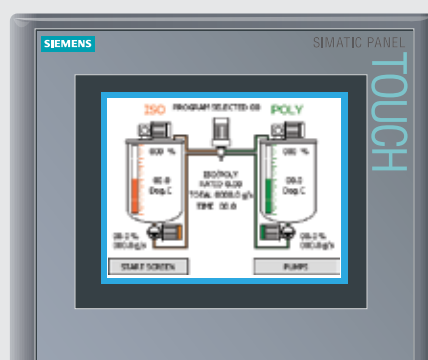
Pressure circuit

Digital pressure gauge for visual display of working pressure complete with 2 point contact (high pressure - minimum pressure) for added safety fitted to both isocyanate and polyol metering lines to prevent over pressure situations.



Electrical control system

Siemens S7 series PLC with a Siemens colour HMI touch screen system for robust and reliable process control and machine parameter monitoring. Suitable for arduous production conditions and supported internationally by the manufacturer.



Cleaning circuit

Cleaning is an essential part of machine function once reaction has occurred. A pressurised stainless steel 18 litre tank ensures solvent delivery by dedicated steel braid hose fitted with sliding exhaust valve, manual decompression valve and a minimum level alarm.



| MODEL | 1:1 ratio litres per minute | | 2:1 ratio litres per minute | | tank capacity in litres | | | machine weight kg | power requirement kW | cooling water flow rate litres/minute | cooling duty Kcal / hour |
|---------|--------------------------------|---------|--------------------------------|---------|-------------------------|------------|---------|-------------------------|----------------------------|---|-----------------------------|
| | minimum | maximum | minimum | maximum | POLYOL | ICOCYANATE | SOLVENT | | | | |
| RM 2 | 0.6 | 2.4 | | | 40 | 40 | 18 | 500 | 5.3 | 10 | 1200 |
| RM 2F | | | 0.7 | 2.5 | 40 | 40 | 18 | 500 | 5.1 | 10 | 1200 |
| RM 6 | 1.8 | 7.2 | | | 100 | 100 | 18 | 450 | 5 | 10 | 1200 |
| RM 6F | | | 3.2 | 8.1 | 100 | 100 | 18 | 450 | 4.9 | 10 | 1200 |
| RM 12 | 3.5 | 14.2 | | | 100 | 100 | 18 | 480 | 5.4 | 10 | 1200 |
| RM 12F | | | 4.4 | 13.4 | 100 | 100 | 18 | 480 | 5.2 | 10 | 1200 |
| RM 40 | 11 | 44 | | | 100 | 100 | 18 | 550 | 7.6 | 30 | 3200 |
| RM 40F | | | 10.6 | 42.2 | 100 | 100 | 18 | 550 | 6.9 | 30 | 3200 |
| RM 60 | 15.2 | 60.8 | | | 100 | 100 | 18 | 625 | 12.4 | 30 | 6000 |
| RM 60F | | | 16.5 | 66 | 100 | 100 | 18 | 625 | 9.8 | 30 | 6000 |
| RM 80 | 22.5 | 90 | | | 100 | 100 | 18 | 680 | 14.7 | 50 | 6000 |
| RM 80F | | | 21 | 84 | 100 | 100 | 18 | 680 | 13.2 | 50 | 6000 |
| RM 110 | 28 | 112 | | | 100 | 100 | 18 | 700 | 15.7 | 50 | 8000 |
| RM 110F | | | 26.7 | 107 | 100 | 100 | 18 | 700 | 14.9 | 50 | 8000 |
| RM 200 | 51 | 204 | | | 200 | 200 | 18 | 1200 | 24 | 70 | 9000 |
| RM 300 | 76 | 302 | | | 200 | 200 | 18 | 1200 | 26.1 | 70 | 9000 |

Outputs refer to materials with a viscosity <1000 cps at 20°C

The equipment described in this brochure has been designed and manufactured in accordance with Machinery Directive 2006/42/EC, Electromagnetic Compatibility Directive 89/336/EC Pressure Equipment Directive 97/23/EC and all amendments.

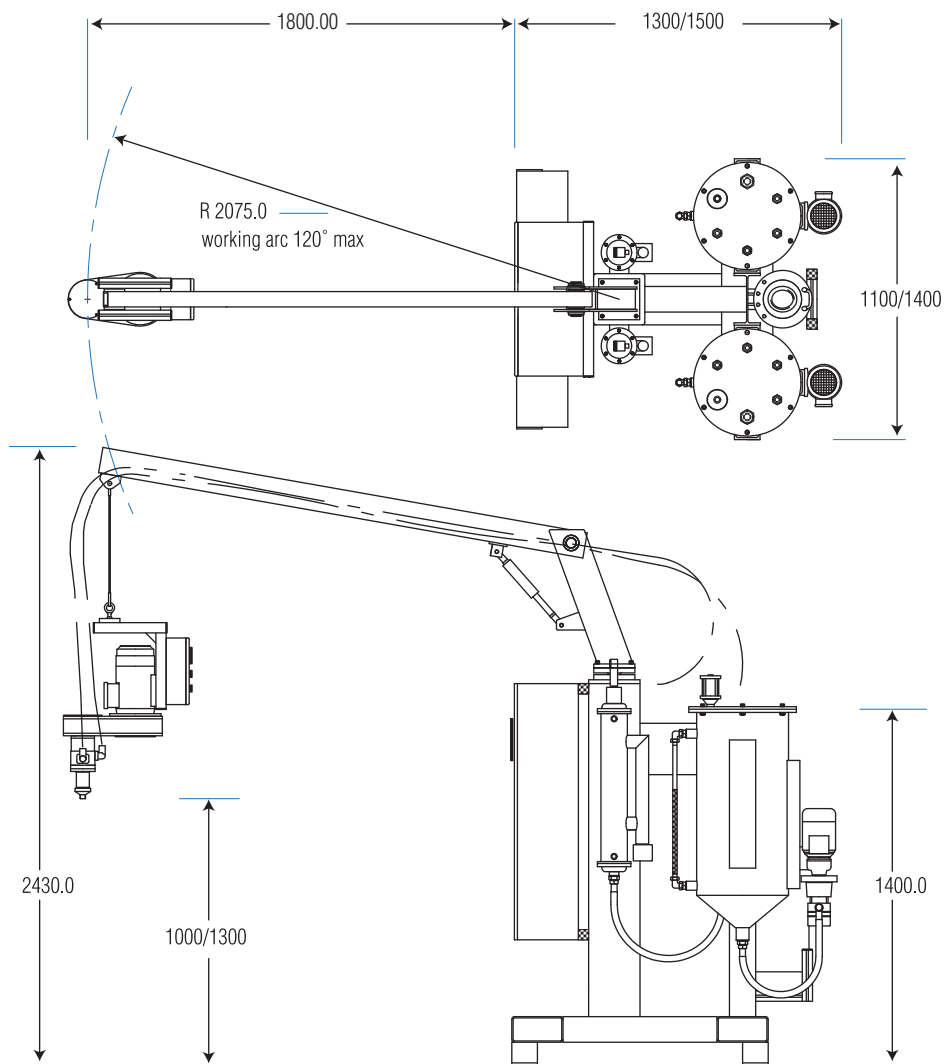
Services required

Electrical power 3 phase /415 volt /50Hz dry, clean, compressed air at 8-10bar pressure cooling water either from mains or free standing water chill unit.

- Chemical transfer pumps
- Electro Pneumatic loading valve
- Variable speed mixer motor

Optional

- Agitator on component tanks
- Chemical transfer pumps
- Digital level display
- Pneumatic loading valves
- Water chill unit
- Colour dosing unit
- Fixed price annual maintenance package
- Volumetric flow meter(s)
- Suction side filter(s)
- Variable speed mixer motor
- Jacketed insulated tanks
- 99 pouring programmes
- AutoRIM Hot Wash, hot water cleaning system
- Component tanks available up to 250 litres
- Heated, jacketed tanks from 60-250 litre capacity
- Data logging
- 3rd component stream
- Choice of colour



AutoRIM
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Due to the continuous development of processing technology we reserve the right to vary data contained within this brochure.

AGENTS DETAILS