

PRESSMATE RANGE

WATER PURIFICATION

PRESS
Mate

THE PERFECT PARTNER FOR
YOUR PRESS

The MGE **PRESSMate** set of equipment includes a range of 3 different sizes of Reverse Osmosis Water purification systems designed to aid performance and minimise operator intervention in the printing process. All have been designed to work in conjunction with MGE's range of Dampening Circulators, Dosing and Filtration systems.

PRESSMate RO-1400/2400/4000 Reverse Osmosis Water Purification Systems

The quality and consistency of a Printers output is as critical as ever in today's highly competitive market. However as environmental concerns push for reduced chemical and alcohol usage, so water consistency becomes more and more crucial in the printing process to maintain the high standards expected. The 'RO' process of water treatment is one of the most widely used and the only commercially viable process that removes up to 99% of all water contaminants delivering a consistent water supply every day of the year.

The **PRESSMate** RO range of units have been specifically designed not just as water purifiers but as complete press water management systems suitable for single or multi-press installations.

Sediment and Carbon pre-filters ensure initial particle and chlorine removal whilst the high quality TFC RO membranes separate out other impurities resulting in a constant supply of ultra pure water and this can then be stored until it is needed in an open or airtight pressurised tank to prevent possible airborne contamination. When required, the RO water is then passed through an integral dosing pump which adds a small percentage of synthetic hardening agent to bring the water back to an optimal level of hardness for use in the printing process.



BASIC UNIT SPECIFICATIONS

Model	RO – 1400	RO - 2400	RO - 4000
Production rate	1400 litres per day	2400 litres per day	4000 litres per day
Dimensions – HxWxD	1000 x 500 x 520		
Power supply	230v, 1ph, 50Hz		
Power consumption	0.24 kW (0.85kW with premix)		



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System features include:

- Easily accessible sediment and carbon pre-filters for particle and chlorine removal
- Low feed water pressure protection
- High quality 'RO' membranes ensuring consistent ultra-pure water
- 0.2% - 1.6% dosing pump for hardening agent
- Convenient sample taps at each stage to enable accurate setup and monitoring
- Expandable water processing capabilities
- Typically 200-400% less waste 'grey' water rejected than other RO systems on the market

Modular Membrane Filter System

PRESSMate RO systems are fitted with high quality RO membranes to give excellent performance and long life. The system can be expanded \ retrofitted with 1, 2 or 3 membranes allowing an increase in production capacity to meet future daily requirements should they increase.

In addition, the membranes are protected by Sediment and Carbon pre-filters ensuring that a consistent supply of ultra-pure water is available for use in the various printing processes.

In certain conditions, for example with very hard feedwater or a larger installation, it could also be necessary to fit a pre softener.

This not only protects the lifespan of the membrane but can also help boost production rates.



Storage Tank Options

PRESSMate RO systems include connections on the rear of the unit for fitting to either a pressurised storage vessel or an open storage tank depending on your preference. Storage levels are easily controlled by a level switch or pressure switch depending on the chosen setup.

This ensures that pure RO water is safely stored in a clean dark environment to prevent bacterial growth

Rehardening of RO Water

Pure RO water is too soft to use in the Print Process and without rehardening can lead to Roller Stripping and other issues. To counter this, all **PRESSMate** RO systems come fitted with an accurate water driven doser to add in hardening agent to allow the Press Operator to set the exact level of water hardness required to give the optimum print output from their press.

TECHNICAL SPECIFICATIONS

Feedwater Specification		Process Information	
Temperature Range	2°C - 29°C	RO operating pressure	200 PSI (13.7 bar)
Pressure Range	30-85 PSI (2-5.8 bar)	Ionic rejection-typical	95.5 - 98%
pH Range	5.5 - 10.0	Water recovery rate typical with Water Softener	50%
Total Dissolved Solids (TDS)	<2000ppm		up to 75%
Free Chlorine - continuous	<0.1 mg/lit	Hardness dosing range	0.2% - 1.6%
Iron content	<0.2 mg/lit	Max distance unit/press	50m
Hardness	<20 grains	Max distance unit/drain	10m



ISO 9001
FM 15051

MGE reserve the right to change, improve and/or modify all or any products manufactured and sold by us at anytime; this does not incur any obligation on our part to make like changes to any of our products previously sold.

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