

RO1

Reverse Osmosis Pilot Plant

The best membrane for a given application can be selected from the company's process database and by trialling a number of membranes to achieve the optimum performance.

Designed for nanofiltration and reverse osmosis trials, this pilot plant features a 250 L batch tank and can be modified to suit customers' specific requirements. Trials can be carried out either at our customers' premises or at our Swansea facility.

Our team of highly skilled engineers is well versed in separation applications utilising microfiltration, ultrafiltration, nanofiltration and reverse osmosis technologies.

Manufactured with 316L stainless steel contact surfaces and EPDM seals. Includes a Pure-Screen pre-filter, tubular heat exchanger, multiple sample points, manual butterfly and ball valves, positive displacement feed pump and centrifugal recirculation pump. Instrumentation includes tank level, membrane inlet and outlet pressure indicators, temperature indicator, permeate and concentrate variable area flowmeters.



TECHNICAL DATA	
Membrane area	2.5-15.8 m ² , dependent on membrane configuration
Holdup volume	35 L, dependent on membrane configuration
Operating pressure	Up to 60 bar
Operating temperature	5-45°C
pH range	2.0-11.0 (depending on membrane chosen)
Permeate flowrate	Up to 300 L/hr (depending on membrane area chosen)
Concentrate flowrate	Up to 1,800 L/hr
Dimensions	2.5 m x 0.9 m x 1.85 m (L x W x H)
Weight	600 kg (empty)
Area of Use	Non-hazardous, frost-free environments, IP55
Pumps	P1, Positive displacement feed pump, up to 1,800 L/hr at 60 bar, variable speed P2, Centrifugal recirculation pump, up to 4,000 L/hr at 2 bar, variable speed
INSTALLATION REQUIREMENTS	
Installed power	6.2 kW
Electrical supply	415v, 50Hz, 3ph, Neutral + Earth
Termination points	Direct feed inlet (bypassing tank): 1.5" clamp Concentrate outlet: 1.5" clamp Permeate outlet: 1" clamp Tubular cooler: 0.5" BSP female in and out

PPDS-RO1-03 Datasheet.doc

CUSTOMISED STAINLESS STEEL SYSTEMS, FABRICATIONS AND COMPONENTS

Axium Process Ltd

Hendy Industrial Estate, Hendy, Swansea, UK SA4 0XP

Tel: +44 (0) 1792 883882

Fax: +44 (0) 1792 886049

Email: info@axiumprocess.com

Web: www.axiumprocess.com



All data is provided in good faith and is subject to change

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