

## 250 L REVERSE OSMOSIS PILOT PLANT DATA SHEET



**Designed for pilot scale  
Nanofiltration and Reverse  
Osmosis trials**

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.

The pilot plant can be modified to suit customer specific requirements and 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.

### **Specification**

Membrane area =	2.5-8.3 m <sup>2</sup> (depending on membrane configuration)
Operating pressure =	Up to 60 bar
Operating pH =	2.0 – 11 pH (depending on membrane chosen)
Operating temperature =	5 – 45°C
Permeate flow rates =	Typically from 100 to 300 l/hr (depending on membrane area chosen)
Concentrate flow rates =	Up to 1500 l/hr
Dimensions =	2.5 m x 0.9 m x 1.85 m high
Weight =	600 kg (empty)
Area of use =	Non-hazardous area, IP55
Pumps =	P1, feed pump, to 1,500 l/hr and 60 bar, variable speed P2, recirculation pump, upto 4,000 l/hr and 2 bar

### **Features and instrumentation**

Manufactured with 316L stainless steel contact surfaces and EPDM seals. Includes a Pure-Screen pre-filter, tubular heat exchanger, multiple sample points, pressure relief valve, high pressure feed pump and high casing pressure recirculation pump. Instrumentation includes empty pipe sensor, inlet and outlet pressure Indicators over the membranes, Temperature indicator, permeate and concentrate variable area flowmeters.

### **Installation Requirements**

Installed Power =	▶ 6.2 kW, 3 Phase N+E, 400v, 50Hz
Termination Points =	▶ Direct feed inlet (bypass tank) = 1½" clamp ▶ Concentrate outlet = 1 ½" clamp ▶ Permeate outlet = 1" clamp ▶ Heat Exchanger = ½" BSP female, inlet and outlet

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