RO 2100

Applications

- Autoclaves
- Printing houses
- Car washing
- Evaporators
- District heating plants
- Process water
- Food industry
- Nursery gardens
- Humidifiers
- Chemical industry
- Cooling water
- Laboratories
- Boiler water and steam production
- Pharmaceutical industry

These reverse osmosis plants are primarily used where reduction of the salt content of the water is of significance.

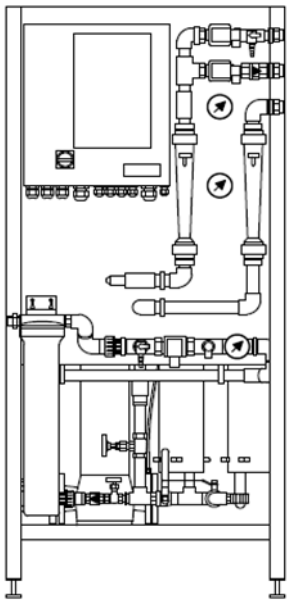
- Easy to place where space is limited
- Ready-assembled panel with built in PLC
- Simple electrical and plumbing installations

Reverse Osmosis

Reverse Osmosis is a membrane process where water is pumped at high pressure through a semi permeable membrane. The membrane pore structure is very fine and allows the passage of water whilst at the same time rejecting the dissolved salts. The Reverse Osmosis process will reduce the concentration of dissolved salts by up to 99% when new. The permeate (pure water) production rate is normally 70% to 75% of the feed flow with the concentrate (waste water) being 25% to 30%, these figures are based on a softened water feed.

The purity of the permeate depends on the quality of the feed water and the efficiency of any pre treatment required. Most UK water are below 350ppm dissolved solids and typical water qualities produced will be in the range 10 to 30 µs/cm. The water quality is measured on the outlet by a conductivity monitor and this instrument can be linked to a dump valve to ensure out of specification water is diverted to drain. The purified water will need to be collected in a suitable treated water tank prior to being pumped to the process or further treatment.

Reverse osmosis will also remove bacteria, pyrogens and yeast cells, however, to keep the water in this clean state further treatment may be required.



The RO-2100 range includes PLC with LCD operator control panel as standard.

It has an easy to use operator panel with LCD data display for read out of conductivity and other operating parameters.

PLC control enables a number of options: logon to BUS systems, reprogramming of PLC control to customise conditions etc.

Technical Specification

TechnicalData	RO-2110	RO-2120	RO-2130	RO-2144
Capacity, litres/hour*	600	1200	1700	2300
Maximum recovery, %*	75	75	75	75
Salt rejection, %*	>98	>98	>98	>98
Typical water quality, µS/cm*	<20	<20	<20	<20
Electrical supply, V/Hz	3x400/50	3x400/50	3x400/50	3x400/50
Power consumption, kW**	2.2	2.2	4	4
Inlet pipe diameter, (“)	3/4	3/4	3/4	3/4
Concentrate outlet diameter, (“)	3/4	3/4	3/4	3/4
Permeate outlet diameter, (“)	3/4	3/4	3/4	3/4
Feed water pressure, min/max, bar	3/7	3/7	3/7	3/7
Dimensions, L x W x H, mm	620 x 970 x 1675	620 x 970 x 1675	620 x 970 x 1675	620 x 970 x 1675
Maximum water temp ºC	25	25	25	25

**Nominal, based on a potable feed water supply with a maximum total dissolved solids level of 500 mg/l, a minimum temperature of 10ºC and a 3 bar inlet pressure.*
*** Without CIP-unit*

UK Office:

Envirogen Water Technologies
Unit 14a Bromyard Road Trading Estate
Bromyard Road, Ledbury
Herefordshire HR8 1NS
Tel: +44 (0) 1531 636328
E: info@envirogengroup.com
www.envirogengroup.com

Italian Office:

Fluxa Filtri S.p.A
Viale De GASPERI,88/B
20017
Mazzo di Rho
Milano
Tel: +39 (0)2 93959.1
E: info@fluxafiltri.com
www.fluxafiltri.com

USA Office:

Envirogen Technologies Inc
PO Box 5419
Kingwood, TX 7735-5419
Tel: +1 877.312.8950
E: info@envirogen.com
www.envirogen.com

ENVIRONMENTAL WATER SYSTEMS (UK)

DERWENT WATER SYSTEMS

PURESEP Purification Filtration Separation

FLUXA