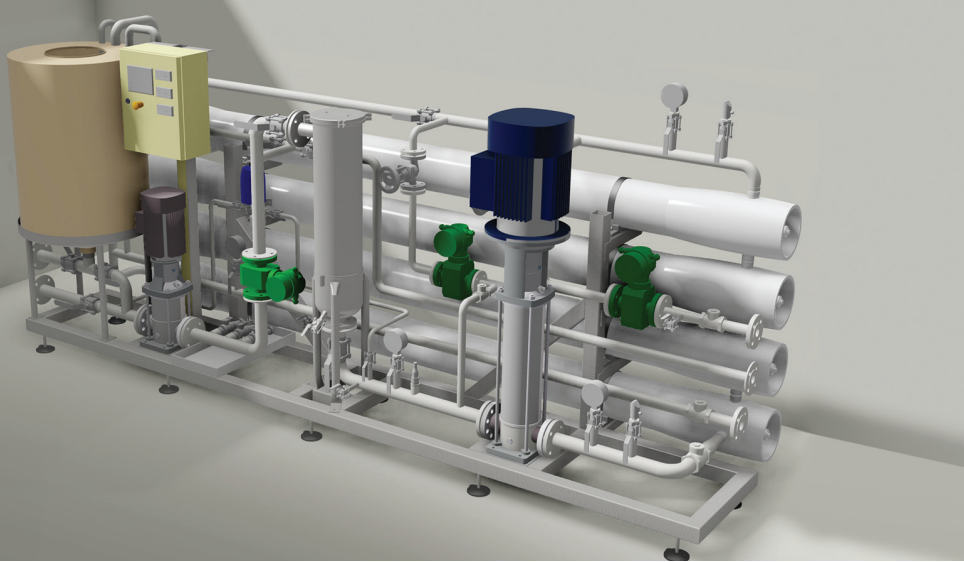


# PACKAGED REVERSE OSMOSIS PLANTS



PROXA's ROPack range of Packaged Reverse Osmosis (RO) plants are designed to be a robust and stand-alone solution for a wide range of applications where high quality product water is required. The package plants are compact and easy to install. Operation is easy with minimum maintenance required.

## TYPICAL APPLICATIONS

- Boiler feed water
- Pre-treatment for de-mineralised water production
- Wash and process water
- Potable water

## OPERATING PARAMETERS

- Feed TDS < 2500mg/l
- Recovery 50 – 80%
- Nominal rejection 97 – 99%
- Temperature 15 – 35°C
- Operating pressure 10 – 16 bar
- Rated pressure PN16/PN25

## PACKAGE PLANT FEATURES

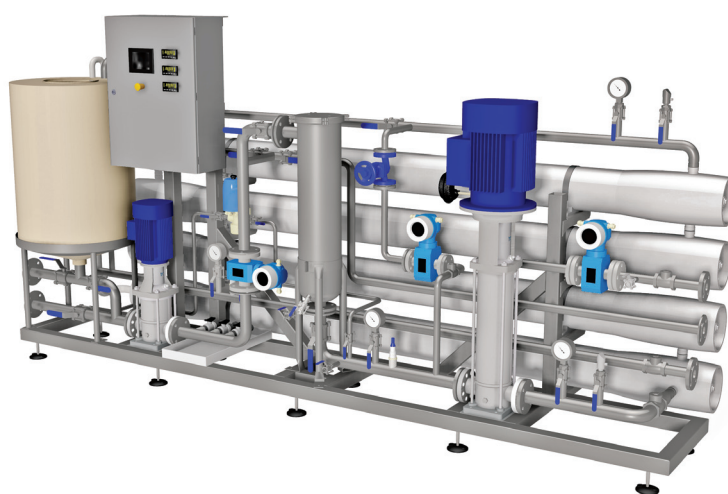
- Complete packaged RO desalination series with nominal permeate capacities of 2.5m<sup>3</sup>/h to 10m<sup>3</sup>/h
- Feed TDS up to 2500 mg/l at a temperature range of 10 – 35°C
- Easy installation and compact footprint
- Minimum infrastructure and utility requirements
- Integrated cleaning (CIP) system
- Manual or automated feed and recovery control
- Low pressure feed pump
- Cartridge filter
- High pressure feed pump with VSD
- Flow, pressure and analytical instrumentation
- 10" Touch screen control panel
- Optional dosing stations:
  - Anti-scale dosing
  - SMBS dosing
  - Feed pH adjustment
  - Disinfection dosing
- Optional SMS based alarm and trip notification

## MATERIALS OF CONSTRUCTION

- Frame 304 SS
- Piping 316 SS
- Electrical panel CS – Powder coated

## INSTRUMENTATION AND CONTROLS

- Flow meters (E+H)
  - Feed
  - Concentrate
- Pressure (WIKA)
  - Feed
  - Permeate
  - Concentrate
- Conductivity (E+H)
  - Feed
  - Permeate
- pH (E+H)
  - Feed (Optional)
- ORP (E+H)
  - Feed (Optional)
- Pneumatic actuated control valves
- Electrical actuated control valves (Optional)
- Schneider PLC with 10" Touch screen control panel



MODEL	ROPACK-2.5	ROPACK-5.0	ROPACK-10.0
Permeate Flow Rate	2.5 m <sup>3</sup> /h	5 m <sup>3</sup> /h	10 m <sup>3</sup> /h
Feed Flow Rate	3.1 – 5.0 m <sup>3</sup> /h	6.2 – 10 m <sup>3</sup> /h	12.5 – 20 m <sup>3</sup> /h
Nominal Rejection	97 – 99%	97 – 99%	97 – 99%
Pressure Rating	PN16/PN25	PN16/PN25	PN16/PN25

LOW PRESSURE FEED PUMP/CIP PUMP			
MOC	SS304/SS316	SS304/SS316	SS304/SS316
Motor Power	1.1 kW	1.5 kW	3 kW

HIGH PRESSURE FEED PUMP			
MOC	SS304/SS316	SS304/SS316	SS304/SS316
Motor Power	4 kW	5.5 kW	11 kW

MEMBRANE HOUSING AND ELEMENTS			
Membrane Housing Type	8", 3 element	8", 3 element	8", 3 element
Pressure Rating (Housing)	300/450 PSI	300/450 PSI	300/450 PSI
MOC (Housing / Elements)	FRP/PA	FRP/PA	FRP/PA

BATTERY LIMITS AND UTILITY REQUIREMENTS			
Feed	40NB, BS4504 1600/3	50NB, BS4504 1600/3	50NB, BS4504 1600/3
Permeate	25NB, BS4504 1600/3	40NB, BS4504 1600/3	40NB, BS4504 1600/3
Concentrate	25NB, BS4504 4000/3	40NB, BS4504 4000/3	40NB, BS4504 4000/3
CIP Waste	25NB, BS4504 1600/3	40NB, BS4504 1600/3	40NB, BS4504 1600/3
Instrument Air (Only for Pneumatic Option)	5 – 7 bar, Dry, Oil Free	5 – 7 bar, Dry, Oil Free	5 – 7 bar, Dry, Oil Free
Electricity	380V/3ph/50Hz	380V/3ph/50Hz	380V/3ph/50Hz
Power Installed	6.1/8 kW	8/10 kW	10/15 kW

PACKAGE WEIGHT AND DIMENSIONS			
Width	1 065 mm	1 065 mm	1 065 mm
Length	3 950 mm	3 950 mm	3 950 mm
Height	2 000 mm	2 000 mm	2 000 mm
Weight (Empty / Operating)	980/1750 kg	1 050/1950 kg	1 250/2150 kg