

Sea water Standard Series

Pre-Assembled Reverse Osmosis plant for Quick Installation at site

Series - 100



Our modular designs for seawater reverse osmosis (SWRO) systems solve your desalination needs while optimizing operating costs. With in-house inventory management and strategic global inventory, our clients receive fast delivery and installation to get up and running quickly.

The SWRO series covers applications, Potable water, boiler feed water, irrigation, plant process water. For applications with challenging feed water source, combination of multimedia filtration, Ultra filtration can be installed as per the feed water condition.

Series – 100- Sea water is considered to be one of the most compact industrial reverse osmosis systems in the market; it also features state of the art energy saving membranes. Series – 100 plants are available as standard model with capacity up to 100,000 USGPD as sea water.

Standard Model Available as Series - 100

Model No and specifications						TDS range and flow in US Gallon per day					
Model No	Membranes	MMF	CF	LPP	HPP	20K	25K	30K	35K	40K	45K
CWES-95-25	8"x40"-10	30"x72"-2	2.5"x20"-4+4	5.5	30	30,000	30,000	25,000	25,000	25,000	25,000
CWES-115-30	8"x40"-12	36"x72"-2	2.5"x40"-5+5	5.5	37	---	40,000	40,000	30,000	30,000	30,000
CWES-150-40	8"x40"-15	36"x72"-2	2.5"x40"-5+5	5.5	37	---	---	---	---	40,000	40,000
CWES-150-40-A	8"x40"-12	36"x72"-2	2.5"x40"-5+5	5.5	37	---	50,000	50,000	40,000	---	---
CWES-189-50	8"x40"-18	36"x72"-3	2.5"x40"-5+5	7.5	40	---	70,000	70,000	---	60,000	50,000
CWES-189-50-A	8"x40"-12	36"x72"-3	2.5"x40"-5+5	7.5	40	---	60,000	60,000	50,000	---	---
CWES-227-60	8"x40"-20	63"x63"-1	2.5"x40"-9+9	7.5	40	---	---	---	---	---	60,000
CWES-265-70-G	8"x40"-24	63"x63"-1	2.5"x40"-9+9	7.5	75.0(G)	---	---	---	70,000	70,000	70,000
CWES-265-70-F	8"x40"-24	63"x63"-1	2.5"x40"-9+9	7.5	58.0(F)	---	---	---	70,000	70,000	70,000
CWES-300-79-G	8"x40"-24	63"x63"-2	2.5"x40"-9+9	7.5	75.0(G)	---	100,000	100,000	79,000	79,000	79,000
CWES-300-79-F	8"x40"-24	63"x63"-2	2.5"x40"-9+9	7.5	58.0(F)	---	100,000	100,000	79,000	79,000	79,000
CWES-378-100-G	8"x40"-36	63"x63"-2	2.5"x40"-18+18	11	90.0(G)	---	150,000	132,000	132,000	100,000	100,000
CWES-378-100-F	8"x40"-36	63"x63"-2	2.5"x40"-18+18	11	88.0(F)	---	150,000	132,000	132,000	100,000	100,000

Legends

- Membranes Size 8" x40" – 36 "Means - 8" Sea water membranes – 36 no in qty
- MMF – 24"x65" – M , means " 24 inch diameter x 65 inch in height" – manual operated
- CF – 2.5"x40" -5+5 – means 2.5"x40" – 5 no CF in each housing and this is available for 10 and 5 micron
- CF – 2.5"x40" -9+9 – means 2.5"x40" – 9 no CF in each housing and this is available for 10 and 5 micron
- LPP(Kw) is capacity of feed water pump – KW
- HPP(Kw) is capacity of high pressure pump – KW
- Model number ends with "G" means – Grundfos high pressure pump and "F" – means Fedco high pressure pump.
- TDS range and flow in GPD – indicates capacity of plant in US gallon per day based on TDS range in scale of 20K (3000PPM) – 45K (15000PPM)
- Capacity shown as "----"means not suitable for the TDS range selected.

Standard Features:

- MS Epoxy coated frame construction for corrosion resistance.
- 8" TFC spiral wound sea water membranes from Hydranautics as standard model SWC 5LD.
- 1000 Psig FRP membrane housing made of Code line.
- High Pressure pump of made of Duplex stainless steel / SS904L multi-stage from Fedco USA/ ERI - USA/ Grundfos - Denmark with TEFC motor.
- Feed pump of Duplex Stainless steel – 2205.
- Multimedia filter with manual control valve for pre filtration
- Poly propylene / PVC / PP- 10 and 5 micron cartridge pre-filter
- Dosing pump SEKO with 100 ltrs dosing tank for pre chlorination, de chlorination, Antiscalant, post PH correction and Post chlorination dosing
- Power supply: 410V/3Ph/50Hz
- High pressure pump VFD controlled
- 220v/ 1ph/ 50Hz control voltage
- Relay controlled control panel for easy maintenance.
- Duplex stainless steel piping.
- Duplex stainless steel coupling for high corrosion resistance
- Low pressure and high pressure switch for shutdown with Auto Restart
- Product PH and product conductivity online display.
- Liquid filled pressure gauges, panel mount for pump suction, membrane feed, and final concentrate
- Storage tank control vide float switch in feed and product water tanks
- Permeate & concentrate flow meters from Blue White USA – GF signet
- Made in UAE

Optional Features:

- Stainless steel 316 as skid
- PLC controlled control panel
- Multimedia filter additional as per raw water quality
- Automation of Multimedia filter
- ORP or flow meter as digital display
- Additional dosing pumps for pretreatment system.
- Additional filtration system as per water quality requirement.
- Turbo charger for energy recovery
- Pressure exchanger as energy recovery

Price Details : Please check with celar representative for quote