IDE PROGREEN™ SW-L 5000

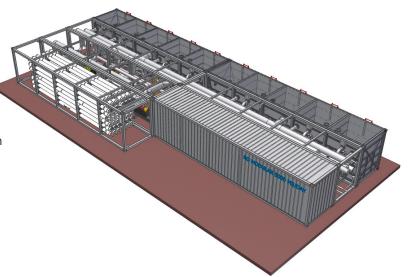
5000 m³/day (917 gpm) SWRO CHEMICAL-FREE DESALINATION PLANT

Key Features

- Patented Direct Osmosis Cleaning (DOC) system
- Energy-efficient high pressure pumps with frequency converter (VFD)
- State-of-the-art, highly efficient energy recovery system
- End-to-end modular PLC with 15" touch screen
- Remote performance monitoring



- Integrated SCADA system
- Configuration: Containerized or skid mounted
- Redundancy options for high availability
- Second pass RO for industrial applications



Operating Parameters

TDS 35,000-41,000 ppm TSS < 15 ppm 15-32°C (59-90°F) Operating temperature 45% Recovery rate Energy consumption (T - 27°C) 3.0-3.2 kWh/m³ Electrical supply EU: 380-420V 50Hz NA: 440-480V 60Hz

Material Specifications

Piping and accessories (LP) SM0 Piping and accessories (HP) Super Duplex High pressure pump Pressure vessels Polyamide (8") R0 membranes Epoxy painted carbon steel Skid

316 / Polypropylene

Dimensions

Weight					
	Shipping (container)			Installed Weight	
Unit Type	Quantity	Туре	Weight (ton)	(ton)	
Pretreatment	2	40'	24.0	208.0	
Equipment	2	40'	16.0	21.0	
R0	2	40'	35.0	46.0	
Media	2	40'	56.0		

Overall Footprint [m]

Length - 23.96

Width -Max: 9.20 / Min: 6.90 Height - Max: 2.62 / Min: 2.51



Equipment & Process Specifications

	Character	Value	
	Feed flow rate [m³/hr]	481.5	
	Minimum inlet pressure [bar]	1.0	
	Contact Media Module		
Pretreatment	Number of units	2	
	Manufacturer	IDE	
	Media type	Plastic Media Carrier	
	Media volume [m³]	9.6	
eat	Filters		
tre	Number of units	7	
re	Filter manufacturer	IDE	
ш	Filter media type	Gravel, Sand, Anthracite	
	Total media volume [m³]	46.7	
	Micro Filters		
	Filter type	Melt Blown Polypropylene	
	Filter manufacturer	Fluytec*	
	Feed flow rate [m³/hr]	463.0	
	Recovery rate [m³/hr]	208.3	
	Brine water flow rate [m³/hr]	254.6	
ion	High Pressure Pumps		
	Pump type	Horizontal Centrifugal	
	Pump manufacturer	Energy Recovery Inc.*	
	Motor power [kW]	630.0	
	Motor manufacturer	ABB*	
	Energy Recovery System (ERS)		
	Number of ERS units	4	
nat	ERS manufacturer	Energy Recovery Inc.*	
Desalination	Circulation Pump	5,	
	Pump type	Centrifugal	
	Pump manufacturer	Fapmo*	
	Pressure Vessels	·	
	Number of units	36	
-	Vessel manufacturer	Protec*	
	Max operating pressure [bar]	82.0	
	Number of membranes per PV	8	
	Membranes		
	Membrane type	TFC Polyamide	
	Membrane manufacturer	Toray / Hydranautics / DOW / Nano H ₂ 0	
* Or equiv		, , , , , , , , , , , , , , , , , , , ,	



