



HIDROWELL-A3-2.5 mobile seawater desalination system

MODEL INFORMATION

Type:	HIDROWELL A3-2.5
Installation:	in 40' HC container
Dimensions:	12,192 x 2,438 x 2,896 m
Weight: /Net_Gross/	5.200 _ 8.800 kg
Application:	Potable water

OPERATING PARAMETERS

Raw water volume:	125,0 m ³ /day
Treated water volume:	50,0 m ³ /day
Concentrate volume:	75,0 m ³ /day
Recovery:	40 %
Origin of raw water:	Sea water
Raw water TDS:	35.000 ppm
Treated water TDS:	According to WHO standards
Concentrate salt content:	56.000 ppm
Design water temperature:	25 °C
Operating water temperature:	15-35 °C
Design pressure:	80 bar
Operating pressure:	60 bar
Specific energy demand:	3,5 kWh/m ³
Inlet water pressure:	2,5 – 5,0 bar
Permeate pressure:	max. 1 bar

CONSTRUCTION

RO-frame:	EN 1.4401
Booster pump:	CRNE 10-2
High pressure pump:	Danfoss APP
Energy recovery system:	Danfoss ER
Membrane housing:	FRG
High pressure piping system:	EN 1.4435
Low pressure piping system:	PVC or PP or SS
UV equipment:	Aquada
Chemical feeder:	HF-VA-ST/C 6-10
Treated water storage tank volume:	2,0 m ³
Control instrumentation	
Motor switching box	
CIP unit	

TREATMENT PROCESS

Pre-treatment:	Ultrafiltration Antiscalant agent dosing Biocid agent dosing
Desalination:	Reverse osmosis
Post-treatment:	UV treatment and Resalting and pH adjustment agent

CONNECTION

Inlet:	DN 40
Permeate:	DN 25
Concentrate:	DN 50
Electric supply:	3 x 415 V; 50 Hz
Installed electric power:	23,4 kW
Energy demand:	7 kW

MEMBRANE MODUL DATA

Type:	SW30XLE-400 or equivalent
Style:	spiral wound elements
Manufacturer:	DOW or equivalent
Total surface area:	148 m ²
Size:	8 x 80"
Quantity:	4 pcs

CONTROL

Controller:	PLC
Communication:	Modbus
Display :	status, function parameters error signals

INSTRUMENTATION

Pressure gauges and transmitter
Flow meter and transmitter
Conductivity meter and transmitter
Thermometer and transmitter
Turbidity meter and transmitter
pH transmitter

