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MAKINA SANAYI VE TICARET A.S.



REVERSE OSMOSIS

DIAMOND SERIS SEA WATER DESALINATION

FRESH WATER PRODUCTION

40-80 m³ per day

DIAMOND SERIES SEA WATER DESALINATION

Introducing the Diamond Series Fresh Water Maker, a state-of-the-art reverse osmosis system designed for marine applications. This system offers a nominal production capacity ranging from 40 to 80 cubic meters per day, ideal for use with seawater at a temperature of 25°C and a salinity level of 35,000 parts per million.

hemodialysis-water-purification-reverse-osmosis-double-pass-dialysis-unit-2

Housed within a durable stainless steel rack, this system is skid-mounted for easy installation and comes equipped with an integrated PLC control and starting cabinet for user-friendly operation. One of its standout features is the automatic freshwater flushing system, which serves as a safeguard for the membranes, prolonging their lifespan. Additionally, it boasts an automatic "water drop" system with a high salinity alarm, ensuring the quality of the produced water.

To enhance performance monitoring, the unit is fitted with a digital flow-meter, providing precise readings of both momentary and cumulative water production. For added convenience and water quality assurance, the system includes a raw water filter and a carbon flush water filter.



MODELS

REVERSE OSMOSIS FRESH WATER MAKER

DSW 240

CAPACITY: 40 m³/day

ELECTRIC: 380 V – 17.6 kW

SKID MOUNTED

CONTAINERIZED

DSW 360

CAPACITY: 60 m³/day

ELECTRIC: 380 V – 17.6 kW

SKID MOUNTED

CONTAINERIZED

DSW 480

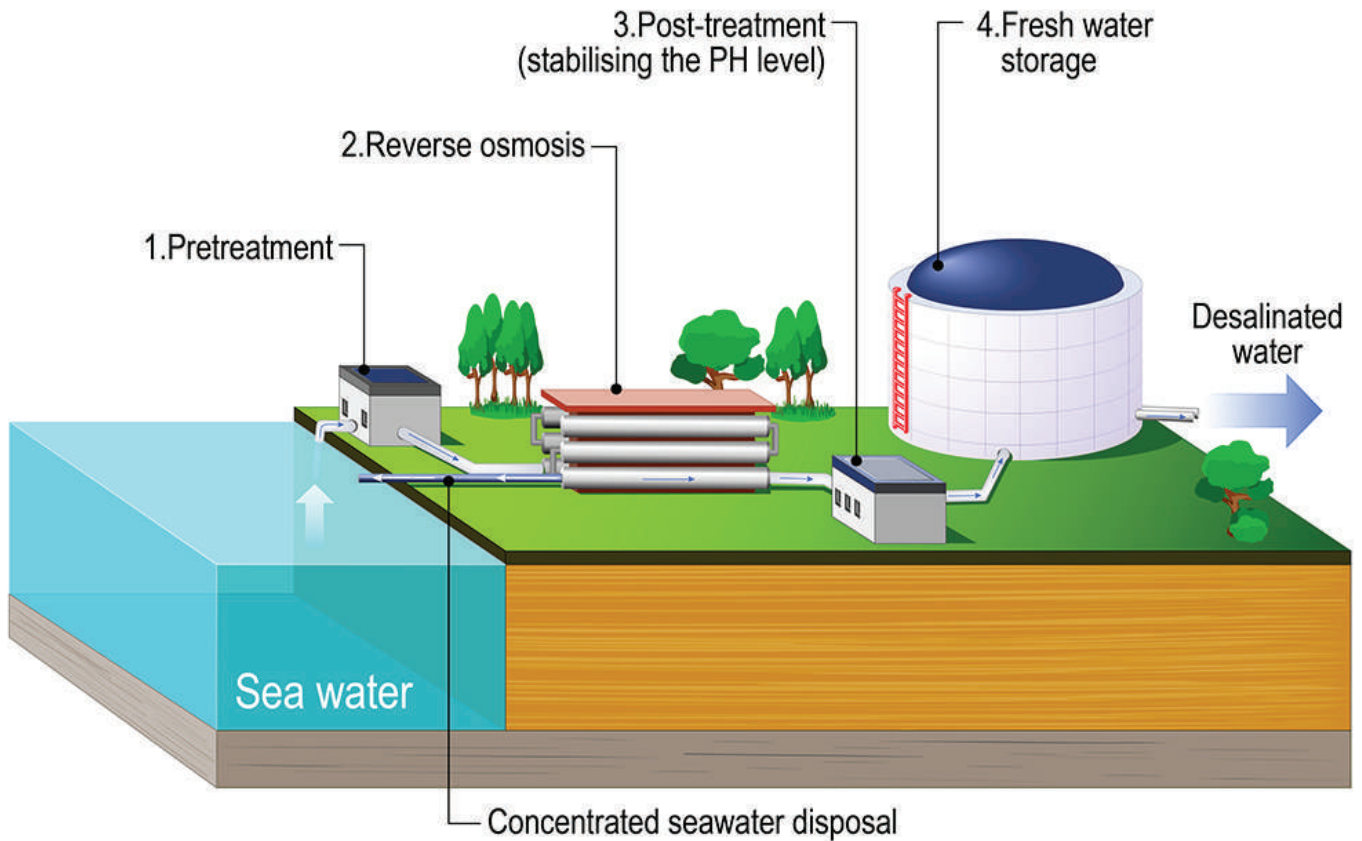
CAPACITY: 80 m³/day

ELECTRIC: 380 V – 17.6 kW

SKID MOUNTED

CONTAINERIZED

FLOW DIAGRAM



MODELS & SPECIFICATIONS

MODEL	DSW 240	DSW 360	DSW 480
Nominal capacity	40 m ³ /day	60 m ³ /day	80 m ³ /day
Minimum feed water flow	5,0 m ³ /h	7,7 m ³ /h	9,6 m ³ /h
Minimum feed water pressure	2,5 bar	2,5 bar	2,5 bar
Maximum feed water pressure	5,0 bar	5,0 bar	5,0 bar
Nominal system pressure (PG2)	65 bar	65 bar	65 bar
Maximum system pressure (PG2)	69 bar	69 bar	69 bar
Maximum permeate back-pressure	2,5 bar	2,5 bar	2,5 bar
Maximum concentrate back-pressure	1,0 bar	1,0 bar	1,0 bar
Pilot air pressure	6 bar	6 bar	6 bar
Calculated max. power consumption	17,6 kW	17,6 kW	22,7 kW
Motor rating S1 duty	21,5 kW	21,5 kW	25,6 kW
System voltage	440V / 60Hz*1	440V / 60Hz*1	440V / 60Hz*1
Nominal product conductivity	≤ 75 mS/m	≤ 75 mS/m	≤ 75 mS/m
Maximum product conductivity	≤ 100 mS/m	≤ 100 mS/m	≤ 100 mS/m
Raw water pre-filtration	5μ	5μ	5μ
Flush water prefiltration	5μ (carbon)	5μ (carbon)	5μ (carbon)
Surrounding temperature	5-40°C*2	5-40°C*2	5-40°C*2
Product water connection (N1)	3/4" BSP Male	3/4" BSP Male	3/4" BSP Male
Concentrate connection (N2)	DN50" – ANSI 150#	DN50" – ANSI 150#	DN50" – ANSI 150#
Feed water connection (N3)	DN50" – ANSI 150#	DN50" – ANSI 150#	DN50" – ANSI 150#
Flush water connection (N4)	3/4" BSP Male	3/4" BSP Male	3/4" BSP Male
Pilot Air	6mm push in / 1/8" BSP FM	6mm push in / 1/8" BSP FM	6mm push in / 1/8" BSP FM
Unit dimension (l x b x h) (m)	1,9 x 1,0 x 1,4	1,9 x 1,0 x 1,4	0,9 x 1,0 x 1,8
Unit Operational weight	+/- 990 kg	+/- 1070 kg	+/- 1150 kg



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