



Water Purification and Desalination Modular and Ecological Systems Spectrum AVG-SW / AVG-PW



Minimum investment

Easy installation

Minimum cost of
operation

Speed and efficiency

Sustainability



Management
System
ISO 9001:2008
ISO 14001:2004

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ID 9105081070

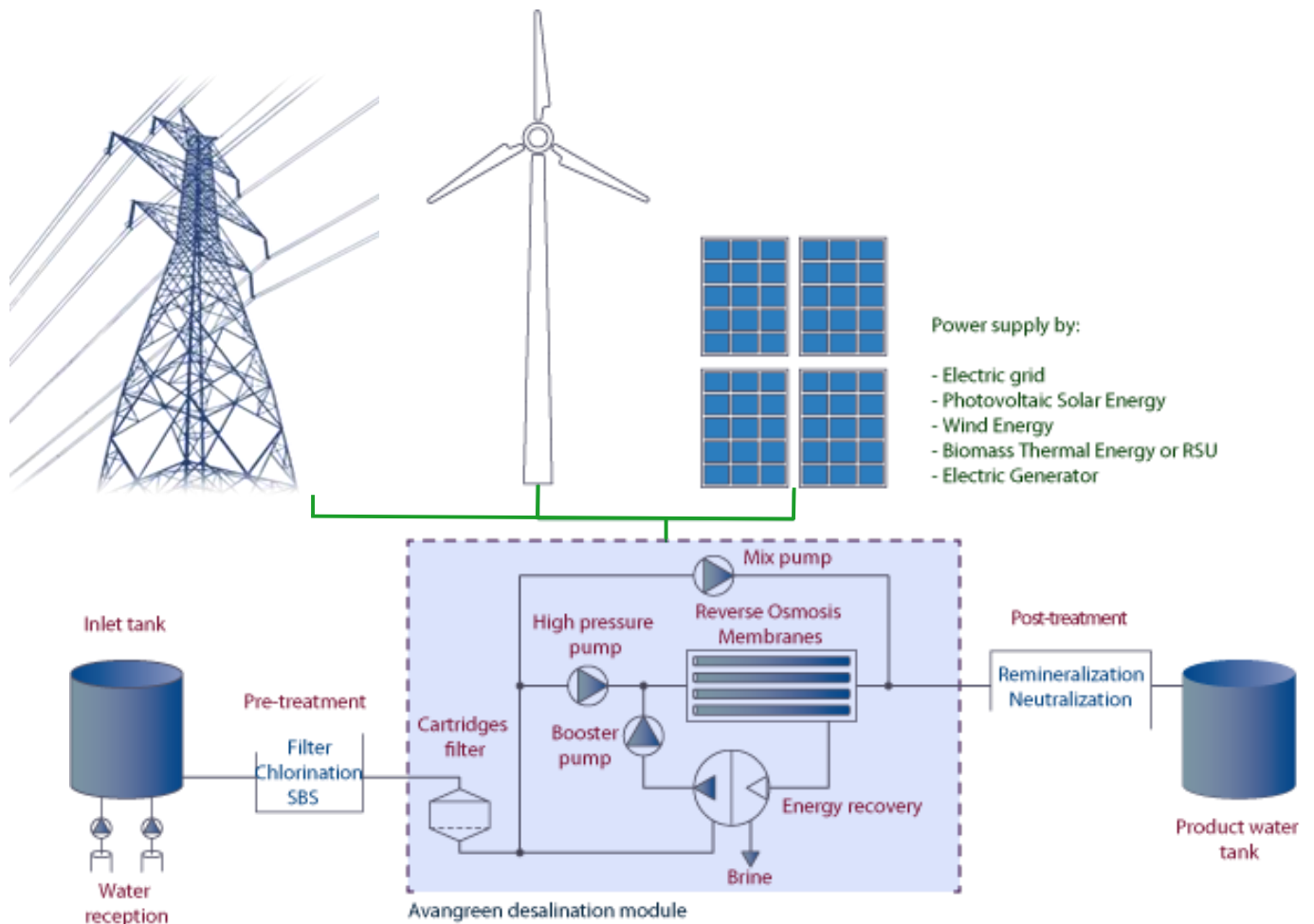


Advantages of the system:

The AVG-SW system has great advantages:

- Easy adaptation to different water qualities.
- High automation system, resulting in:
 - The installation works semi unattended.
 - High capacity for predictive maintenance.
 - Remote monitoring of production parameters.
 - High energy efficiency.
- High energy efficiency.
- Great expansion options:
 - Sand filtration system at the entrance.
 - Filter system with calcite bed for remineralization departure.
 - Possibility of increasing energy recovery up to 98% using ERI.
 - Alternative energy supplies, using the HPS system of Avangreen.

Schematic of a typical project:



Technical data seawater desalination

	AVG-SW-500	AVG-SW-1000	AVG-SW-2500
Production			
Water product	500 m ³ /d	1.000 m ³ /d	2.500 m ³ /d
Inflow	1.111 m ³ /d	2.222 m ³ /d	5.555 m ³ /d
Brine	611 m ³ /d	1.222 m ³ /d	3.055 m ³ /d
Reverse Osmosis			
Membranes	DOW SW30HRLE-440i o equivalente		
Number of membranes	6x6	12x6	30x6
Consumption			
Consumption	78 kW	142 kW	350 kW
ERI consumption	65 kW	112 kW	275 kW
Ratio	3,74 kWh/m ³	3,41 kWh/m ³	3,36 kWh/m ³
Ratio with ERI	3,12 kWh/m ³	2,69 kWh/m ³	2,64 kWh/m ³
Voltage	400V 50 Hz / 460V 60 Hz 230 V 50/60 Hz		
Filtration			
First step	Cartridge filter 50 µm		
Second pass	Cartridge filter 5 µm		
Implantation			
Maximum number of identical modules in parallel	7		
Dimensions (W x H x L)	2,3 x 1,3 x 8,75 m	2,3 x 2,1 x 8,75 m	4,8 x 2,1 x 8,75 m
Approximate weight	4.500 kg	6.000 kg	10.200 kg
Entrance	DN 80	DN 150	DN 300
Exit	DN 40	DN 80	DN 200
Brine rejection	DN 50	DN 100	DN 250
Input parameters			
TDS	35.000 ppm NaCl		
Maximum recovery	45%		
Water temperature	25 °C		
Minimum inlet pressure	1,5 bar		



Technical data brackish water purification

	AVG-SS-500	AVG-SS-1000	AVG-SS-2500
Production			
Water product	500 m ³ /d	1.000 m ³ /d	2.500 m ³ /d
Inflow	1.111 m ³ /d	1.333 m ³ /d	5.555 m ³ /d
Brine	611 m ³ /d	333 m ³ /d	3.055 m ³ /d
Reverse Osmosis			
Membranes	Filmtec BW30-400 o equivalente		
Number of membranes	5x6	9x6	22x6
Consumption			
Consumption	19 kW	34 kW	82 kW
ERI consumption	17 kW	30 kW	72 kW
Ratio	0,91 kWh/m ³	0,81 kWh/m ³	0,79 kWh/m ³
Ratio with ERI	0,82 kWh/m ³	0,72 kWh/m ³	0,69 kWh/m ³
Voltage	400V 50 Hz / 460V 60 Hz 230 V 50/60 Hz		
Filtration			
First step	Cartridge filter 50 µm		
Second pass	Cartridge filter 5 µm		
Implantation			
Maximum number of identical modules in parallel	7		
Dimensions (W x H x L)	2,3 x 1,3 x 8,75 m	2,3 x 2,1 x 8,75 m	4,8 x 2,1 x 8,75 m
Approximate weight	4.000 kg	5.200 kg	9.500 kg
Entrance	DN 60	DN 120	DN 300
Exit	DN 40	DN 80	DN 200
Brine rejection	DN 25	DN 40	DN 100
Input parameters			
TDS	5.000 ppm NaCl		
Maximum recovery	75%		
Water temperature	25 °C		
Minimum inlet pressure	1,5 bar		





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