AZUD
WATERTECH

AZUD WATERTECH DW
Purification of water with Reverse Osmosis membranes

Purification plant AZUD WATERTECH DW SOX/SOW/SSW, to provide the required standard of potable water for towns and industries, through brackish or sea water desalination with reverse osmosis membranes.

AZUD WATERTECH DW SOX / SOW / SSW solution

- ✓ Reverse Osmosis membranes desalination, to remove dissolved pollutants in water, such as mineral salts, heavy metals, pesticides, radioactive elements, etc.
- ✓ More energy efficiency than other desalination systems (distillation).
- ✓ Physical-chemical pretreatments and automatic-scheduled preventive actions to prevent RO membranes clogging with suspended solids, salts precipitates and/or bio fouling.
- ✓ No need of chemicals reagents and unnecessary consumables which generate cost and dependence.
- ✓ Fully autonomous operation, ensuring the water quality and the maximum equipment protection. No need of qualified and permanent staff.
- ✓ Very compact and modular plant, with simple and immediate installation and commissioning. Without civil works. Without setbacks.

Human use

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Standard features

- Silex and Anthracite media filtration
  - FRP or Polyamide tanks with silex and anthracite media.
  - Automatic valves for backwash.
- Microfiltration cartridge
- High pressure pump with Variable Frequency Drive
- Reverse Osmosis membranes desalination
  - TFC polyamide RO membranes in FRP vessels.
  - Automatic valves for automatic flushing on shutdown.
- Anti-scale dosing
- Flushing and CIP skid
  - Permeate tank and SS pump.
- Measurement and control equipment
  - Pressure switches; Inlet/Outlet and Max/Min.
  - Digital pressure transmitters and digital flow meters.
  - EC controller with sensor.
- Electrical panel and automation and control system
  - Electric circuit breakers, motor starters, relays, etc.
  - PLC and HMI providing full automatic control.
- Framework, piping and electric connections. Testing
  - Steel framework.
  - Pipes, accessories and valves for hydraulic line.
  - Electrical connections equipment-electrical panel.
  - Hydraulic and electric bench testing.

*For higher flow, contact the engineering area.

Standard plant models:

Model AZUD WATERTECH DW	Maximum flow (m^3/h | gph)	Dimensions (m) Length x Width x Height	Power installation KW
Sea water. High salinity (10.000 - 55.000 ppm)			
SSW4	4,0 | 880,0	7,0 x 2,0 x 2,3	25,02
SSW9	9,0 | 1980,0	8,0 x 2,0 x 2,3	41,02
SSW14	14,0 | 3080,0	8,0 x 2,0 x 2,3	57,02
SSW17	17,0 | 3740,0	9,0 x2,0 x 2,3	65,02
Brackish water. Medium salinity (4.500 - 10.000 ppm)			
SOW05	0,5 | 110,0	1,5 x 0,8 x 2,0	2,97
SOW1	1,0 | 220,0	4,0 x 1,5 x 2,3	2,97
SOW2	2,0 | 440,0	4,0 x 1,5 x 2,3	7,02
SOW3	3,0 | 660,0	5,0 x 1,5 x 2,3	10,52
SOW5	5,0 | 1.100,0	3,0 x 1,5 x 2,3	18,02
SOW6	6,0 | 1.320,0	4,0 x 1,5 x 2,3	18,02
SOW9	9,0 | 1.980,0	4,0 x 1,5 x 2,3	19,52
SOW14	14,0 | 3.080,0	6,0 x 1,5 x 2,3	26,52
SOW21	21,0 | 4.620,0	6,0 x 1,5 x 2,3	34,52
SOW30	30,0 | 6.600,0	6,0 x 2,0 x 2,3	52,02
SOW45	45,0 | 9.900,0	9,0 x 2,0 x 2,3	97,02
Brackish water. Low salinity (< 4.500 ppm)			
SOX05	0,6 | 132,0	1,5 x 0,8 x 2,0	2,97
SOX1	1,2 | 264,0	4,0 x 1,5 x 2,3	2,97
SOX2	2,4 | 528,0	4,0 x 1,5 x 2,3	5,52
SOX3	3,5 | 770,0	4,0 x 1,5 x 2,3	8,52
SOX5	5,0 | 1.100,0	3,0 x 1,5 x 2,3	10,52
SOX7	7,0 | 1.540,0	4,0 x 1,5 x 2,3	10,52
SOX10	11,0 | 2.420,0	4,0 x 1,5 x 2,3	15,52
SOX15	15,0 | 3.300,0	6,0 x 1,5 x 2,3	19,52
SOX21	21,0 | 4.620,0	6,0 x 1,5 x 2,3	23,02
SOX28	28,0 | 6.160,0	7,0 x 2,0 x 2,3	26,52
SOX38	38,0 | 8.360,0	7,0 x 2,0 x 2,3	44,02