

DRINKING WATER PRODUCTION UNIT FROM SEA WATER OR BRACKISH WATER

Production

- > 2,8 à 42.0 m³/h

Raw water / Input

- > Sea water
- > Brackish water

Applications

- > Seaside villages
- > Hotels closed to the sea or installed on an island



CHARACTERISTICS

- > QUICK and EASY installation,
- > MECHANICAL FILTRATION TECHNOLOGY without chemicals,
- > Prefiltration with Pouzzolanes and ZEOLITE, Filter for suspended solids removal,
- > Reverse OSMOSIS MEMBRANE SYSTEM. Optimized life time for membranes thank to an improved physical-chemical pretreatment,
- > Automatic control SYSTEM in order to endure the quality of drinking water.

TECHNOLOGIES



Pre-filtration by pouzzolane filter, filtration on zeolite (5 µm)



Microfiltration cartridges (1 µm)



Desalination by reverse osmosis membranes

FRAME



Open skid



Shipping container (on request)

AUTOMATION



Automatic control of :
> Whashing equipments
> Water quality

POWER SUPPLY



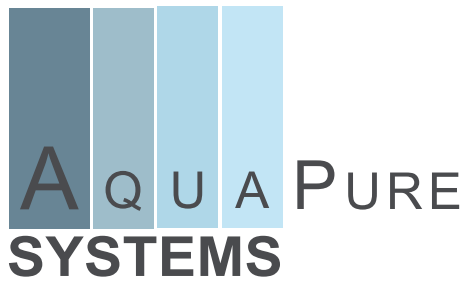
Solar energy (optional)



Electrical network



Generator



Containeur



Skid

MAIN COMPONENTS

- > DIGITAL DOSAGE pump for oxidant with REDOX regulation
- > PRE FILTRATION by pouzzolanne and filtration by ZEOLITE,
- > Analog dosing pump for ANTI INCRUSTANT,
- > MICROFILTRATION cartridge in polypropilene [1 micron],
- > HIGH PRESSURE PUMP in stainless steel,
- > REVERSE OSMOSIS polyamide membranes housed in fiberglass-reinforced polyester pressure tubes,
- > PLC with touch screen control,
- > Electrical cabinet including transformers, protections and starters,
- > Pump and tank for flushing reverse osmosis membranes.

OPTIONAL EQUIPMENTS

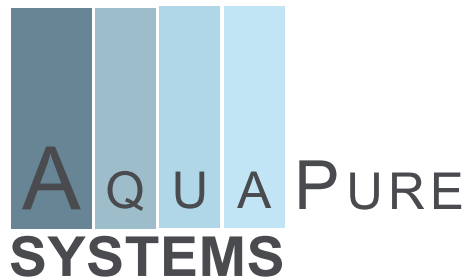
- > Acid/base dosing system,
- > RESIDUAL CHLORINE dosing system,
- > remineralization with CALCITE,
- > remote CONTROL SYSTEM.

WATER QUALITY

RAW WATER/ INPUT

BRACKISH WATER USUALLY FROM UNDERGROUND AQUIFERS

- > Low/medium level of solids in suspension,
- > Dissolved elements in significant concentration,
- > Low concentration of organic matters and pathogens.



RAW WATER/ INPUT

SEA WATER

- > High concentration of solids in suspension,
- > High concentration of dissolved mineral salts,
- > Medium / high level of pathogens and organic matters.

**WATER
PRODUCED**

Fresh water meeting the quality requirements for drinking water published by the World Health Organization :

- > No microbiological contamination,
- > TDS < 1 000 mg/l,
- > TSS < 10 mg/l,
- > Turbidity < 1 NTU

CONDITIONS D'INSTALLATION

**ALIMENTATION
ELECTRIQUE**

Three phase power // 380 - 400 V AC // 50 Hz.

DIMENSIONS

According to plant dimensions. Maintain a minimum free space of one meter around the unit for maintenance.

**PARAMETRES
D'OPERATION**

- > Supply pressure : 2 - 4 bar
- > Temperature : 0 - 40 °C
- > Water temperature : 5 - 30 °C