

REVERSE OSMOSIS DESALINATORS.



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► DESCRIPTION OF THE PROCESS AND OPERATION

Osmosis is a natural phenomenon represented by the diffusion of a solvent (in this case water), through a semi-permeable membrane, which lets through the solvent and not the solute.

Reverse osmosis is a technology that allows desalination and purification of water by eliminating harmful and polluting agents, toxic to the body. In fact, this process is increasingly used in both the domestic and industrial environments. The withdrawn brackish water or seawater is sent to the sterilization tank first; then it is filtered and collected in a second accumulation tank which feeds the microfiltration and desalination treatments, through reverse osmosis membranes.

The Envissep reverse osmosis program can be supplemented with softening - iron removal - filtration treatments. For post-treatments, the systems can be equipped with mixed-bed ion exchange resin filters, tanks for storing pure water and autoclaves. The process ends with the addition of dolomite filters to guarantee the potability of the water.

IN ENVISEP, WE FOLLOW THE WHOLE DESIGN PROCESS AND SET UP OF STATIONS, GIVING YOU A "TURNKEY" SOLUTION

► APPLICATION FIELDS

ENVI.SE.P. reverse osmosis systems are applied in cases where there is a need for continuous use of pure water with a minimum presence of dissolved salts and a minimum footprint.

This solution is particularly suitable for the production of drinking water from drilling, marine or brackish water.

The main areas of application are:

- **food and beverage industry;**
- **pharmaceutical industry;**
- **heating systems and steam production;**
- **cosmetic industry.**

► ADVANTAGES OF REVERSE OSMOSIS

Applicable to water with any salt content, from groundwater to seawater.

Limited use of chemicals to be discharged after use, we offer a sustainable and ecological solution.

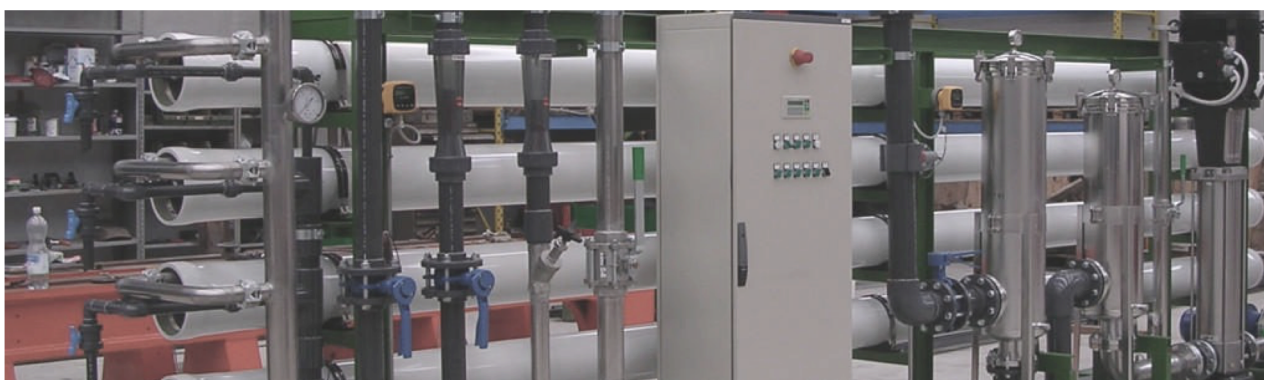
Limited support and maintenance costs, especially in the presence of high influent salinity.



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► OUR SYSTEMS

Our reverse osmosis systems consist of: stainless steel or grp containers; high pressure pumps in aisi 316; manometers. pneumatic valves; microfiltration of raw water; flow meters and level sensors; microprocessor-based electrical panel with status indicators and electrical conductivity meters; buttons for automatic or manual operations, with status indicators; monoblocks assembled in each part, electric and hydraulic; supporting structure in AISI 304 STAINLESS STEEL.



MODEL	BRW 800	BRW 1000	BRW 1200	BRW 1500	BRW 2000
Hourly production (l/h)	8.000	10.000	12.000	15.000	20.000
Maximum recovery	75%	75%	75%	75%	75%
Supply pressure (Atm, max-min)	2/5	2/5	2/5	2/5	2/5
Number of membranes	8	10	12	15	20
Water temperature (°C, max-min)	10/30	10/30	10/30	10/30	10/30
Power supply (V/Hz)	380/50	380/50	380/50	380/50	380/50
Power (kW)	11	11	11	15	18,5
Working pressure	13 bar	13 bar	13 bar	13 bar	13 bar
Dimensions (HxWxL)	160x100x500 cm	160x100x600 cm	160x100x500 cm	170x120x600 cm	190x150x600 cm

Tab. Characteristics of reverse osmosis systems - Mod. BRW.

* Hourly production corresponds to water with 1500 mg/l of TDS (in NaCl) and a temperature of 20 ° C.

► BRW-LF FOR LOW CAPACITY

For low flows (250-5,000 l/h), we produce the BRW-LF series, a compact system characterized by simplified use.

► ACCESSORIES

Filtration, softening, iron removal systems - Mixed bed ion exchange resin filters. Pure water tanks - Autoclaves - Dolomite filters

WE MAKE THE BETTER FUTURE.



Direttore Responsabile
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► LE NOSTRE DIVISIONI

IMPIANTI DI POTABILIZZAZIONE E
DEPURAZIONE ACQUE

DIGESTORI ANAEROBICI E IMPIANTI
FOTOVOLTAICI



SOCIETÀ CERTIFICATA UNI CEI EN ISO/IEC 17025:2018



SOCIETÀ CERTIFICATA: ISO 9001:2015 – UNI ISO 45001:2018
ISO 14001:2015



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