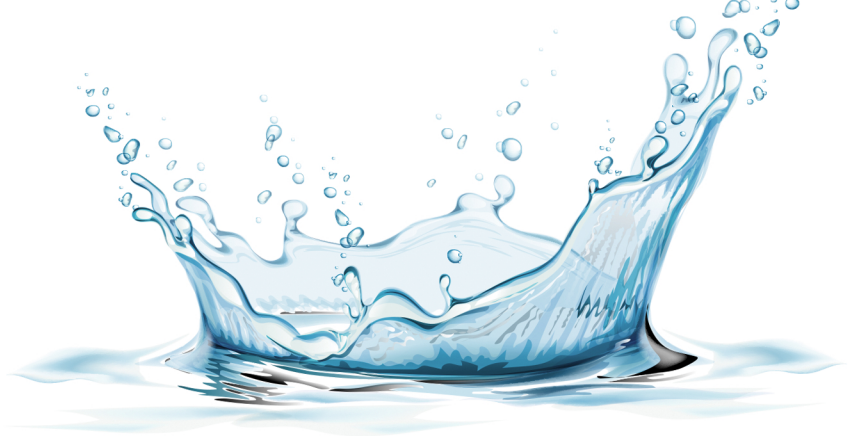




WATER DESALINATION TECHNICAL DATA

The desalination of water entails several problems, among which stand out

- ✿ The high cost of the process
- ✿ Pollution of the planet
- ✿ Large-scale power requirements
- ✿ An even greater dependence on known fossil fuels

Currently, each process that involves desalination has a direct relationship with different chemical components.

- ✿ Beyond leaving brine after desalination, they cause other inconveniences to the established balance.
- ✿ There are currently more than 17,000 desalination plants in the world that use the reverse osmosis process.
- ✿ The main problem with current desalination plants is the high maintenance cost, since the membranes used (reverse osmosis) are very easily saturated with salt and have to be changed or cleaned.
- ✿ The electrical energy used for high pressure pumping is also high and makes the process more expensive.
- ✿ In addition, the final product is pure H₂O, to which a post-process must be added to reach drinking or irrigation water.



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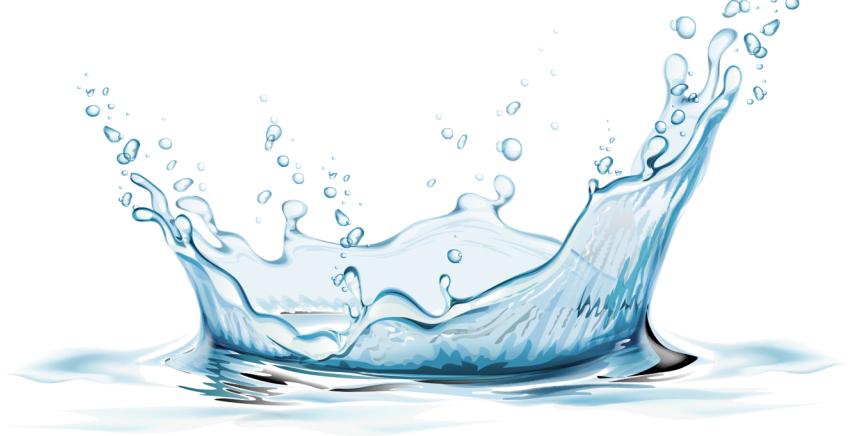
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WATER DESALINATION TECHNICAL DATA

Our desalination plant

- ✿ Due to the problems already mentioned, our product allows to separate the ions from the salts dissolved in the water and can therefore be used as a method to desalinate salt water.
- ✿ It uses a very innovative desalination method using variable magnetic fields emitted by dipoles and electrical energy, which allows:
 - Cleanly desalinate seawater
 - Removal of bacteria, viruses and microplastics
 - Reducing high energy costs without utilising expensive material
 - Obtaining desalinated water with unmatched performance so far.
- ✿ To achieve the proposed objectives, a salt water deionizer machine has been designed that separates the cations from the anions that are dissolved in a specially designed receptacle that stores ionized water.
- ✿ Three fundamental principles at the technological forefront
 - The magnetic force exerted on the cations and anions of ionized water
 - The electrical force exerted on the ions to remove them from the charge zone. This electrical force is produced by a special device covered by an insulating material that prevents electrolysis.
 - The variation of the electrical force through internal mechanisms
- ✿ The system is designed to act in a modular way.
- ✿ At the cost level, we can find the following results:
 - The consumption of a Reverse Osmosis desalination plant is approximately 3.2 kWh per cubic meter



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WATER DESALINATION TECHNICAL DATA

- In our case, the power consumption of the desalination plant to desalinate 1 cubic meter of water is 0.9 kWh.
- The construction and commissioning cost of a desalination plant using our method is comparable to that of a reverse osmosis plant with the same capacity and specifications.
- Our technology eliminates brine production therefore removes environmental challenges associated with brine disposal, such as marine life disruption and soil salinization. This approach creates a circular system where both clean water and safe, household usable salt are the end products.



Our desalination modules can replace current modules based on reverse osmosis, taking advantage of the rest of the installation.



New desalination plants can also be produced entirely from the start of the process.

The space required for our desalination plants is less than current reverse osmosis systems.



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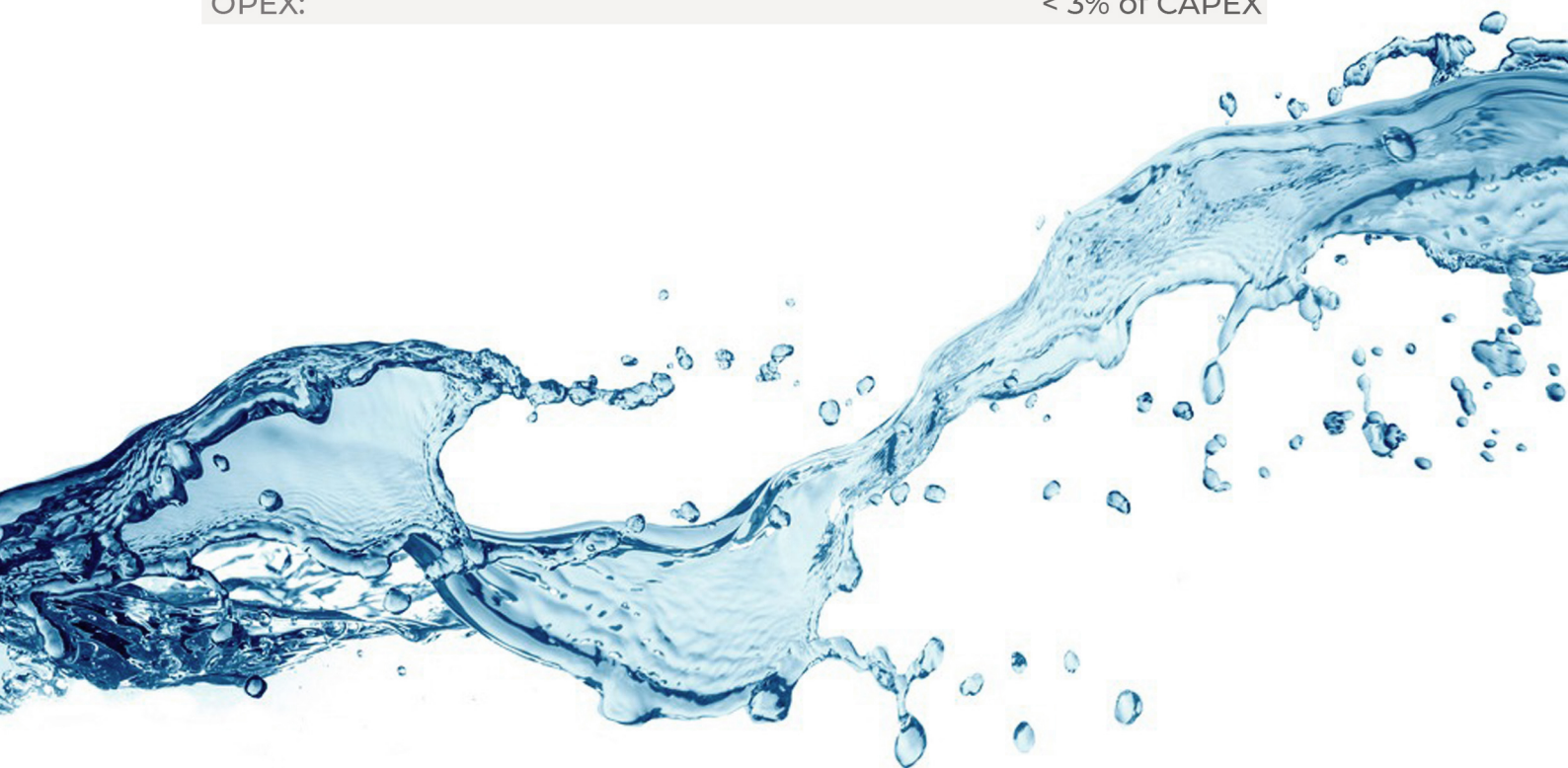


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WATER DESALINATION TECHNICAL DATA

Power consumption:	0.9 kW/1 m ³
Production capacity:	Acc. to customer requirements
Tube connection terminals:	Acc. to customer requirements
Operating temperature range:	1 to 70 °C
Operating salinity range:	0 to 50000 ppm
Operation mode:	Continuous
Desalinates Sodium Chloride:	Yes
Desalinates other salts :	Yes
Water for human consumption:	Yes
Water for irrigation:	Yes
Need for chemicals in post process:	No
Use of expensive membranes:	No
OPEX:	< 3% of CAPEX



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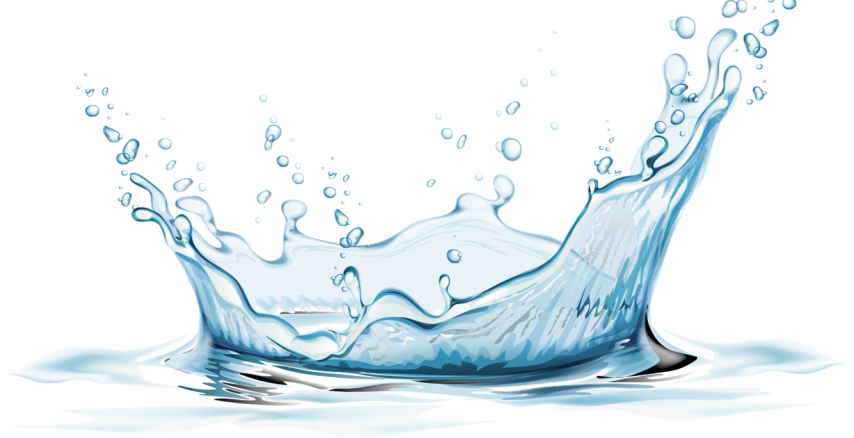
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WATER DESALINATION TECHNICAL DATA



SALINE WATER ENTERS THE FEED LINE



THE DESALINATION SYSTEM APPLIES THE OSCILLATING MAGNETIC FIELD TO SALINE WATER TO WEAKEN THE BONDS BETWEEN SODIUM IONS AND WATER MOLECULES AND TO WEAKEN THE BONDS BETWEEN CHLORIDE IONS AND WATER MOLECULES



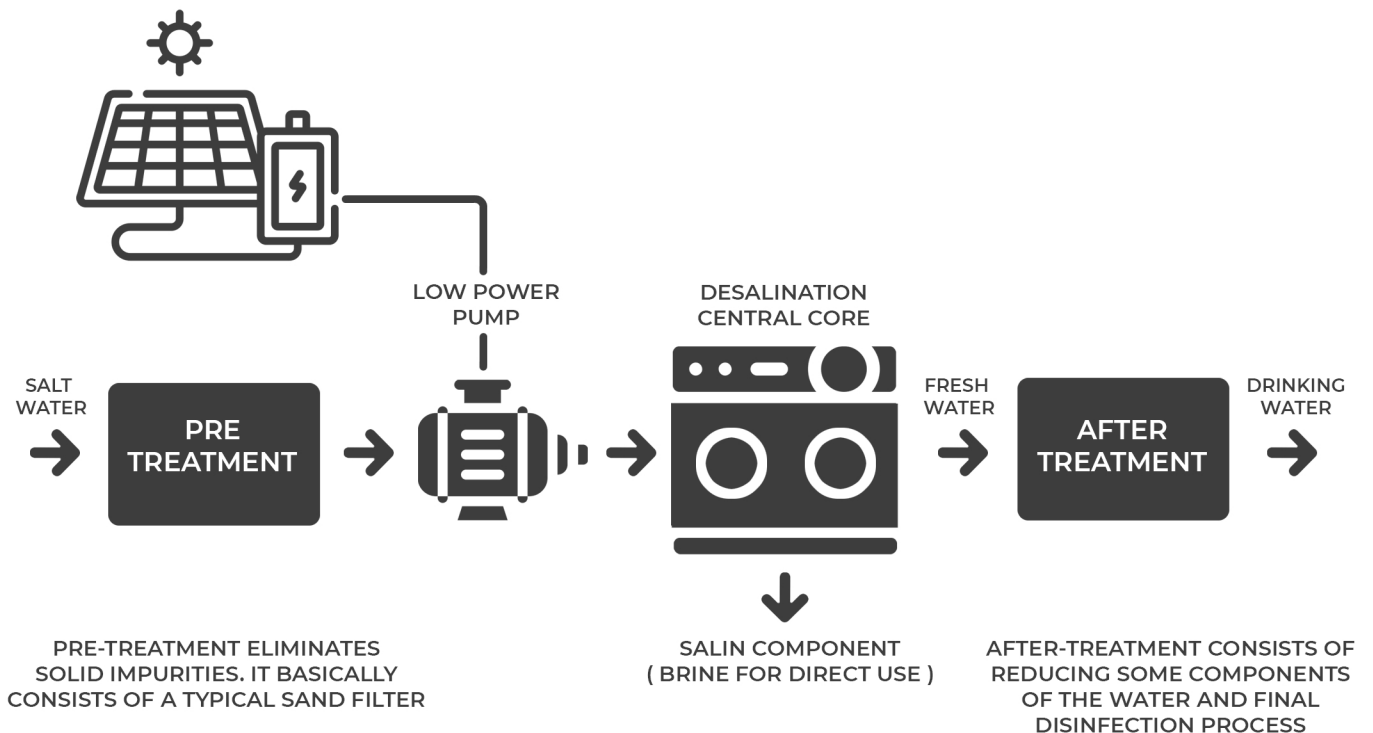
AFTER APPLYING THE MAGNETIC FIELD TO SALINE WATER, THE DESALINATION SYSTEM APPLIES AN ELECTRIC FIELD TO THE WATER TO ATTRACT SODIUM IONS AND CHLORIDE IONS AWAY FROM THE WATER MOLECULES



NEGATIVELY CHARGED CHLORIDE IONS ARE ATTRACTED TO A POSITIVELY CHARGED ELECTRODE (ANODE) AND POSITIVELY CHARGED SODIUM IONS ARE ATTRACTED TO A NEGATIVELY CHARGED ELECTRODE (CATHODE) TO DISPLACE SODIUM IONS AND CHLORIDE IONS OF THE WATER



BY PASSING THE SALINE WATER THROUGH THE OSCILLATING MAGNETIC FIELD AND THROUGH THE ELECTRIC FIELD, THE SALINE WATER BECOMES DESALINATED WATER



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