

## **Reverse Osmosis Pilot Plant** We turn industrial wastewater into usable water

The goal of the treatment is to produce clean and reuse water. The resulting water is of such quality that, in addition to complying with current legislation pouring water, is drinkable.

Dimasa Grupo proposes the use of reverse osmosis system through its new Pilot Plant. Get identical results to a big-scale plant, but with the advantage of being able to rent it first. We will carry out testing and demonstration of feasibility of the technology. Will convince you.





#### 1. What is Osmosis?

Osmosis is the movement of molecules through a partly porous and permeable membrane, going from a region of higher concentration to a lower. In this action the membrane tends to equalize the concentrations on both sides.

This flow of solvent particles to the area of lowest potential is known as osmotic pressure measurable in terms of atmospheric pressure.

#### 2. What is Reverse Osmosis?

If we use a higher pressure than osmotic pressure, an effect opposite to osmosis can be achieved by pressing fluids through the membrane, and only the lower weight molecules pass across.

In the water treatment, the dissolved solids to generate this pressure, are retained on the membrane and just passes the water, this is called reverse osmosis.



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### Advantages of Reverse Osmosis of Dimasa Grupo

- Removes up to 99% of the dissolved solids in the water, whether organic or inorganic.
- It does not require a complicated maintenance due to the simplicity of its technology.
- It saves energy as it requires no phase change.
- It is capable of removing microorganisms in the water.
- The process is performed continuously and in one step.
- Saves space, because it is a modular process.





# Possible industrial applications of our solution:



Washing in the **olive sector** is a huge consumption of water, which because of its composition, should treat to reuse or throw.



In the **meat processing** is generated wastewater with high concentrations of organic matter and must be disinfected before throw.



The **wineries** have a strong dependence on water. With our tailor-made custom, you can save a lot of money recovering the water.



In the **fruit sector**, water is an indispensable resource. Wastewater have a high pollutant load and should be treated by law.



Most of the water used in the **lacteal sector**, it ends up as wastewater, so treat it and get it back is an investment with rapid return.



The wastes from the **salt industry**, the bitter, constitute a danger to the ecosystem, given its high toxicity, so its treatment is a key factor.

A new service of Dimasa Grupo, with the unique design of our Reverse Osmosis membrane, and tailored to the needs of each client

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