

SAGUNTO DESALINATION PLANT

BEL

Within the actions of the program A.G.U.A in the Mediterranean basins entrusted to ACUAMED society, whose main goals are to increase water resources, improve the management of water and restore the environment, is the construction of the desalination plant of SAGUNTO.



The contract for the construction of this new plant was awarded to the J.V. Lubasa-Pasaval. Grupo SETA, being the Spanish company specializing in water treatment, also responsible for the engineering and installations.

This new desalination plant is settled on the Port of Sagunto – industrial area - near the combined cycle power plant of Gas Natural Union Fenosa.

Sagunto Plant uses the same infrastructure of this combined Cycle plant as seawater intake and to discharge the brine, minimizing the environmental impact of the action.



With a total production of 22.900 m³/day, the plant consists of three skids with 2 stages and a total recovery of 55%. The facilities were built with enough space to double the production in future expansion if it is needed.

This plant shows the particularity that the skids were fully built in pieces (including pipes and vessels) and transported from Madrid to Valencia to be assembled in situ by elastic clamps.

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2.352 units of Toray membranes were used in a hybrid design to assure a quantity of Boron lower than 1 mg/l in the permeate flow.

The configuration of vessels chosen was BEL multiple port vessels with a total amount per skid of 64 units in the 1st stage with ports of Ø3" and 48 units in the 2nd stage with ports of Ø2", all of them in 1.200 psi and 7 elements and connect in horizontal

DESALINATION PLANT



Project name: Sagunto

Plant Location: Sagunto Port, Valencia - SPAIN

Capacity: 22.900 m³/day

Source of Water: Sea Water

Technology: Reverse Osmosis

Contractor: J.V. Lubasa-Pasaval - Grupo SETA

BEL, world specialist manufacturer and vendor of composite made Pressure Vessels and other equipment for the water industry.

With more than 40 years of experience in the world of composite materials and winding driven products, BEL is serving the process and water industries holding unique wealth of expertise and skilled resources necessary for design, development and manufacturing of advanced composite products from cutting-edge technologies for the chemical and food industries, waste water treatment and water supply was the selected supplier for the Pressure vessels of this plants with:

First Stage

- 144 Units of High Pressure Vessels model BEL8-S(4x3")-1200-7M
- 48 Units of High Pressure Vessels model BEL8-S(2x3")-1200-7M

Second Stage

- 96 Units of High Pressure Vessels model BEL8-S(4x2")-1200-7M
- 48 Units of Low Pressure Vessels model BEL8-S(2x2")-1200-7M

Skid Configuration: Multiple ports

Membranes: Toray Membranes

For more information,
contact BEL by e-mail: composite@bel-g.com
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