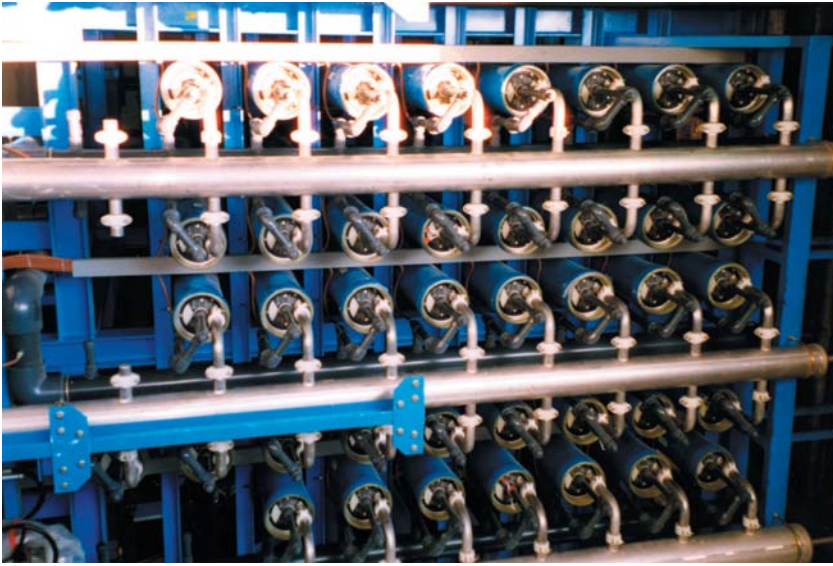


Brédéah - Water demineralisation plant

Construction and installation



Country

Algeria

Client

Direction de l'Hydraulique
de la Wilaya d'Oran

Date

2002-2005

Cost of works

€6.7m before tax

Sogreah's services

- ▶ Validation of the general operating concept.
- ▶ Inspection of working designs.
- ▶ Supervision of works.
- ▶ Implementation of acceptance tests and procedures.

Background

The Oran region in western Algeria is suffering from a shortage of drinking water resources. Pending the implementation of large-scale transfers from the neighbouring regions, the city of Oran is obtaining some of its supplies from boreholes that produce brackish water. The plant abstracts water from the Brédéah aquifer that becomes brackish as it comes into contact with the salt-bearing

terrain forming the bedrock of the Great Sebkhia of Oran.

Purpose

The purpose of the Brédéah water demineralisation plant is to reduce the general salinity of the water in the network.

Historically, Brédéah water has a salinity of around 4000 mg/l (TDS) with a tendency to concentrate. The facility is designed to produce 35,000 to 28,000 m³ of water

per day treated to 1000 g/l with salinities varying from 4000 to 7000 mg/l.

The conversion rates therefore vary between 85% and 75%. The facility comprises the following treatment sequences: physico-chemical preparation, sand filtration, secondary filtration to 5 microns, two-stage reverse osmosis with booster on four lines, post-treatment.

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