

CASE STUDY

RO-500 Series

**Industrial Brackish RO
Equipment for General Use**



Web: www.pureaqua.com

Email: sales@pureaqua.com

Phone: +1 (714) 432-9996

Toll Free: +1 (844) 309-7501



Made in USA

 **PURE AQUA, INC.**[®]



Industrial Brackish RO Equipment for General Use

Country: Kuwait | **Capacity:** 600,000 GPD

Challenge

Water is a basic necessity to human existence. With almost every application varying for some type of daily activity, water is a worldwide essential to mankind. General use applications require an abundant supply of water due to the amount used per application as well as the number of applications this encompasses. While each usage might entail a different water quality requirement, in order to save time, money, and resources, it is in the best interest of everyone to purify the main supply of water. This customer is using well water with 8,000 PPM TDS to supply a mall in Kuwait. The TDS levels from this well are extremely elevated and must be reduced for any general usage. Therefore, a water treatment system is ideal to reduce the TDS and produce high quality water.

Solution

This industrial brackish RO equipment was recommended and constructed for a public mall facility in Kuwait. The capacity of this RO equipment was 600,000 GPD and the product is intended to be the main supply of water for the facility. This system includes the necessary pre-treatment and post-treatment units that keep the RO equipment functioning efficiently without any problems. Part of this pre-treatment is duplex multimedia filter to reduce turbidity and suspended solids. The pre-treated water continues on to a 5-micron cartridge filter to further reduce any leftover suspended solids and is injected with sodium metabisulfite along with antiscalant for chlorine reduction prior to reaching the RO membranes. Then, the water is pressurized by high-pressure pumps through the RO membranes that will raise the pressure to 300 PSI. The water exiting the system results in a product and reject stream.

Applied System

This equipment included an RO model **#BW-600K-13780-8** from our **RO-500 Series** in addition to a multimedia filter model **#MLF-72** from our **MF-1000 Series**.

Project Video



Features

- (13) FRP pressure vessels Protec rated at 300 PSI model PRO-8-300-MSP-7
- (91) 8" TFC spiral wound membranes Hydranautics ESPA2-LD
- ORP on feed line and pH on product line
- Low- & high-pressure switches
- Paddlewheel flow meters
- Two high pressure pumps CRN90 with 2 VFDs
- Two 5-micron pre-filter with SS housing (SSC-88-316)
- Siemens S7-1200 PLC controller with HMI screen

RO-500 Series Product Video

To learn more about our RO-500 Series product, watch this video!



[Request Pricing >>](#)

Stay Connected

Facebook
YouTube
Instagram

Twitter
Pinterest
Linkedin