

2009 Case Study

Industrial Sea Water Reverse Osmosis Unit

Major Water Treatment Company, Azerbaijan



INTRODUCTION

In February 2009, Pure Aqua supplied 2x200m³/day Industrial Sea Water Reverse Osmosis (SWRO) Unit to a major treatment company in Azerbaijan. The complete SWRO Units were completed with advanced PLC, colored touch panel screen, prechlorination, multi media filters, antiscalant dosing, dechlorination dosing, post chlorination, cleaning and flushing system,

SYSTEMS & PROCESS

Feed water to the system is from sea water, TDS of about 25,000 PPM. The SW-52K-4480 Sea Water Reverse Osmosis Units were selected from our SWI Series.

Pre-treatment of raw water includes filter feed and backwash pumps, variable frequency drive and all necessary equipment to run the system smoothly.

Each of the Seawater Reverse Osmosis Units consists of (2) FRP Protec pressure vessels, (8) 8" TFC spiral wound membranes, 5 micron sediment prefilter. In addition to Danfoss HP Pump which is manufactured from duplex SS2205 stainless steel alloy, Duplex 2205 High pressure piping, powder coated frame skid.

PERFORMANCE

The SW-52K-4480 SWRO Unit was designed to produce 200m³/day, at max. TDS 25,000 ppm.

Desalination using Seawater Reverse Osmosis (SWRO) membrane technology has become a viable option for the development of new regional water supplies.

Pure Aqua is well known in supplying the highest quality RO systems within the water treatment industry, all stainless steel pipes are passivated and electro polished, the skid is sand blasted, primed and fused or powder coated. Pressure vessels and membranes are manufactured in USA.