

PROJECT

3 - Desalination Plant



LOCATION

Ajman, Fujairah & Ras Al Khaimah, Northern Emirates, U.A.E.

END USER

Ministry of Electricity & Water (MEW)

CONTRACTOR

Emirates Trading Agency (ETA),
Dubai & Sasakura Engineering, Japan

CONSULTANT

Tractabel, Belgium

PIPE SYSTEM CONSULTING ENGINEER

Dynaflow International Inc., U.A.E.

COMPLETION DATE

1999

DESCRIPTION

Three Multi-Effect Desalination Plants to produce desalinated water for use in the three Emirates. Each plant produced 1 million gallons per day distillate water.

PIPE SYSTEM

The system included the following:

10 Bar, 50°C Pipes & Fittings. Diameter range from 80mm up to 1500mm.

12.5 Bar, 80°C Pipes & Fittings. Diameter range from 25mm up to 700mm.

THE FPI ADVANTAGE

Our strength lies in our extensive experience in similar plants. Our understanding of the process involved helped us to ensure proper system design and the selection of most appropriate jointing system. Our site installation crew worked closely with the main contractor to ensure proper installation of the pipes and fittings in a timely manner.

SCOPE

Major systems provided for this project included:

- Seawater intake and supply
- Product water system
- Air backwash
- Brine reject outfall
- Pump stations and discharge systems
- Chlorination Lines

Our scope entailed a single point responsibility for the pumping stations and underground piping for desalination plants. Under this code, we were fully responsible for all the activities required to produce a fully functional pipe system, including:

- Engineering: Preparation of Isometrics, Bill of Materials & Spool Drawings.
- Surge & Stress Analysis
- Manufacture of pipes & fittings
- Packing & Delivery
- On-Site installation and hydrotesting
- Documentation