

Yanbu Reverse Osmosis Desalination Plant RO-1 Saudi Arabia

Yanbu Industrial City is located on the Red Sea coast about 320kms northwest of Jeddah. Because of the arid desert area, MYAS depends on seawater desalination for its entire fresh water supply. This RO plant will increase the installed desalination capacity in this area by 50400m³/day to a total of approximately 146000m³/day.

The seawater RO plant is made up of six trains of about 2.2 MGD capacity each. The plant consists of five major components: a seawater supply system, a feed water pre-treatment system, high pressure pumping, RO modules and a permeate post-treatment system. The plant is equipped with a distributed control system (DCS) using ABB's state-of-the-art computerized technology.

Execution of the complete desalination plant was carried out by a Saudi SBG-PCM consortium. ABB Germany was the subcontractor to SBG for the main electrical parts and the plant control system.

Enduser: Royal Commission of Jubail and Yanbu, Yanbu, Saudi Arabia.

The project was completed in March 2007.





Technical Specification / ABB Scope

Yanbu Desalination Unit RO-1

- 24x 4.16kV switchgear cubicles
- 2x 4000kVA distribution transformers
- 1x 480V main distribution
- 1x 480V motor control centres
- 1x 480V UPS
- 1x 120V UPS
- 1x 120V DC system
- Control system and telemetry (extension)
- Instrumentation
- DCS control system
- Plant operation training simulation system
- Erection supervision
- Commissioning

Note:

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For more information please contact:

ABB AG

Power Systems

P.O. Box 10 03 51

68128 Mannheim, Germany

Phone: +49 621 381 30 00

Fax: +49 621 381 26 45

E-mail: powertech@de.abb.com

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