

7.5 MIGPD SEAWATER DESALINATION PLANT



PROJECT NAME	7.5 MIGPD SEAWATER DESALINATION PLANT
LOCATION	ABU DHABI
CLIENT	MINISTRY OF ELECTRICITY & WATER
CONSTRUCTION PERIOD	30 MONTHS



This 7.5 migpd seawater desalination plant (consisting of three 2.5 migpd units) was one of the few desalination projects to have been completely assembled on site from plate small in the Middle East. The construction of the new plant was required by the city of Abu Dhabi in order to double its production of sweet water and thus meet the substantial increase in demand from this booming capital. The work involved very strict construction safety measures dictated by the proximity of the existing operating plant. It also featured work in a restricted area where major de-watering and excavation works (to a depth of 12 metres) were undertaken to permit the construction of deep concrete pits and heavy foundations.





The work included:

- Design and construction of all civil works.
- Major de-watering of the site for the complete period during which underground structures, pits and foundations were being built.
- All related reinforced concrete works, including reinforced concrete foundations supported on reinforced concrete piles, concrete pavements and buildings.
- Fabrication, assembly and welding of three cross-flow evaporators from plate steel, involving over 2,000 tons of steel each including installation, alignment and tig welding of CuNi tube sheets.
- Tubing and expanding over 40,000 individual CuNi tubes in tube sheets.
- Piping fabrication, installation and welding to British standards.
- Electrical work and instrumentation.



- Insulation of vessels, cladding of piping and painting.
- Testing, commissioning and start-up assistance.



