

# UMM AN-NAR 240-MW POWER PLANT

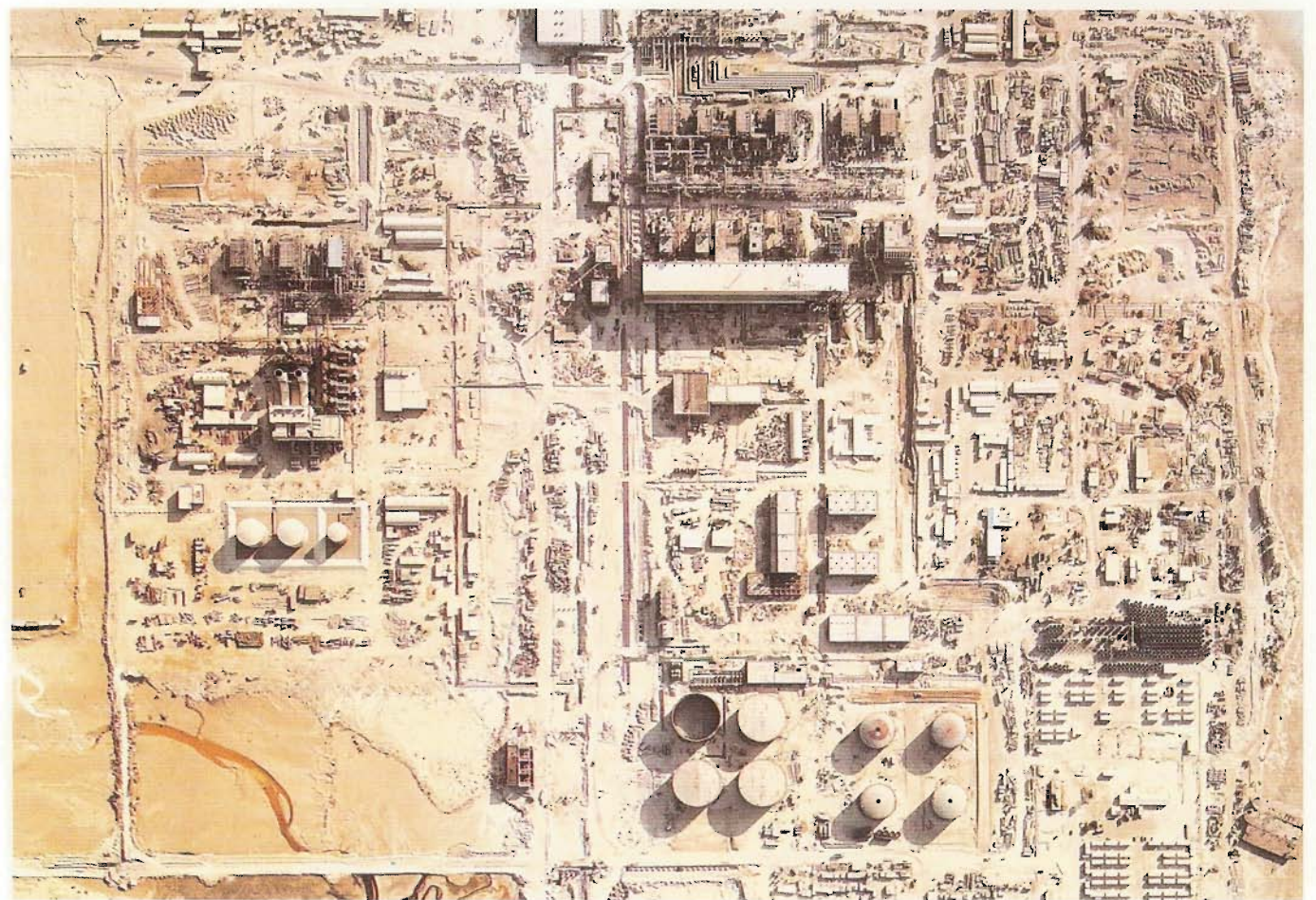


PROJECT NAME	UMM AN-NAR 240-MW POWER PLANT
LOCATION	ABU DHABI
CLIENT	MINISTRY OF WATER & ELECTRICITY/DEUTSCHE BABCOCK, OBERHAUSEN, GERMANY
CONSTRUCTION PERIOD	20 MONTHS



This project was for a grassroots construction of a major power and desalination plant located on the mainland, west of Abu Dhabi town. It involved the erection, to DIN 8560 standards, of four full scope boiler islands with 60 MW top-supported radiant heat boilers. MAC mobilized quickly to take delivery of the first consignment of the project, a shipment of 2,300 tons of underground concrete lined Bonna piping, and transported it to the site via an unasphalted track.







The total project involved over 12,500 tons of material and consumed 1.6 million manhours. At the height of the work, MAC was engaged simultaneously on 40 different activities with a peak direct manpower load of 450.

The work included:

- Lifting of four 42-ton boiler drums onto 25-metre-high steel structures.
- Installation of pressure parts, inclusive of field assembly, tig and arc welding to DIN 8560 standards using Lloyds certified welders, performing 100% Gamma-Ray non-destructive testing, and hydrotesting.
- Erection of boiler casing, ducting to boiler burners and installation of all flues and air testing.
- Erection of turbine hall condensers, equipment and piping including the welding of chrome-molydenum high pressure steam alloy piping.
- Installation of crude oil system pumping station and piping; natural gas system and piping.
- Town water pumphouse and piping; chemical storage and storing system, water treatment equipment and associated polypropylene and stainless steel piping system; service air piping and instrument air compressors.
- Seawater intake equipment, including gates, grates, travelling band screens, vertical pumps and a Demag 50 ton gantry travelling crane on rails.
- 1,500mm in diameter of concrete-lined inside and outside Bonna pipe network for cooling turbine hall condensers.



