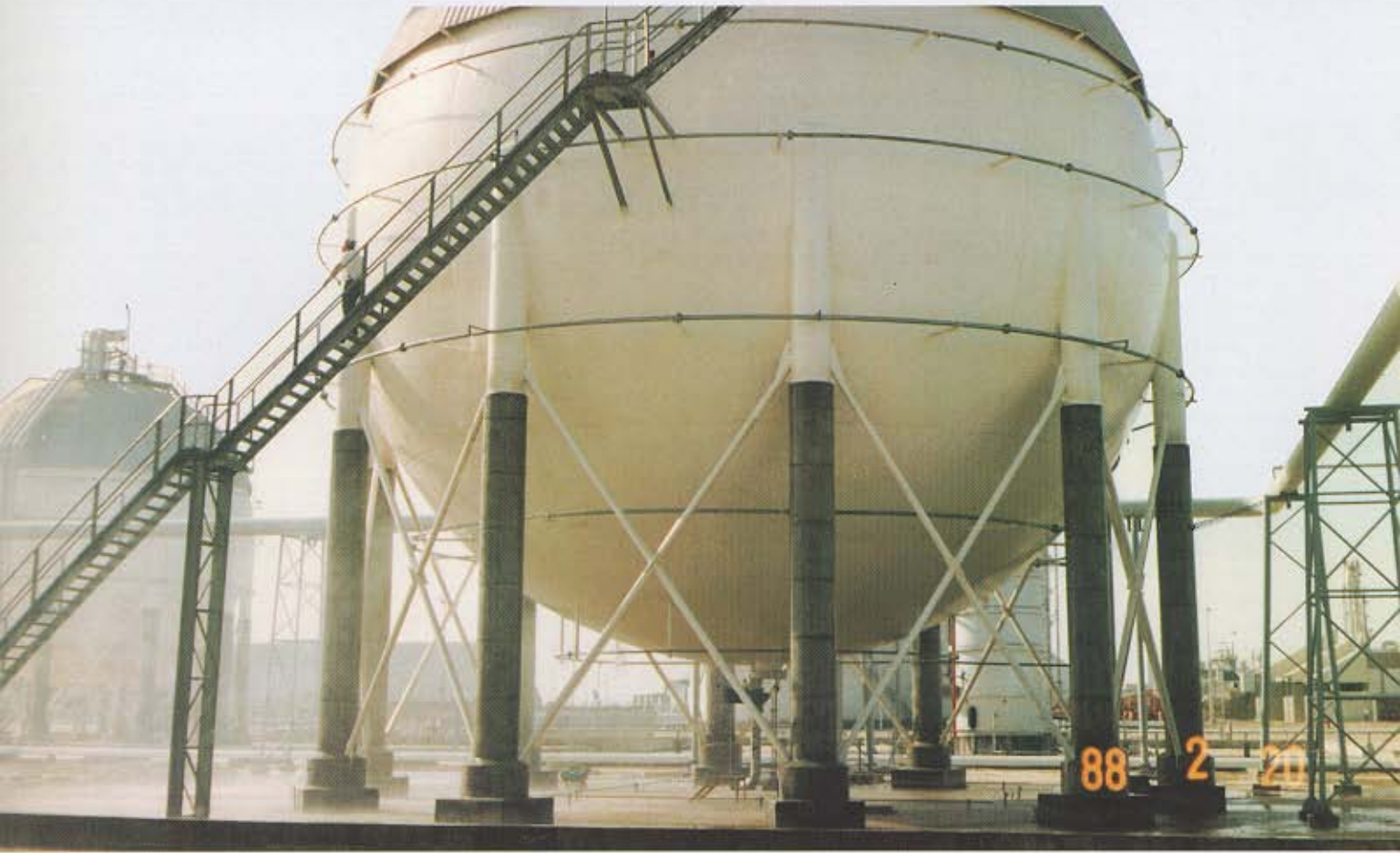


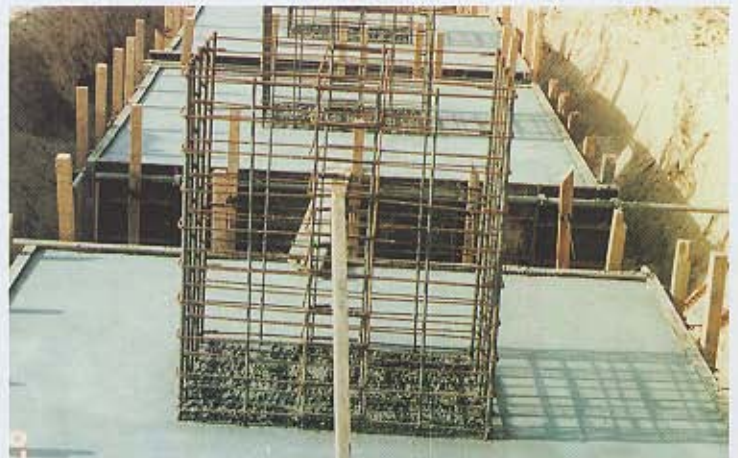
MTBE PLANT

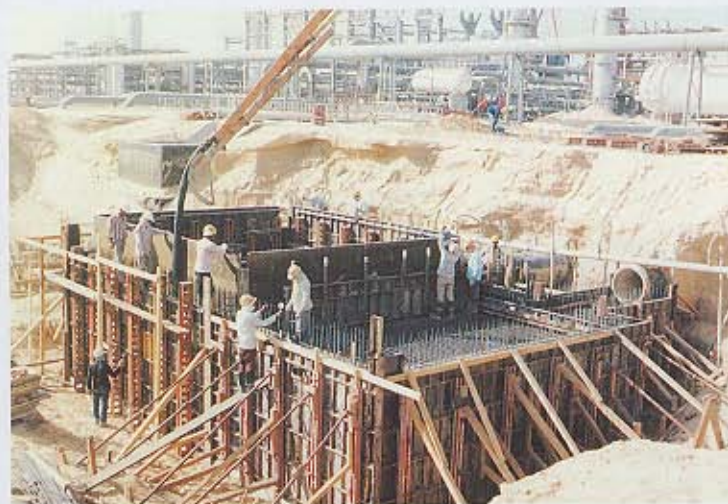


PROJECT NAME	MTBE PLANT
LOCATION	JUBAIL, SAUDI ARABIA
CLIENT	SAUDI EUROPEAN PETROCHEMICAL CO. (Ibn Zahr)
CONSTRUCTION PERIOD	21 MONTHS



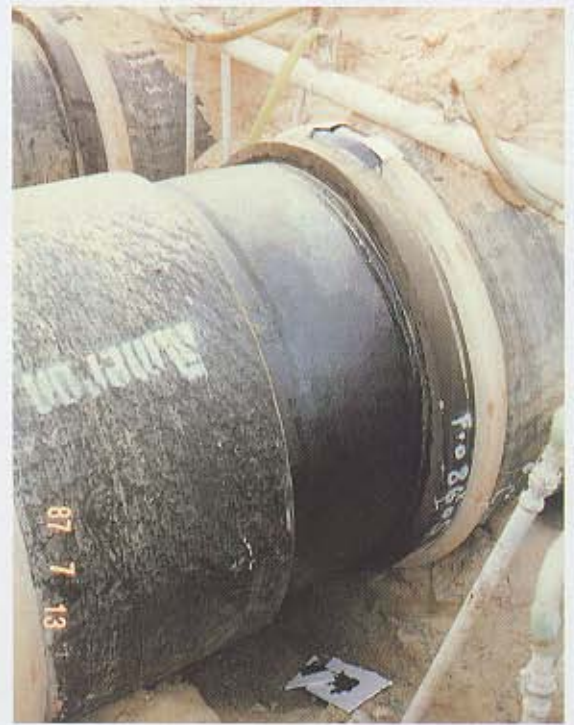
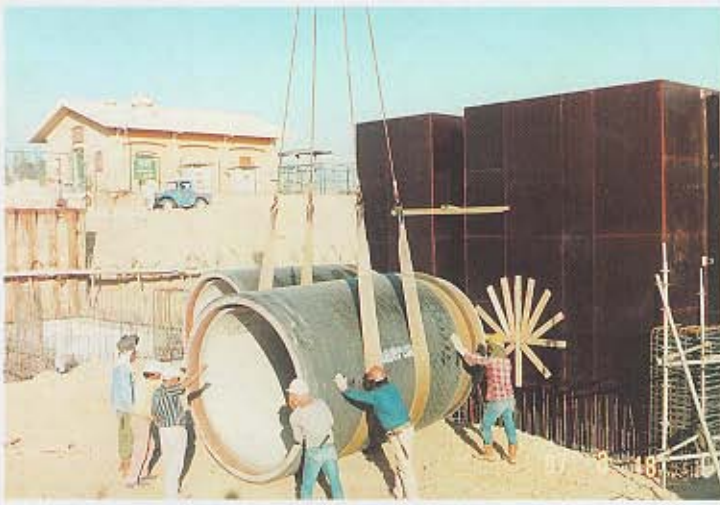
The MTBE Petrochemical Complex, the first of its kind in the Middle East and only the third in the world, was executed over a 2-year period. The plant was commissioned in 1988 and is now capable of producing 500,000 tons/year of MTBE (Methyl Tertiary Butyl Ether), which increases the octane rating in petroleum products and provides a substitute for TEL (Tetra Ethyl Lead), a petroleum additive causing high atmospheric pollution.





The work included:

- Soil improvement by vibro-flotation and the installation of underground stone columns.
- Site establishment works, including general and localized excavation and backfilling, dewatering and sheet piling for deep excavations.
- Underground storm drainage, sewage pipes and pressurized sewer lines.
- Installation of concrete, PVC and carbon steel underground pipework.
- Precast concrete pipes with a diameter of 2,000 millimetres.
- Reinforced concrete manholes, ditches and special structures such as lifting basins, retention ponds and separators.
- Roadworks, including bases and sub-bases, road embankments, surface drainage, cross-over bridges and culverts, asphalt and asphalt lining.



- Reinforced concrete foundations for pipe-racks, precast concrete sleepers for pipes, concrete supports and precast elements.
- Retaining wall and boundary walls, concrete pavement and slabs, electro-chlorination building and specialized activities such as waterproofing.





- Heavy reinforced concrete foundations (1,200 cubic metres in a single pour) and special structures for compressors, reactors, turbines, etc; foundations for vessels, tanks, columns and equipment.
- Construction of 12-metre-deep seawater intake, including the design of special formwork and scaffolding.

