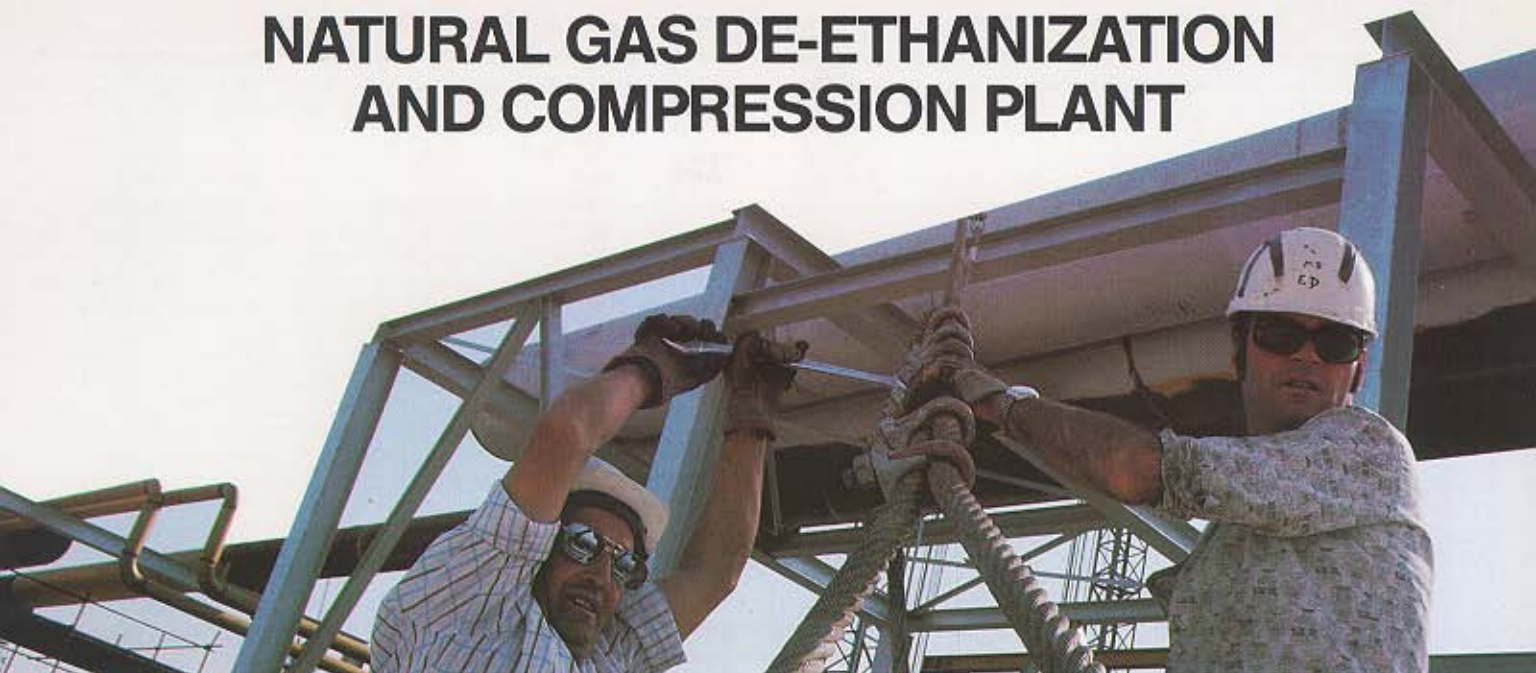


# NATURAL GAS DE-ETHANIZATION AND COMPRESSION PLANT

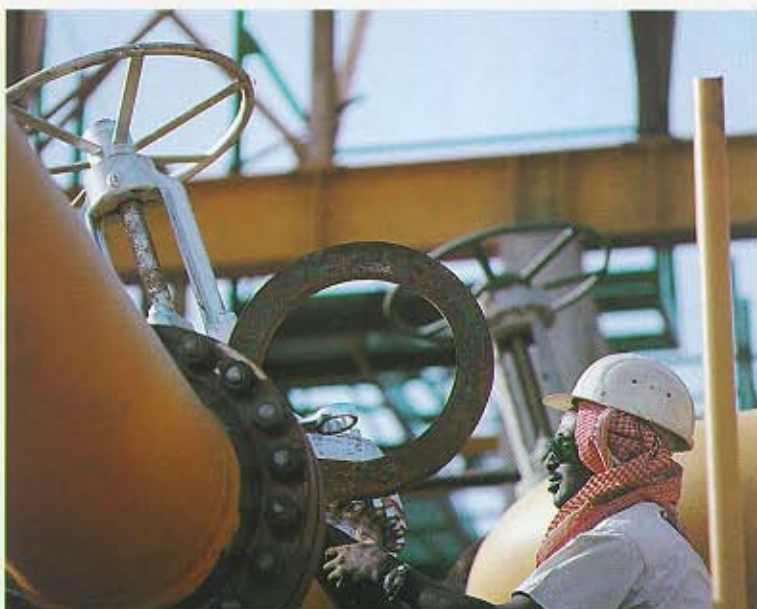


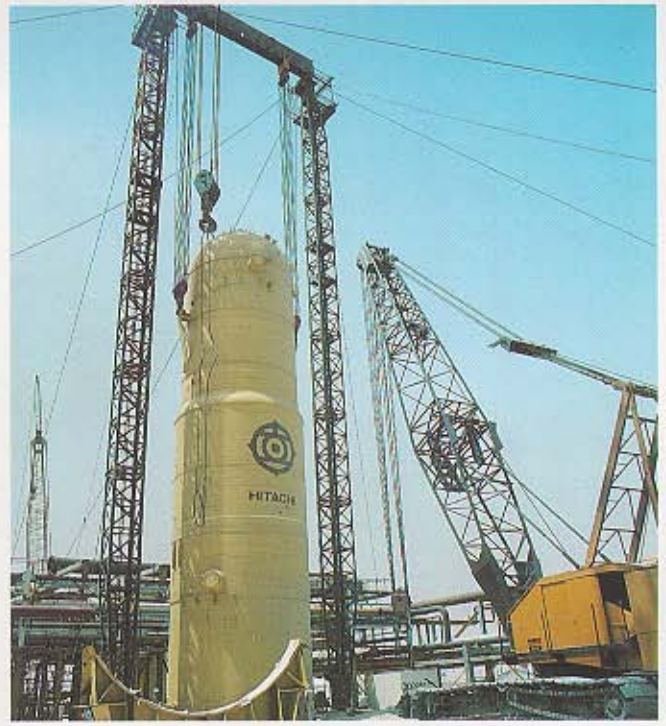
PROJECT NAME	NATURAL GAS DE-ETHANIZATION & COMPRESSION PLANT 462
LOCATION	ABQAIQ, SAUDI ARABIA
CLIENT	ARAMCO
CONSTRUCTION PERIOD	15 MONTHS

On completion in 1976 the Natural Gas De-ethanization and Compression Plant at Abqaiq (Eastern Province of Saudi Arabia) represented the largest single NGL project ever undertaken by Aramco. The plant was designed for the purification and compression of natural gas (collected at Abqaiq), which was then piped to Ras Tanura for forward bulk shipment to world markets.

Working to a very tight schedule, MAC Construction carried out the work within 15 months as part of a 50-50 joint venture with a UK-based firm. A total of over 3 million manhours was expended, with a workforce peaking at 1,200 men, for whom all accommodation, canteen, medical and life-support facilities were provided.

The work covered all construction disciplines from concrete foundations and buildings to mechanical installations, electrical and instrumentation work.





One of the most demanding tasks was the construction of what, at the time, were the world's largest air coolers and the lifting and installation of a 480-ton stripper column.

The work included:

- Excavations for all concrete foundations, underground piping and cable trenches.
- Pouring of over 20,000 cubic yards of concrete for miscellaneous foundations, paving and fireproofing.

- Construction of all service buildings, including control room, sub-stations, maintenance and switchgear housing.
- Erection of 2,500 tons of steel structures.
- Fabrication and erection of 180,000 feet of piping with diameters of up to 60 inches.
- Installation of 4,000 tons of machinery and equipment, including a 480-ton single-lift stripper column and 3 million cubic feet of humidified air coolers using 2 gin poles and a tailing crane.
- Laying of 350,000 feet of underground cables and 25 miles of electrical conduits with diameters of up to 60 inches.
- Installation and commissioning of all electrical equipment.
- Installation and testing of 2,000 instrument assemblies, both pneumatic and electronic.
- Painting of 0.5 million square feet of surface area in steel structures and equipment.
- Installation of 60,000 square feet of insulation material.

