



KARADAG
GAS COMPRESSOR
STATION





# **OWNER:**

AZERGAS JOINT STOCK COMPANY

# MAIN CONTRACTOR:

TOYO ENGINEERING CORP.

# **CONTRACT VALUE:**

9,600,000 US \$

# DATE OF CONTRACT:

14 June 2002

# DATE OF COMPLETION:

30 September 2003

# **PROJECT LOCATION:**

KARADAG REPUBLIC OF AZERBAIJAN

# **SCOPE OF WORKS:**

TML as the leader and sponsor of the TML - BOROVA Joint Venture was entrusted with the main subcontract to execute all civil works, mechanical, electrical and instrumentation works.









#### **CONSTRUCTION WORKS:**

- Compressor Building
- Nitrogen Building
- Process Plant Foundations
- Fire Fighting Building
- · Administration Building
- Gate House

# MAJOR CIVIL WORKS ITEMS:

- 355 PCRC Piles (400 mm sq.)
- 17,000 m<sup>3</sup> Earthworks
- 3,500 m<sup>3</sup> Reinforced Concrete
- 350 Tons of Reinforcement
- 11,000 m<sup>2</sup> of Formwork
- 275 Ton of Steel Structure
- 500 m<sup>3</sup> of Asphalt Works

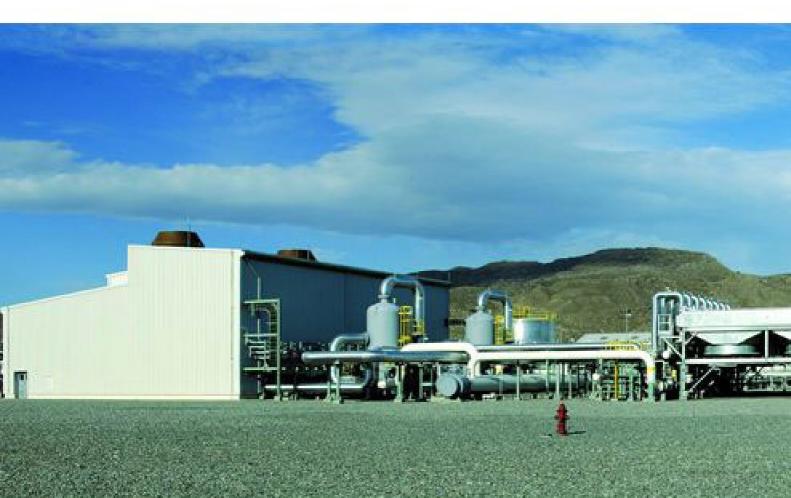
#### MECHANICAL INSTALLATIONS

- Gas Turbine & Compressors 186 t.
- Diesel Engine Generator 10 t.
- Vertical Pump & Drivers 10 t.
- Horizontal Pump & Drivers 9 t.
- Air Fan Coolers 181 t.
- Tower & Reactor Drum Vessels 110 t.
- Fire Water Tank (200 m<sup>3</sup>) 20 t.
- Flare Stack 15t.
- Instrument Air Dryer 4 t.
- Filter 19 t.

### STRUCTURAL WORKS

- Compressor Building 170 t.
- Nitrogen Building 24 t.
- Fire Fighting Station 21 t.
- Pipe Racks 39 t.
- Administration Building 50 t.
- Platforms & Supports 68 t.









#### **PIPING WORKS:**

- Underground PVC-Piping (1,5-6") 2,751 dia - inch welding
- CS Piping (1.5 16 inch)
   22,578 dia inch welding
   Including Spool Welding
- Post weld heat treatment 3,320 dia-inch
- 1,500 Radiographic Tests (NDT)
- 55 t. Field Fabricated Supports
- 740 m<sup>2</sup> field coating & wrapping
- 500 dia inch Dye Penetrant

# **ELECTRICAL WORKS:**

- Overhead Transmission Line 2x10 KV 3 Km.
- Power Cabling 0,4 KV 20 Km.
- Instrument & Control Cabling 40 Km.
- Lighting Cables 7 Km.
- Ground & Lightning Cables 7 Km.
- Field & Local Instruments
- Switchgears (LV MCC 10 KV) 30 t.
- Battery Systems
   UPS 36 V 24 V DC 10 t.
- Control Room Relay / PC Control Equipment
- Communication / CCTV Systems
- Lightning Protection & Ground Systems
- Testing and Precommissioning Works











In late 2003 TML completed this Gas Compressor Station which is a part of the project supplying natural gas from the SOCAR (State Oil Company of Azerbaijan Republic) processing facilities in Karadag to the Severnaya 400 MW Combined Cycle Power Plant which was also previously completed by TML.

TML's scope comprised of the civil, mechanical, electrical and instrumentation works for this station which incorporated two 11 MW gas turbine compressors each rated at 5 million m<sup>3</sup>/day at 37 barg discharge pressure.

After years of international contracting in Libya, Saudi Arabia, Tunis, Iran and Russia, in 1996 TML moved into Azerbaijan construction market and since have completed and delivered to their owners:

- A 400 MW Power Plant,
- An Underground Parking Garage,
- A Training Center for an Oil Sector Multinational,
- · A Built-It-Yourself Store,
- · A Supermarket,
- An Office and Apart Hotel Complex measuring 22,000 sq. meters,

and is presently continuing serving the oil industry by renovation and extention works at SPS offshore platform manufacturing shipyards.

Today, TML İNŞAAT SAN. TİC. ve TUR. A.Ş., awarded with an ISO 9001 certificate continues to serve its clientele in Turkey, Libya and Azerbaijan in the fields of Building construction, Process and Power Plant construction and assembly, Heavy Civil works (Bridges, Roads, Tunnels, infrastructure works), Environmental Engineering and Construction Management.













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