



Taper/Taper adhesive-bonded joint



Coil-Lock mechanical joint



## SONATRACH / SINOPEC ZARZAITINE OILFIELD using Bondstrand® GRE pipe

Zarzaitine Oilfield, located in the center of the Sahara Desert, is one of the three fields in In-Amenas, 1650 km South East of Algiers. This oil field was built in 1962 and now is jointly operated by Sonatrach and Sinopec. Most of the facilities need to be rebuilt or expanded, or new facilities are needed, including the Oil Process and Storage Center, Produced Water Treatment Center and Water Injection systems.

EPC Contractor for this project was SIPSC, who selected Bondstrand GRE Pipes in a worldwide open bid. FGS's scope of supply included systems design, MTO's, support spand and stress analysis calculations, as well as the materials.

The Water Injection systems posed a challenge due to extreme design conditions of high pressure (90 bar) and high temperature (85 °C). FGS utilized its proprietary Coil-Lock joining system on Series 2400 pipe to meet this challenge. Integral Joint (IJ) pipe, Union Assemblies and Pup Joints of various lengths were used to achieve system alignment and orientation.

Installation was carried out smoothly under supervision of FGS Field service engineers, especially for the water injection lines. The high reliability Coil-Lock GRE pipe, as well as FGS's strong R&D capabilities have ensured the high pressure water injection system's successful operation since start-up.

### Project

Project Development of Oilfield Zarzaitine

### Client

SIPSC (SINOPEC International Petroleum Service Corporation)

### Owner

SONATRACH / SINOPEC

### Design company

VECO Engineering

### Pipe system

For Low pressure systems:

Bonstrand 2414 Taper/Taper adhesive-bonded joint  
Systems: Produced Water, Fire Water, Oil Return  
Design Pressure: 10 bar  
Design temperature: 85 °C  
Size: 2 to 24 inch  
Quantity: 27 km

For High Pressure Systems:

Bondstrand S2400 CLF X CLM 90 bar  
Systems: Water Injection  
Design Pressure: 90 bar  
Design temperature: 85 °C  
Size: 12 inch  
Quantity: 1,855 m

### Installation date

2009-2010