



Taper/Taper adhesive-bonded Joint



## Gas Injection platforms (USGIF) using Bondstrand® GRE pipe systems

The Umm Shaif Field is located in Abu Dhabi Sector of the Arabian Gulf. Umm Shaif processing facilities are located at one main offshore gathering centre, designated the Umm Shaif Super Complex (USSC).

The USGIF project, one of the world's largest offshore developments, involves the supply and installation of three platforms, subsea pipelines, and modifications to wellhead towers. It also incorporates a compression platform to be located 2 km from the existing Umm Shaif super complex (USSC) and connected to an accommodation platform. The third platform, containing an oil separation unit, will be connected to the existing USSC. Hyundai Heavy Industries (HHI) was awarded the project by ADMA-OPCO. This is the first phase of a major re-development of the Umm Shaif Field. The USGIF facilities comprise three new build platforms; a Compression Platform (CP-1), a Collector Separator Platform (CSP-1) and an Umm Shaif Accommodation Platform (UAP). CSP-1 is linked by bridge to the existing Umm Shaif Super Complex.

Project Management and planned execution is key and differentiates NOV Fiber Glass Systems from other suppliers. NOV Fiber Glass System's on-time delivery systematic spool production enabled HHI to meet the fast track 10-month construction duration of this project.

Abu Dhabi Marine Operating Company (ADMA-OPCO) engages in offshore oil and gas exploration, development and drilling. It was assigned by its majority shareholder, the Abu Dhabi National Oil Company, (ADNOC), the responsibility for all offshore drilling and the required logistical support within its concession area of 30,370 km<sup>2</sup> and elsewhere. The remaining shareholders are BP, Total and the Japan Oil Development Company. ADMA-OPCO's concession includes two major fields, Umm Shaif and Zakum, one of the largest oil fields in the world. They are the company's two main sources of offshore oil drilling. The crude is transferred from these fields to Das Island, the company's main processing and storage plant, and the first stop in the delivery cycle. Das contains the oil and gas processing, storage and export facilities, utilities, power generation and accommodation sites.

### Project

ADMA-OPCO Umm Shaif Gas Injection facilities  
USGIF located in the Abu Dhabi sector of the Arabian Gulf

### Shipyard

Hyundai Heavy Industries (HHI) – Korea

### Client

ADMA-OPCO (Abu Dhabi Marine Operating Company) – United Arab Emirates

### Pipe system

Bondstrand 2020 C and 2020 C-FP.

Diameter: 1-36 inch (25-900 m) with Taper/Taper adhesive bonded joints for:

- Firewater (wet)
- Firewater (dry)
- Seawater
- Cooling water
- Hydrocarbon open drain
- Non-hydrocarbon drain
- Washdown water
- Vent gas
- Sewage

### Operating Conditions

|                        |              |                 |
|------------------------|--------------|-----------------|
| Operating pressure:    | up to 20 bar | (up to 290 psi) |
| Operating temperature: | 10 - 93 °C   | (50 - 200°F)    |
| Design pressure:       | 20 bar       | (290 psi)       |
| Design temperature:    | 10 - 93 °C   | (50 - 200°F)    |
| Test pressure:         | 30 bar       | (435 psi)       |

### Installation date

Mid 2009