

PROJECT SHEET

PORT INFRASTRUCTURE INSPECTION, REPAIR AND MAINTENANCE
MESAIEED AND RAS LAFFAN PORT, STATE OF QATAR

INTRODUCTION

Boskalis provides Port Maintenance Services to Qatar Petroleum (QP) on a long-term contract in Mesaieed (MIC) and Ras Laffan Industrial Cities (RLIC) in the State of Qatar.

Boskalis provided inshore and offshore diving services in support of Port infrastructure until 31/08/2015. The scope of work for the inshore diving included Inspection, Repair and Maintenance (IRM) services. The offshore diving supported terminal operations involving Single Point Mooring (SPM) systems both in Mesaieed and Ras-Laffan. During the contract a high speed Port Regulation Vessel (PRV) was provided, manned and managed as well.

Marine support services are ongoing with the management and manning of a dynamic positioning (DP1) crane barge. On-shore work scope includes the manning and management of the marine workshop port maintenance and fabrication teams.

MESAIEED INDUSTRIAL CITY (MIC)

The port of Mesaieed was initially selected to export crude oil, produced from the onshore Dukhan field. This was due to its accessibility to a natural channel and relatively deep water. First crude oil was exported in December 1949. Further industrialization followed with the erection of plants that produce other petroleum products and liquefied petroleum gas (LPG) for export. The port also contains a ship-repair and fabrication yard for dry-docking, repairing and manufacturing all types of marine units. The fabrication yard serves the construction needs of the oil and gas industries.

The Port Operations Department provide pilotage, traffic control, berthing assistance and other Marine Operational support. Mesaieed Port

FEATURES

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|----------------|--------------------------------|
| Client | Qatar Petroleum (QP) |
| Location | Mesaieed and Ras Laffan, Qatar |
| Project number | BIMS8321 & J-1148 |
| Period | July 2008 – to date (ongoing) |



- A** Location map of Qatar's Mesaieed and Ras Laffan Ports
- B** DB-1 sailing in Mesaieed Port
- C** PRV II in Small Boat Harbor

Maintenance department are responsible for the general maintenance of the Port area, this includes the QP owned vessels, machinery, equipment, bunkering areas and Terminals.





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RAS LAFFAN INDUSTRIAL CITY (RLIC)

The Port of Ras Laffan was built by Qatar Petroleum as an export facility to support Ras Laffan Industrial City (RLIC). Port of Ras Laffan has been designed as the export facility for Liquefied Natural Gas (LNG), Liquid Petroleum Gas (LPG), condensates, petroleum products and sulphur, derived from the processing of gas landed from the North Field gas reservoir which is situated 70 km North North East (NNE) of the Port. Offshore SPM's are located approximately 54 km from the Port of Ras Laffan. These SPMs can accommodate vessels ranging from 85,000 to 320,000 DWT.

SCOPE OF WORK

The Scope of Work provided by Boskalis to QP varied throughout the duration of the contract. After an initial few years the maintenance and workshop teams were extended on QPs request.

Manpower for maintenance and workshop services

Boskalis supplies skilled manpower to carry out maintenance work related to the Port and Marine infrastructure. Boskalis also operates the Port's workshop facility. This includes, but is not limited to, mechanical, electrical, instrumentation and fabrication services.

Equipment for Workshop Services

Boskalis supplies, installs, tests, commissions and maintains equipment for Workshop Services. This includes tools, instruments and machinery used for specialized and other purposes related to Port and marine maintenance.

Work-Barge Services

At the initial mobilization Boskalis refurbished the Client-supplied barge from a non-propelled dumb barge that was fitted with a 27 t pedestal crane into a Self Propelled DP1 Crane Barge. Since completion of the barge refurbishment Boskalis

has been manning and managing the Barge that operates on a seven day week, 12 hour day basis, from Mesaieed Port.

Diving Services (until 31/08/2015)

Boskalis provided two IMCA qualified air diving teams, who carried out all subsea diving services on the inshore and offshore subsea assets within Ras Laffan and Mesaieed Industrial City Ports. Scope of work consisted mainly of inspection diving, but occasionally small repairs, assistance with marine works and SPM-related jobs were completed.

As part of the Diving Services Boskalis supplied two containerized Air Diving Systems with Scuba Replacement Packages (SRP). The vessels have air-conditioned cabins, are 12.5 m in length with ample deck space for divers to work from with subsea inspection tooling, UT, Cathodic Protection, Digital Video Editing Suite, and a Remote Operated Vehicle (ROV).

PRV Services (until 31/08/2015)

Supply, man, operate and maintain a high speed Port Regulations Vessel (PRV) for 24 hours a day, seven day week support to the Mesaieed Port Regulation Department. The vessel provided security and first response to incidents within the port limits.



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- D Preparing a diver to dive at SPM
- E Crane barge Al Khatiya with PRV-II

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