

QP Fahahil Stripping Plant – PLC Based System for Inst. Air Compressors

End User: Qatar Petroleum (QP)
 Customer: Tadmur-Qatar / Atlas-Copco
 Segment: Compressor Control

Requirements of the customer:

- In 2009 Qatar Petroleum, decided to replace their existing Instrument Air Compressors K-1112 & K-1113 at Fahahil Stripping Plant (FSP) in the Dukhan Fields. M/s TADMUR Qatar was awarded the EPC for the same (GC08103400).
- M/s Atlas-Copco Middle East was chosen as the supplier for the two screw compressors (ZT-75) with new dryer skid.
- In this connection Atlas Copco Middle East awarded the contract to Prudent to supply the new redundant PLC system for controlling the compressor package.

Short description of the solution

Allen Bradley Control-Logix Redundant System with Simplex I/O's on ControlNet
 Communication to DCS on Dual Modbus RS-485 link



Contact:

Prudent Solutions WLL
 P. O. Box 11091,
 Manama,
 BAHRAIN
 Phone: +973 1745 6180
 Fax: +973 1745 6190
 www.prudentolutions.net

Founding year:

1999



Recognized Systems Integrator

Company	Project	Consultant	Contractor
 OPERATIONS ENGINEERING DEPARTMENT (DUKHAN)	REPLACEMENT OF INSTRUMENT AIR COMPRESSORS K-1112 AND K-1113 AT FAHAHIL STRIPPING PLANT IN DUKHAN	 TEBODIN Consultants & Engineers	 TADMUR TEIC
	Contract No. : GC08103400		
	Job No. : TEIC 225		
	Rev: 1		
Doc. No. 2657-5000	Sheet: 1 of 34 Date: 11 th August 2009	Engineer Doc. no. 50012-00-3185001	Contractor Job No. TEIC 225



Functional Design Specification (FDS)

PLC Based Instrument Air Compressor Control Panel
 For
 Fahahil Stripping Plant Project
 (QP Project/ Contract Reference – GC 08103400)

End User: M/s Qatar Petroleum

Client: M/s Atlas Copco, Bahrain

Contractor: TADMUR

Submitted By -
 Prudent Solutions WLL



Document No: P700-0709-FDS

Rev 3
 11 November 2009

QP Fahahil Stripping Plant – PLC Based System for Inst. Air Compressors



Contact:

Prudent Solutions WLL
P. O. Box 11091,
Manama,
BAHRAIN
Phone: +973 1745 6180
Fax: +973 1745 6190
www.prudentolutions.net

Founding year:

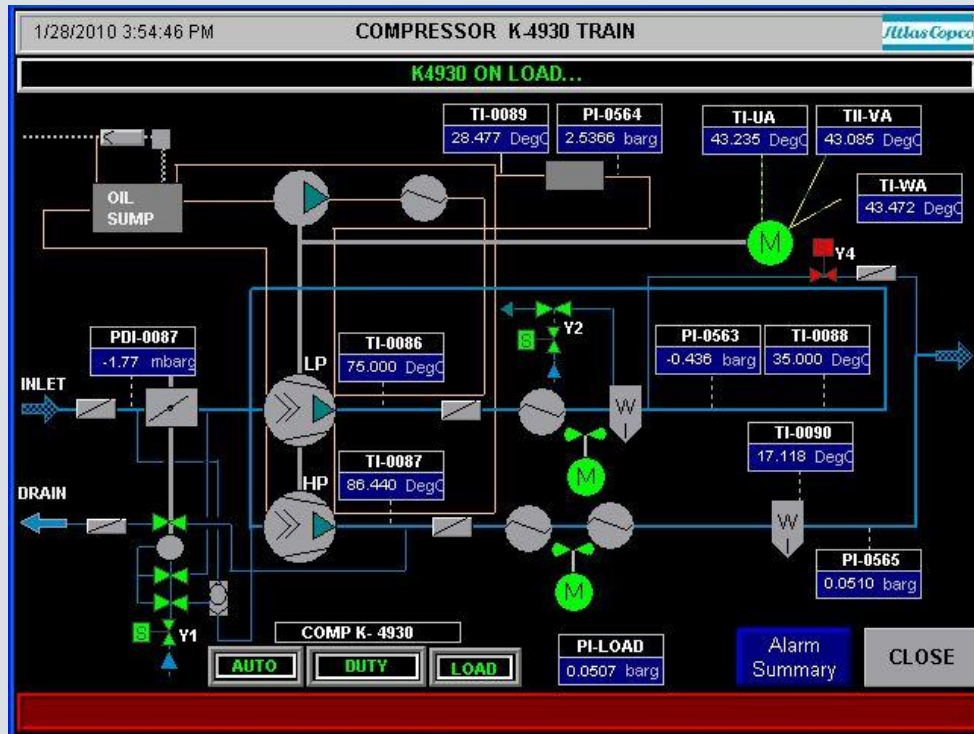
1999



Recognized Systems Integrator

Implementation by the Solution Partner:

- One Common PLC for all Compressors for sequencing, alarming, interlocking, safety shutdown interlocks, and data mapping.
- Dual Modbus Communication modules for redundant Communication with DCS
- Monitoring status of equipment's, change loading / unloading set-points locally via 15" Touch Screen PanelView+ HMI.



Benefits for the customer:

- Proven Allen Bradley ControlLogix technology
- Redundant CPU, Power Supply, Communication Interface provides High Availability
- High level Diagnostics & Ease of Maintenance

