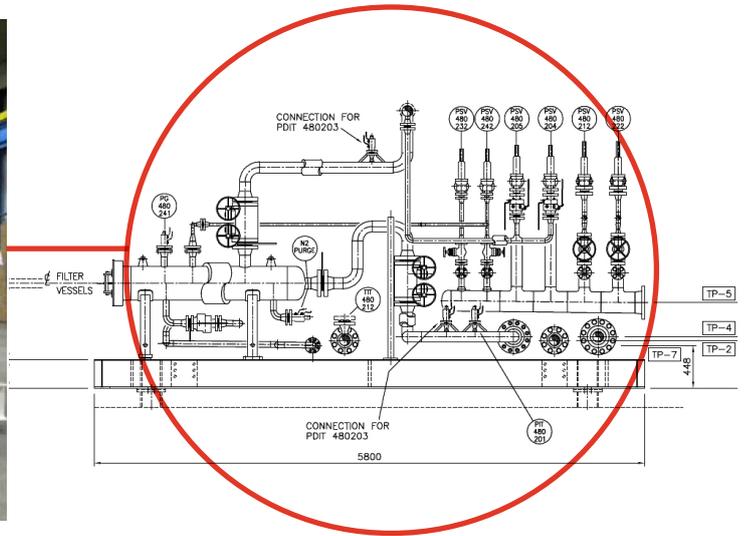


# C193 | BP/AIOC | Chirag Oil Project

## Fuel Gas Treatment Package



Project:	Chirag Oil Project (COP)	Contractor:	KBR	End User:	BP/AIOC
Product:	Fuel Gas Treatment Package	Location:	Azerbaijan, Offshore	Year:	2010

### Application

This Fuel Gas Treatment Package is the ninth in a series of Fuel Gas Treatment Packages for BP Azeri projects. The package provides superheated and filtered hydrocarbon fuel gas to all gas turbines and to other users on the WC-PDQ platform. The package is capable of operating on two different gas supplies.

### Description

Scope of supply included the following:

- Two Electric Heaters; one Preheater and one Afterheater
- Duty/Standby Dry Gas Filters
- All piping, valves and instrumentation
- Skid Package, 5.8m (l) x 4.0m (w) x 3.0m (h)
- Inlets 900# RTJ, Outlet 600# RF, Duplex, Carbon and Stainless Steel Materials, Modular Double Block & Bleed Isolation

### Challenges

Under normal operation, fuel gas flowed from the knockout drum (by others) through both heaters in series, although only one was providing the heater duty in this scenario. When operating on buyback gas, the fuel gas passed through the preheater before exiting the package to pass through a knockout drum (by others). The gas then re-entered the package and passed through the afterheater where it was superheated, before passing through either the duty or standby dry gas filter to the skid outlet termination point. The customer also required that each heater could be isolated separately for maintenance without affecting normal operation.

One of the main challenges faced on the project was to devise and implement a mechanical valve interlock scheme in order to provide safe changeover between operating modes. OGS, working with Smith Flow Control and our customer, developed the logic sequence and then installed

the system onto the isolation valves. The double block and bleed isolation philosophy provided added complexity as the valve seal integrity was required to be checked during the changeover.

Due to the various modes of operation, OGS engineers also had to use their expertise to divide the heat tracing circuits suitably so that individual sections of equipment could be isolated and maintained.

Whilst this package was essentially very similar to Fuel Gas Packages previously supplied to BP in Azerbaijan; BP's specifications, inspection requirements and document control systems have been continuously developing and becoming more complex in recent years. One of the challenges on this project was to understand these developments and ensure that OGS met with BP's increased expectations.

