

Application Notes

Crude Oil Metering



Project Name:

Sahil & Shah Full Field Development Project

Location:

Abu Dhabi, United Arab Emirates

EPC Contractor/Consultants: Tecnicas Reunidas

End User:

Abu Dhabi Company for Onshore Oil Operations (ADCO)



Scope of Application

The scope of supply for this crude oil metering system includes 2 x 8" turbine flow meters and 2 x 100% configuration for crude oil.

A metering control system was also supplied as part of this package.



Applicable Standards

API MPMS Chp. 5: Liquid Metering

API MPMS Chp. 12: Calculation of Petroleum Quantities

ISO 5168: Measurement of fluid flow - Estimation of uncertainty of a flow-rate measurement

Main Equipment

- 12 x 100% 12" ANSI 900# streams with 8" turbine meter
- 8" 900# RF turbine flow meters c/w twin pick-offs and pre-amplifiers
- 12" 900# RF FB ball valves, manually gear operated
- 10" 900# RF globe type control valve, pneumatically actuated
- 12" 900# RF meter protection strainers
- Differential pressure transmitters (FF Protocol)
- Temperature transmitter, c/w 3 wire PRT, 4-20mA output
- 11/2" 900# x 2" 150# RF thermal relief valves
- Small bore valves for drain and vent connection, transmitters and gauge isolation
- · Flow computing system, includes flow computers and control system



