O1 PIPING, FITTINGS & VALVES

PROCUREMENT OPPORTUNITIES

PIPING, FITTINGS & VALVES

THE FOLLOWING 9 PRODUCT GROUPS WITHIN PIPING, FITTINGS & VALVES OFFER LOCAL MANUFACTURING POTENTIAL

Pipes (Seamless and welded)

Forged Fittings

Wrought Fittings

Motor Operated Actuated Valves, Butterfly, IDBB, Shutdown valves, Actuators

Mechanical Valves

Cladded Pipe & Fittings

Fasteners (Bolts & Nuts)

Gaskets including Insulating Gaskets

Flanges

SEAMLESS AND WELDED PIPES

Overview



Opportunity

- Limited local manufacturing within UAE
- Key component in All ADNOC Projects



Applications

- · Oil & Gas
- · Sweet / Sour Service
- Upstream / Downstream



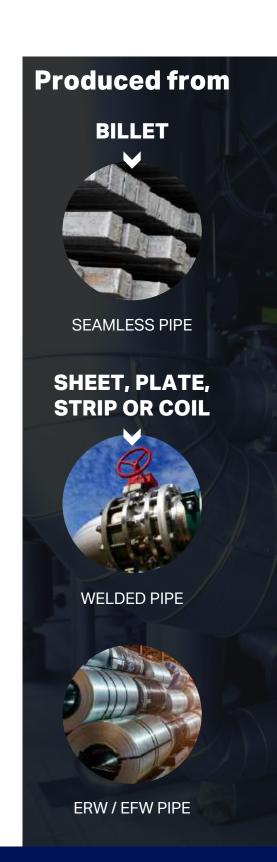
ADNOC Standards / Specifications Requirements

- ASME B31.3/31.4/31.8 / ASME B36.10M/36.19M
- API 5L / EMMUA 234/ Applicable ASTMs
- AGES-SP-09-002 Piping Material Specification
- AGES-SP-09-013 Specification for Metallic Pipe, Fittings and Flanges



Types

- Pipe (seamless and welded (EFW & SAW)) carbon and stainless steel.
- Pipe (exotic)—Inconel, Monel, titanium, Copper-nickel



WROUGHT FITTINGS

Overview



Opportunity

- · Substantial demand in ADNOC Projects
- Limited number of local manufacturers



Applications

- · Process and Utility Plants
- Offsite Units
- · Offshore Platforms



- ASME B16.9, B16.11, B16.25 and MSS SP-75, SP-95, SP-97
- ADNOC Specification for Metallic Pipe, Fittings and Flanges (AGES-SP-09-013)





FORGED FITTINGS

Overview



Opportunity

- Substantial demand in ADNOC Projects
- Limited number of local manufacturers



Applications

- Process and Utility Plants
- Offsite Units
- Offshore Platforms



- ASME B16.11, B16.25 and MSS SP-97
- ADNOC Specification for Metallic Pipe, Fittings and Flanges (AGES-SP-09-013)
- Types: O-lets, SWEEP-O-Let, Sock-O-Let



CLADDED PIPES & FITTINGS

Overview



Opportunity

- Growing demand in ADNOC Projects
- Limited number of local manufacturers

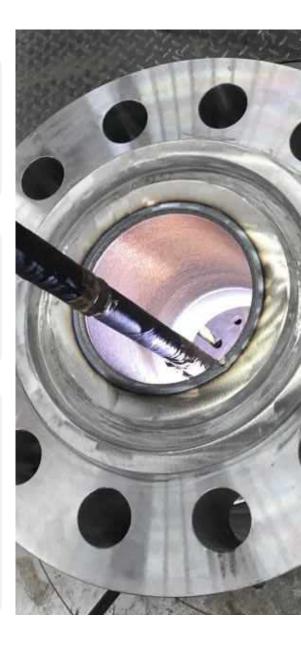


Applications

- **Process Plants**
- Offsite Units
- Offshore Platforms
- **Onshore and Offshore Pipelines**



- ASME B31.3 ASME Section IX
- · ADNOC Clad Pipes, Fittings and Flanges Specification (AGES-SP-09-015)
- · ADNOC CRA Clad and Lined Steel Pipe Specification (AGES-SP-10-006)





FLANGES

Overview



Opportunity

- Substantial demand in ADNOC Projects
- Limited number of local manufacturers



Applications

- Process and Utility Plants
- Offsite Units
- Offshore Platforms
- Onshore and Offshore Pipelines



- ASME B16.5, B16.47, B16.48, B16.36 and MSS SP-44
- · ADNOC Specification for Metallic Pipe, Fittings and Flanges (AGES-SP-09-013)



MECHANICAL VALVES GATE - BALL - GLOBE - CHECK

Overview



Opportunity

- Substantial demand in ADNOC Projects
- · Limited number of local manufacturers



Applications

- Process and Utility Plants
- Offsite Units
- · Offshore Platforms
- · Onshore and Offshore Pipelines



- ADNOC Specification for Manual Piping and Pipeline Valves (AGES-SP-09-003)
- Gate Valves: API 602/600/603 BS1848
- Ball Valves: API 6D
- Globe Valves: API 602/623 BS1848
- Check Valves: API 6D/594



CHECK VALVE



GATE VALVE



GLOBE VALVE



BALL VALVE

MOTOR OPERATED ACTUATED VALVES, BUTTERFLY, DBB, SHUTDOWN VALVES, ACTUATORS

Overview



Opportunity

- · Substantial demand in ADNOC Projects
- · Limited number of local manufacturers



Applications

- · Process and Utility Plants
- Offsite Units
- Offshore Platforms
- · Onshore and Offshore Pipelines



- Motor Operated Valves
- · Butterfly Valves
- · DBB Valves
- Shutdown valves
- Actuators



ACTUATORS



BUTTERFLY VALVE



DBB VALVE



SHUTDOWN VALVES

GASKETS INCLUDING INSULATION GASKETS

Overview



Opportunity

- · Substantial demand in ADNOC Projects
- · Limited number of local manufacturers



Applications

- Process and Utility Plants
- · Offsite Units
- · Offshore Platforms



- API Spec 6A, ASME B16.5 and ASME B16.47
- ADNOC Specification for Gaskets & Fasteners (AGES-SP-09-005)







FASTENERS (BOLTS & NUTS)

Overview



Opportunity

- · Substantial demand in ADNOC Projects
- Limited number of local manufacturers



Applications

- · Process and Utility Plants
- Offsite Units
- · Offshore Platforms



- API Spec 6A, ASME B16.5 and ASME B16.47
- ASME B18.2.1 ASME B18.2.2 ASME B1.1
- ADNOC Specification for Gaskets & Fasteners (AGES-SP-09-005)
- ADNOC Specification for Material Selection Guide-lines AGES-GL-07-001
- ADNOC Specification for Galvanizing AGES-SP-07-009

