



Exploration & Production

GENERAL SPECIFICATION

SUBSEA SYSTEMS

GS EP SPS 006

Service valves in subsea stations

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1. Scope

The purpose of this specification is to define the design and testing requirements of subsea service valves for use on subsea Stations.

The requirements are applicable to the following range of valves:

1. Valves for methanol and chemical service

- Needle valves 0.5" - 2" for inhibitor, chemicals and methanol fluids
- 2" ball valves ANSI class 2500 (Higher pressure rating may be used if available from valve Supplier)
- Spring loaded check valves 0.5" - 2"
- Small bore gate valves 0.5" - 2".

2. Valves for use in hydraulic service

- Ball valves 0.5" - 2"
- Needle valves 0.5" - 2"
- Small bore gate valves 0.5" - 1".

2. Reference documents

The reference documents listed below form an integral part of this General Specification. Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the EFFECTIVE DATE of the CONTRACT.

This technical specification is complementary to document [GS EP SPS 001](#) and [GS EP PVV 142](#), and shall therefore be read in conjunction with said document and the other Company specifications and standards identified herein.

The service valves shall comply with all relevant statutory requirements and specifications as well as all referenced ISO and other standards unless otherwise stated by Company.

Standards

Applicable industry standards and specifications are defined in reference [GS EP SPS 001](#) and [GS EP PVV 142](#). In addition, reference is made to the latest revision of the following codes and standards that are applicable to the valve:

Reference	Title
ANSI B 16.5	Pipe flanges and flanged fittings
API 17D	Specification for Subsea Wellhead and Christmas Tree Equipment
ASTM A 193	Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High Temperature or High Pressure Service and Other Special Purpose Applications
ASME B16.34	Valves - Flanged, Threaded, and welding End
ASME B31.3	Chemical plant and petroleum refinery piping



Reference	Title
ASME V	Boiler and Pressure Vessel Code Section V - Non Destructive Examination
ASME VIII - Div 1	Boiler and Pressure Vessel Code Section VIII - Rules for Construction of Pressure Vessels - Division 1
ASME VIII - Div 2	Boiler and Pressure Vessel Code Section VIII - Rules for Construction of Pressure Vessels - Division 2 - Alternative Rules
EN 10204	Metallic Products - Types of Inspection Documents
ISO 4406	Hydraulic fluid power – Fluids – Methods for coding the level of contamination of solid particles
ISO 10423	Petroleum and natural gas industries – Drilling and Production equipment – Wellhead and Christmas tree equipment
ISO 13628-4	Petroleum and Natural Gas Industries - Design and Operation of Subsea Production Systems - Part 4: Subsea Wellhead and Tree Equipment
ISO 13628-8	Petroleum and natural gas industries - Design and operation of subsea production systems - Part 8: Remotely Operated Vehicle (ROV) interfaces on subsea production systems
ISO 15156-1	Petroleum and Gas Industries-Materials for Use in H ₂ S-containing environments in oil and gas production - Part 1: General principles for selection of cracking-resistant materials Including Technical Corrigenda and Technical Circulars
ISO 15156-2	Petroleum and Gas Industries-Materials for Use in H ₂ S-containing environments in oil and gas production - Part 2: Cracking-resistant carbon and low alloy steels, and cast irons Including Technical Corrigenda and Technical Circulars
ISO 15156-3	Petroleum and Gas Industries-Materials for Use in H ₂ S-containing environments in oil and gas production - Part 3: Cracking-resistant CRAs (corrosion resistant alloys) and other alloys including Technical Corrigenda and Technical Circulars

Professional Documents

Reference	Title
Not applicable	



Regulations

Reference	Title
Not applicable	

Codes

Reference	Title
Not applicable	

Other documents

Reference	Title
Not applicable	

Total General Specifications

Reference	Title
GS EP COR 100	Design of cathodic protection of offshore structures
GS EP PVV 142	Valves
GS EP SPS 001	Design philosophy and requirements for Subsea Stations
GS EP SPS 002	Design of subsea structures
GS EP SPS 005	Subsea ball valves
GS EP SPS 009	Corrosion protection of subsea stations
GS EP SPS 010	Preservation requirements for subsea package
GS EP SPS 011	Mechanical completion of subsea stations
GS EP SPS 023	Cleaning and Flushing of Hydraulic Systems
GS EP SPS 029	Metallic Materials for Subsea Production Facilities

3. Introduction

3.1 Abbreviations

FAT	Factory Acceptance Test
ROV	Remote Operated Vehicle