



Exploration & Production

GENERAL SPECIFICATION

SUBSEA SYSTEMS

GS EP SPS 004

Subsea Manifold System Gate Valves

07	01/2011	General revision
06	10/2009	General revision
05	10/2008	General revision
04	10/2007	General revision
00	10/2002	First issue
Rev.	Date	Notes

Owner: EP/TDO/TEC

Managing entity: EP/TDO/TEC/SBS



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1. Introduction

1.1 Scope

The purpose of this specification is to define the functional, design and testing requirements of subsea manifold isolation gate valves. The requirements are applicable to all gate valves except the service valves. This specification covers both Remotely Operated Vehicle (ROV) operated valves and hydraulically operated valves with ROV override.

1.2 Responsibility

It is the responsibility of anyone who supplies equipment to this specification to ensure and document compliance with the requirements defined by this specification, and other relevant standards and statutory requirements.

Deviations from any of the requirements defined herein shall be treated as non-conformance in accordance with relevant Total procedures.

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 documents **GS EP SPS 001** and **GS EP PVV 142**, and shall therefore be read in conjunction with said documents and the other Total specifications and standards identified herein.

The specification for gate valves shall furthermore comply with all relevant statutory requirements and specifications as well as all referenced ISO and other standards unless otherwise stated by TOTAL.

Standards

Applicable industry standards and specifications are defined in **GS EP SPS 001** and **GS EP PVV 142**.

In addition, reference is made to the latest revision of the following codes and applicable standards:

Reference	Title
API 17D	Specification for Subsea Wellhead and Christmas Tree Equipment
API 17H	Remotely Operated Vehicle (ROV) Interfaces on Subsea Production Systems
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



Reference	Title
ASME B16.5	Pipe flanges and flanged fittings
ASME B16.34	Valves Flanged, Threaded and Welding End
ASME B31.3	Chemical plant and petroleum refinery piping
EN 10204	Metallic Products - Types of Inspection Documents
ISO 4406	Hydraulic Power Fluid - Fluids - Methods for coding the level of contamination by solid particles
ISO 10423	Petroleum and natural gas industries - Drilling and production equipment - Wellhead and christmas tree equipment
ISO 13628	Petroleum and natural gas industries - Design and operation of subsea production systems
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 14313	Petroleum and natural gas industries - Pipeline transportation systems Pipeline valves
NORSOK M-710	Qualification of non-metallic sealing materials and Manufacturers

Professional Documents

Reference	Title
Not applicable	

Regulations

Reference	Title
Not applicable	

Codes

Reference	Title
Not applicable	