

GENERAL SPECIFICATION

SUBSEA SYSTEMS

GS EP SPS 048

Subsea Bolted Connections

00	11/2018	First issue
Rev.	Date	Purpose of the revision

Owning entity: DSO/IP/TEC	Managing entity: DSO/IP/TEC/SBS
Other Approving entity(ies):	

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1. Scope

This specification is for subsea use, not onshore for sure, maybe within the envelope of offshore.

This document provides recommendations for use of bolted connections in subsea environment and specifies the minimum requirements for the management system that shall be in place to ensure integrity of the connections.

This specification covers pressure containing bolted joints, either dry or wet made-up, including flanges, flange-to-forged blocks (studded type joints), and clamp type connectors.

The design criteria for the joint types are as specified in the applicable Industry Standards or Codes and are outside the scope of this document.

2. Reference documents

The reference documents listed below form an integral part of this General Specification.

External Documents

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, is the latest revision published at the effective date of this document.

Reference	Title
API SPEC 17D	Specification for Subsea Wellhead and Christmas Tree Equipment
API SPEC 20E	Alloy and Carbon Steel Bolting for Use in the Petroleum and Natural Gas Industries
API SPEC 20F	Corrosion-resistant Bolting for Use in the Petroleum and Natural Gas Industries
API SPEC 6A	Specification for Wellhead and Christmas Tree Equipment
API TR 6AF1	Technical Report on Temperature Derating on API Flanges under Combination of Loading
DNV-OS-F101	Submarine Pipeline Systems

Total General Specifications

Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and addendums, is the latest revision published.

Reference	Title
GS EP SPS 009	Corrosion protection of subsea stations
GS EP SPS 029	Metallic Materials for Subsea Production Facilities