Swivel Ring Flange

Easy alignment of flange bolting

Correct alignment is a critical factor when bolting subsea pipeline flanges. Oceaneering's Swivel Ring Flange assembly enables easy alignment of bolt holes during makeup to a common flange including those defined by ASME B16.5, MSS SP-44, and API 6A.

The outer ring flange of the Swivel Ring Flange assembly is held in position by a retainer ring. The flange is able to rotate freely around the inner weld-neck hub to ensure accurate positioning of the bolt holes of the two flanges being joined.
Swivel-Ring Flange

Easy alignment of bolt holes

**Design Parameters**

Nominal Pipe Size (NPS): any API Specification 5L pipe, wall thickness, and grade

Service: Standard (i.e. crude oil, natural gas, hydrocarbons, water, or chemical injection, etc.) and Sour (i.e. hydrogen sulfide, carbon dioxide, etc.)

Design Pressure Rating and Applicable Dimensions: ASME, MSS, or API

Design Temperature Range: 25°F to 250°F / -4°C to 121°C

**Material Specifications**

Ring Flange: ASTM A694 F52 or F60 forging (or customer specified)

Hub: ASTM A694 F52 or F60 forging (or customer specified)

Coating: Zinc Phosphate

**Applicable Design Codes, Standards, and Specifications (latest editions):**

- OIE/PCRS Group Swivel Ring Flange Drawings, Bill of Materials (Controlled Copies), and Vendor Supplied Material Test Reports
- ASME Boiler Pressure Vessel Code, Section V Nondestructive Examination
- ASME Boiler Pressure Vessel Code, Section VIII, Division 1 and 2
- ASME B16.5, Pipe Flanges and Flanged Fittings
- ASME B31.4, Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids
- API 5L, Specification for Line Pipe
- API 6A, Specification for Wellhead and Christmas Tree Equipment
- MSS SP-44, Steel Pipeline Flanges
- NACE MR0175, Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment

**Certifications**

- ISO 9001:2008 - World Certification Services Ltd. - Accredited by UKAS Quality Management
- EN 10204 Section 3.1B (DIN 50049), Inspection Documents for the Delivery of Metallic Products