Ring Type Joint (RTJ) Gaskets

Ring Type Joint gaskets are precision machined metallic gaskets generally used in high pressure applications such as the Oil, Gas, Petrochemical and Offshore industries.

This type of gasket is designed to be used in RTJ groove flanges and are produced under license to dimensions as per API-6A and ASME B16.20.

Details:-
- Ring Type Joints concentrate the bolt load over a small area producing high sealing stresses.
- As the Ring Type Joint Material should always be softer than the mating flanges, the high seating stress causes “plastic flow” of the ring joint in the flange faces creating the seal.
- RTJ Gaskets can be produced from a variety of material’s to suit the process application and flange grade.
- Used on high pressure lines up to 20,000 PSI, RTJ’s are an extremely reliable and robust sealing mechanism.
- Standard R type available R11 (1/2”) to R105 (36”) in Oval or Octagonal Section.
- BX, SBX & RX type available for Sub Sea application.
- IX Seal Rings used in Norsok Compact flange assemblies
- RTJ Gasket

RTJ Gasket Profiles:-

**Oval and Octagonal**
Oval and Octagonal section Ring type Joints are designed for flanges with standard ring type grooves. These standard shapes are used to seal pressures up to 5,000 psi in accordance with API 6A.

The Octagonal cross section has a higher sealing efficiency than the Oval cross section and is therefore preferred.

The oval section ring joints were originally designed for the now obsolete round bottom groove. Both the Oval and the Octagonal cross section are interchangeable on the flat bottom groove design.

**BX RTJ**
BX Ring Type Joints are designed for pressures up to 20,000 psi, suitable only for use with API type BX flanges and grooves. The gasket has a square cross section with bevelled corners. The average diameter of the ring joint is slightly greater than that of the flange groove. This way, when the ring joint is seated, it stays precompressed by the outside diameter, creating high seating stress.

**RX RTJ**
RX Ring Type Joints are designed for pressures up to 5,000 psi, they are pressure activated ring joints designed to use the fluid pressure to increase sealability. The outside sealing surface of the ring joint makes the initial contact with the flange. As the internal pressure rises the contact pressure between ring joint and flange also increases. This is sometimes referred to as a pressure activated ring joint due to the shape of the gasket. High seating pressures are created increasing the sealability. This design characteristic makes the RX more resistant to vibrations, pressure surges and shocks that occur during oil well drilling.

**IX Seal Ring**
IX Seal rings are designed to be used in Norsok Compact Flange Connections (CFC). Available in different materials, IX rings are supplied with colour coded PTFE coating to denote base material supplied. Unlike all of the other RTJ’s supplied, markings are on the inside of the ring in accordance to Norsok L-005 standard.
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Type R Oval and Octagonal Ring Type Joint Gaskets - In accordance ASME B16.20 / API 6A*
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