

## **Technical Data Sheet**

## **Spiral Wound Gaskets**

Spiral wound gaskets are widely used in many industries to seal a vast array of media across a wide range of temperatures and pressures. The key to the gaskets versatility is the inherently resilient sealing element. The spiral wound sealing element is manufactured by spirally winding a preformed metallic strip and filler material around the periphery of a metal mandrel.

It would not be possible to cover every combination in a general product data sheet. Under optimum conditions spiral wound gaskets are effective across the following operational parameters:

Pressure Range: Full vacuum to > 450 bar

Temperature Range: -250° C to 1050° C

Spiral wound gaskets can be used in flanges with various flange face configurations. The type of configuration is the main determinant of the style of spiral wound gasket used.

An important consideration when using spiral wound gaskets is to control the maximum compression the gasket is subjected to during gasket installation. Compression can be controlled by the use of a solid metallic compression stop incorporated into the gasket

design. Alternatively compression may be controlled by flange face configuration.

The incorporation of outer metallic rings also facilitates gasket location especially on standard Class or PN rated flanges with raised and flat face configurations. There are numerous construction standards, more common ones include ASME B16.20, EN 12560-2 and EN 1514-2

BAM for Oxygen approved.

## <u>Materials:</u>

Spiral wound gaskets can be constructed using many different combinations of materials.

Material selection is generally dictated by application conditions namely temperature, pressure and media.

In the oil, gas and power generation industries a common sealing element material combination is 316 stainless steel metallic strip with Flexicarb<sup>™</sup> (graphite) filler material. However gaskets made from many other material combinations are commonly available.

General guidelines for filler material selection are as follows:

Flexicarb™ (Graphite): Hydrocarbon and steam service up to 450° C

Thermiculite® (Silicate): Hydrocarbon, steam and chemical service up to 1050° C

Polytetrafluoroethylene (PTFE): Chemical, oxygen and clean service up to 260° C



etallid

tificate Number: 14352



Care should be taken in selecting the most suitable quality for each application. Advice is available, but final responsibility remains with the customer.

> Web: www.epdm.co.uk E-Mail: Sales@epdm.co.uk

## **Spiral Wound Gasket Styles**







Sealing element with outer ring only: Style CG for use with raised and flat flange face configurations.

Sealing element with outer & inner ring: Style CGI for use with raised and flat face flange configurations.

Sealing element with inner ring only: Style RIR for use with spigot to recess (TEMA) type flange face

Sealing element only: Style R for use with flat face to recess and tongue & groove flange face configu-

Contact

Telephone: +44 (0)1625 573971 FAX: +44(0)1625 573250 PTM Ltd Units AG2/3 Clarence Mill Clarence Road, Bollington Macclesfield, Cheshire SK10 5JZ United Kingdom