

**PRODUCT DATASHEET**

# SPIRAL WOUND GASKETS



The spiral wound gasket is a versatile semi-metallic gasket capable of sealing across a wide range of applications.

**Service:**

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

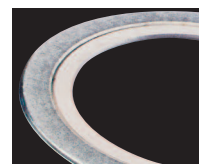
BAM for Oxygen approved.

**Spiral Wound Gasket Styles:**

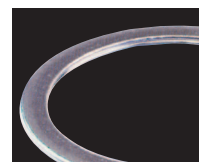

Sealing element with outer ring only:  
Flexitallic Style CG for use with raised and flat flange face configurations.



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



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



Sealing element only:  
Flexitallic Style R for use with flat face to recess and tongue & groove flange face configurations.

This Data Sheet refers to the material as supplied. The information contained herein is given in good faith, but no liability will be accepted by the Company in relation to same.

We reserve the right to change the details given on this Data Sheet as additional information is acquired. Customers requiring the latest version of this Data Sheet should contact our Applications Engineering Department.

The information given and, in particular, any parameters, should be used for guidance purposes only. The Company does not give any warranty that the product will be suitable for the use intended by the customer.

**Health & Safety**

For further Health and Safety information please see the relevant Material Safety Datasheets or contact Flexitallic Ltd.

## PRODUCT DATASHEET

### Materials:

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™ (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

### Properties:

Spiral wound gaskets can be supplied to national or international standards where properties are controlled by adherence to construction codes. This is normally the case for bolted connections utilising standard flanges. Spiral wound gaskets may also be manufactured on a customised basis where gasket style, geometry and sealing element stiffness are chosen to best suit the flange arrangement, available gasket load and operational conditions.