# SPIRAL WOUND GASKET



## The design principle of Alpha Spiral Wound Gaskets:

The basic sealing component of every Spiral Wound Gasket is the wound element. The unique profiled metal strip is spirally wound to integrate with the specified sealing element material. To improve the mechanical strength and other sealing characteristics and to comply with international standard, some layers at the beginning and at the end are wound without soft material and spot-welded over the total circumference. Consistency of winding tension combined with the profile of the winding, provide for a superior sealing performance.

This advantage is achieved by special process of feeding preformed metal strip and soft filler material.

This gives the gasket, the required recovery properties at designed bolt load, even at fluctuating operating conditions. Alpha Spiral Wound Gaskets are now available as sealing elements and also with inner and outer rings.

A major requirement of any gasket is its ability to recover and maintain a constant sealing force under variable loads.

The effect of pressure and temperature fluctuations, together with radial forces, stress relaxation and creep, demand a gasket with adequate flexibility and recovery to maintain a seal even under trying conditions. Alpha Spiral Wound Gaskets can meet this requirement adequately.

#### Ease of Installation

- · Quick and simple to fit
- · Do not need grooved or lapped flange face finishes
- · Can often be used on flanges where other gaskets have failed
- · Will not cause corrosion
- · Will not adhere to flange faces when opened, thus minimizing expensive cleaning time.

### **Technical Specification**

Gasket Size Range: Standard 15 NB to 300 NB Standard Filler Material: Flexible Graphite Metal Winding Material: Stainless Steel 316L

Outer Ring: Carbon Steel Inner Ring: Stainless Steel 316L Maximum Temperature: 500 °C

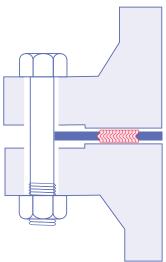
## **Seal Maintained Under The Most Exacting Conditions**

- From cryogenic to +900°C
- From high vacuum to 400 bar
- · Thermal cycling, Vibration, Mechanical shock, Dry gases.

#### Standard Gasket thickness

Nominal thickness: 4.5 mm Compressed thickness: 3.2-3.4 mm Outer / Inner ring thickness: 3.0-3.3 mm



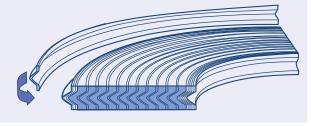


- · Consists of solid metal outer and inner rings.
- Suitable for high pressure and temperature applications.
- Used on raised face or flat face flanges.
- Prevents turbulence and erosion damage to flange.
- Prevents damage to the gasket bore and inner windings.
- · Acts as a corrosion barrier.

### Recommended Flange Surface Finish

Alpha Spiral Wound Gaskets are capable of giving an excellent seal over a wide range of flange surface finishes, but as a general guide we offer the following:

	Micro Inch	Micro Metre
General	125-200	3.2-5.1
Critical	125	3.2
Vacuum	80	2.0



<sup>\*\*</sup>We can manufacture to the most exacting international standards such as API601, ASME B16.20, ASME B16.47 A&B series, JIS standards and others as specified.