SPIRAL WOUND GASKETS

A VISUAL GUIDE

Associated Gaskets

Spiral Wound Gaskets are the most common type of gasket used for sealing in high pressure environments. Their ability to be made from almost any metal means they can be produced to withstand almost any corrosive medium and temperature from cryogenic to over 1000°C.

Anatomy of a Spiral Wound Gasket

Outer Ring

The outer ring (sometimes known as centering ring or guide ring) can be manufactured from almost any available solid metal material.
The outer ring serves to centre the gasket on the flange, act as an anti blow-out device and a compression stop to prevent the filler and windings from being crushed too much.

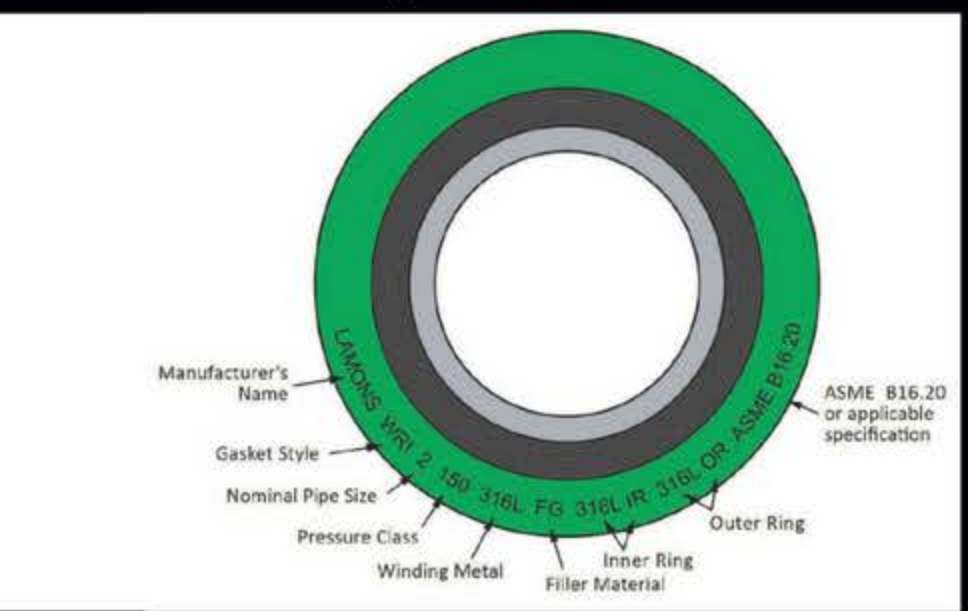
Inner Ring

Like the outer ring, the inner ring can also be produced from most solid metal materials. The inner ring offers an additional level of protection against buckling or imploding while providing radial support to the ID of the sealing element.
As it is usually the same thickness as the outer ring, it also acts as a compression stop to prevent over-tightening.

Sealing Element

The sealing element consists of a metallic winding and a soft non-metallic filler material. This part of the gaskets is where the primary sealing occurs. The sealing element can be produced from a range of different materials (listed below) to suit your individual application.

Identifying Spiral Wound Gaskets as per ASME B16.20

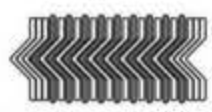


When ordering Spiral Wound Gaskets from AG we will need to know all of the above information (besides manufacturer's name). A list of the most common styles of Spiral Wound Gaskets can be found opposite.

Common Styles of Spiral Wound Gaskets

Style W

Type W Spiral Wound Gasket consist of the sealing element (winding and filler) with no inner or outer ring. They can be produced in a wide range of sizes, thicknesses and material combinations and are typically installed in the groove of confined groove-type flanges.



Style WR

Style WR Spirals Wound Gaskets consist of the sealing element coupled with an added solid metal outer ring. These are normally made from carbon steel or stainless steel but can also be produced in a range of other hard metals when required.

Style WRI

Style WRI Spiral Wound Gaskets consist of the sealing element and outer ring, as well as an additional solid metal inner ring preventing internal buckling or imploding. The inner ring is normally supplied in the same material as the winding.

Other Styles

In addition to these 3 common styles of Spiral Wound Gaskets, AG also offers a range of specialized configurations for uncommon application areas. These include spirals that seal at lower seating stress, high temperature spirals, corrosion inhibiting spirals, custom made spirals for heat exchangers and more.
If you think your application demands a specialized spiral, contact us today!

Metallic Winding Materials

304 SS	Yellow	Incoloy	White	321 SS	Turquoise	Hastelloy "B"	Brown
316L SS	Green	Titanium	Purple	Monel	Orange	Hastelloy "C"	Beige
317L SS	Maroon	Alloy 20	Black	Inconel	Gold	Phos. Bronze	Copper
347 SS	Blue	Carbon Steel	Silver	Nickel	Red		

Filler Materials

PTFE	White Stripe	Flexible Graphite	Grey Stripe
Ceramic	Light Green Stripe	Phyllosilicate (HTG)	Light Blue Stripe