



**1710 SPIRAL WOUND GASKET**

Spiral wound gaskets can be used for fluid sealing, the pressure can reach 250bar, and the applicable temperature is -200° C to 1000° C, the gasket is widely used in oil, gas, petrochemical and engineering industries.



Spiral wound gaskets type

NO.	Type	Thickness(mm)	
1711	Basic form	3.2	4.5
1712	With inner ring		4.5
1713	With outer ring		4.5
1714	With inner and outer ring		4.5

Structure type

Filler	Hoop	IR	OR
Asbestos	SUS 304	CS	CS
Graphite	SUS 316	SUS 304	SUS 304
PTFE	SUS 316L	SUS 316	SUS 316
		SUS 316L	SUS 316L

The table below may be used for selected material of inner ring and winding metal:

Trade name	AISI	Hardness(HB/HV)	Temperature°C
Stainless steel	304	130-180	-800
Stainless steel	316	130-180	-650
Stainless steel	316L	130-190	-650

The outer ring is generally manufactured from carbon steel with an anti corrosion treatment

The table below may be used for determining the correct filler:

Filler material	Temperature °C	Max operating pressure(kg/cm <sup>2</sup> )
Graphite	-700	250
Asbestos	-600	100
PTFE	-500	100



Flange tyke and Spiral Wound Gasket form:

Flange type	Shape
Flat face flange(F.F)	Gasket with an outer ring
	Gasket with an inner and outer ring
Raised face flange(R.F)	Gasket with an outer ring
	Gasket with an inner and outer ring
Male and female flange(M & F)	Basic form gasket
	Gasket with an inner ring
Tongue and groove Flange(T & F)	Basic form gasket
	Gasket with an inner ring
Flat and groove flange (F & G)	Basic form gasket
	Gasket with an inner ring

Tolerances of thickness:

Item	Thickness(mm)	Tolerances(mm)
Gasket thickness	4.5, 3.2	0.1
Ring thickness	3	±0.24

Tolerances of diameter:

	DIN(mm)	ANSI B16.5 BS1560(mm) Mss sp-44	API 605	Tolerances
Inner ring I.D.	≤600	≤24	≥26 and ≤34	±0.5
Gasket I.D.	>600 and ≤1600	>24 and ≤34	>36 and ≤60	±0.9
	>800 and ≤1600	>34 and ≤60		±1.3
	>1600	>60		±1.6
Gasket O.D.	≤600	≤24	≤24	±0.9
	>600 and ≤1600	>24 and ≤60	>24 and ≤60	±1.8
	1600	>60		±2.2
Outer ring O.D.			>1/2 and ≤60	±0.9
	≤600	≤24		0 - 1.0
	>600 and ≤1000	>24 and ≤34		0 - 1.8
	>1000 and ≤1600	>34 and ≤60		0 - 2.2



### **METAL JACKETED GASKET**

Metal jacketed gaskets are frequently required with pass partition bars, which manufactured by one-piece construction. These gaskets are specially designed and widely used for heat exchangers, autoclaves, columns, pressure vessels, flue stacks, boilers, gas mains, valve bonnets, pumps and similar services.



Metal:

Soft Iron , Low Carbon steel , SS304, SS316, SS316L, SS321, SS347, Copper, Aluminum.

Filler:

Non-asbestos compressed sheet, Asbestos compressed fiber sheet.

Graphite foil, PTFE film, Ceramic fiber, Fiber glass.

### **KAMMPROFILE GASKET**

Kammprofile gaskets consist of a metal core (Generally Stainless Steel ) with concentric grooves on either side with sealing materials.

The sealing layers (depending on the service duty) can be Graphite, PTFE CAF or Metal (e.g. Aluminium or Silver) .

Kammprofile can be used without sealing layers to provide an excellent seal but there is a risk of flange surface damage-especially at high sealing loads. The sealing layers protect the flange surfaces from damage in addition to providing on effective seal.



The very wide seating stress range (minimum to maximum stress) of the kammprofile gasket makes it:

\*Highly suitable for varying temperatures and pressures.

Less sensitive to assemble faults (inaccurate bolt tensioning)

Suitable for light and heavily constructed flanges.

Dependent on layer material kammprofile gaskets are resistant to temperatures up to circa 1000 °C

Resistant to media pressures up to 250 bar.


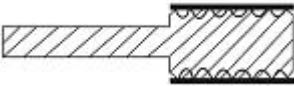

The additional benefits are:

When assembled the layer thickness of the sealing material is extremely small (0.1-0.2 mm) thus reducing leaks, reject rates and environment pollution.

The gasket will not damage the flange surface and can be easily removed.

Reduces maintenance costs-thanks to the kammprofile gasket's super reliability and sealing performance.



	<p>Parallel root core without centering ring(for male/female.Tongue/groove flanges)</p>
	<p>Parallel root core with centering ring</p>
	<p>Parallel root core with floating centering ring,attached outside the sealing area</p>

**1720 RING JOINT GASKET**

Ring Joint Gasket are metallic sealing rings suitable for high pressure and high temperature duties.

Type

No.	Type	Pressure Mpa
1721	Oval	70
1722	Octagonal	70
1723	RX	70
1724	BX	150



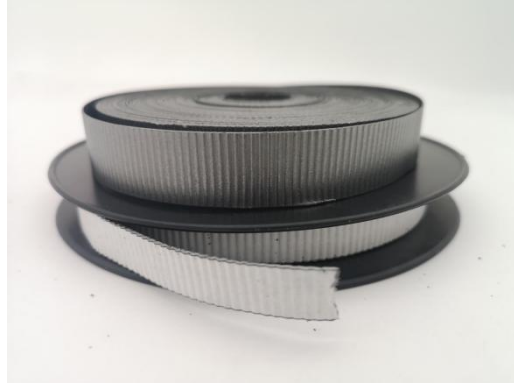
Material:

Material	Identification	Max, Hard	Temperature(°C)
Soft Iron	D	90	540
Low Carbon Steel	S	120	540
5Cr0.5Mo	A182-F5	130	650
SS304	SS304	160	800
SS316	SS316	160	800
SS316L	SS316L	150	80



### **GRAPHITE TAPE**

Graphite tape is a silted Pure Expanded Graphite Tape into a ribbon form which offer excellent sealing capabilities under extreme conditions for longer equipment life and less maintenance. Graphite tape has no impregnates, binders, additives, oils or greases which could possibly leave the packing and reduce its volume or contaminate the process media. Graphite tape are wrapped around the shaft or spindle when it is installed. The tapes wrapped are pushed into the stuffing box interior and compressed with the gland to form an endless molded seal ring directly around the shaft providing a positive seal without disassembling the equipment. It is non-hardening , dimensionally stable and is impervious to gases and fluids.



#### **Material Data**

Purity: 99%

Sulphur content:  $\leq 1000$ ppm

Leachable chlorides:  $\leq 50$ ppm

Density: 1.0 to 1.1g/cc

Temperature: -200°C to +3300°C (Non-Oxid)

-200°C to + 500°C (Oxidizing)

-200°C to + 650°C (Steam)

HP: 0 to 14 (except strong oxidizers)

### **GRAPHITE RING**

Made through molding of flexible graphite sheet and 1100 series braided packing

Applications: Packing sealing for valves, pumps and reaction vessels.

Specifications available:  $\Phi 10 - \Phi 1000$

