

# Spiral Wound Gaskets



## INFORMATION / SPECIFICATION SHEET

Spiral wound gaskets - made with an alternating combination of formed metal wire and soft filler materials - form an extremely effective seal when compressed between two flanges. A V-shaped crown centred in the metal strip acts as a spring, giving the gaskets greater resilience under varying conditions. Filler and wire material can be changed to accommodate different chemical compatibility requirements. Depending on the application, the spiral wound gasket can be specified with a centering ring, an inner ring or both. The outer centering ring accurately positions the gasket within the flange and acts as a compression limiter, whilst the inner ring provides additional radial strength. The inner ring also reduces flange erosion and protects the sealing element. Resiliency and strength make spiral wound gaskets an ideal choice under a variety of conditions and applications. They are widely used throughout refineries and chemical processing plants and are also effective for power generation, aerospace, and a variety of valve and specialty applications.

## SEATING STRESS

Spiral Wound Gaskets should preferably be mounted within the following gasket stress range to ensure a leak-proof solution.

Filler	Single side confined			Both sides confined		
	Gasket stress (20°C)			Gasket stress (20°C)		
	Min. (N/mm <sup>2</sup> )	Opt (N/mm <sup>2</sup> )	Max. (N/mm <sup>2</sup> )	Min. (N/mm <sup>2</sup> )	Opt (N/mm <sup>2</sup> )	Max. (N/mm <sup>2</sup> )
Graphite	50	95	180	50	122	400
PTFE	50	80	130	50	110	250

## SELECTING THE CORRECT FILLER MATERIAL

Graphite is the optimum filler in most applications - only where graphite could cause media pollution, or it is not chemically resistant, should another type of filler material be recommended.

Use the below table to aid in selection of the correct filler.

Material	Temp(°C)		Max. Op Pressure (Bar)	Gas Tightness	Application
	Min.	Max.			
Graphite	-200	550	250	Good	Aggressive Media
PTFE	-200	250	100	Good	Aggressive Media

### GRAPHITE

- Very good chemical resistance
- Resistance to high and fluctuating temperatures and pressures
- Resistant to ageing
- Excellent gas tightness

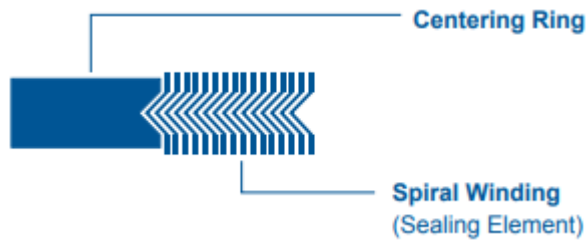
### PTFE

- Suitable for food and dairy applications
- Excellent chemical resistance
- Resistant to temperatures up to +250°C
- Resistant to ageing
- Excellent gas tightness

## SPIRAL WOUND GASKET STYLES

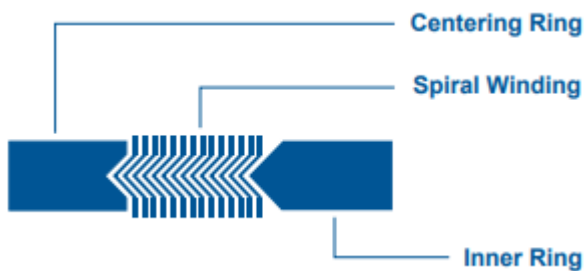
### Style CG

- General purpose gasket suitable for flat face and raised face flanges up to Class 2500
- Centering ring accurately locates the gasket on the flange face, provides additional radial strength and acts as a compression limiter
- Spiral winding (sealing element) consists of pre-formed metal and soft filler material



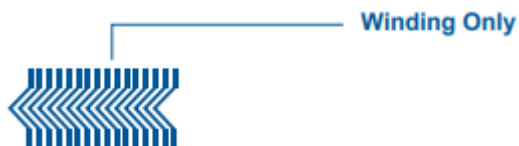
### Style CG-IR

- Suitable for flat face and raised face flanges up to Class 2500
- Recommended for higher pressure applications, for use with PTFE fillers
- Inner ring acts as a compression limiter and protects sealing elements from process media attack



### Style R

- Suitable for tongue and groove, male–female, or groove–to–flat face flanges
- Spiral winding only, containing preformed metal and soft filler material
- Inner and outer diameters of winding are reinforced with several piles of metal without filler to give greater stability



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