



## Selco Seal® vs. Spiral Wounds



The basic Selco Seal RING GASKET is a flat metal carrier with sealing grooves containing a compressible sealing element.



The SELF LOCATOR design adds locating tines which allow it to be installed on flanges from 150# (PN10) to 2500# (PN400).



Spiral Wound gaskets are constructed by combining alternate windings of a pre-formed stainless steel with a filler material. Part of the manufacturing process involves spot welding the windings. These are known as an "R" type.

When an OD metal ring is added you have a "CG" type (for use in flat faced or raised face flanges). When an ID ring is added you have a "CGI" type (to prevent erosion in turbulent mediums or where a vacuum might be present).

## Technical Characteristics

	Spiral Wound	SelcoSeal
Metal Thickness	4.5mm	1.6mm
Y Factor	10,000 psi	2,900 psi
m Factor	3.00	2.85
Recommended	12,000 psi	8,700 psi



Note that most of the clamping force on a Spiral Wound (SW) is on the metal plate, not on the sealing element. They are self energized by system pressure, the pressure causing the "V" convolutions to open and therefore seal.

## REASONS FOR CHOOSING THE SELCO SEAL GASKET



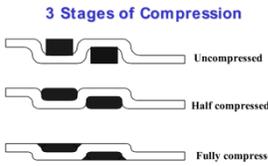
### Pressure

Pressure surges or harmonic vibrations cause constant flexing among the SW stainless steel convolutions. This can result in the spot welds breaking, causing

the convolutions to break and the SW gasket to come apart. Spiral Wounds are designed for applications that go up to pressure and temperature and stay there and are unable to deal with temperature surges.

### Compression Seal

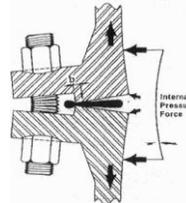
One of the problems with Spiral Wound gaskets are that they are not a true compression gasket. They perform more like an "O" ring. They come in one



thickness and are designed to be compressed into another thickness. This compression is controlled by the thickness of the metal ring surrounding the gasket. This means that all the force produced by the flange is not on the sealing medium but is actually clamping the metal ring.

### Over Torquing

Re-tightening of a Spiral Wound gasket is usually a waste and a temporary fix at best, as you are not tightening the sealing element, only the metal ring.



Compare the above to the Selco Seal® gasket. Lower clamping force and thin metal design less sensitive to surges and shocks handle the pressure surges and harmonic vibrations. Sealing element contained in a true compression seal that protects the sealing element and combined with the lower clamping force provides a leak free seal. No re-torquing required as well as no ability to over-torque.

Appearances and test results are one thing but the true test of a good performer is performance under stressful conditions and the Selco Seal® gasket out performs all Spiral Wound gaskets when conditions get tough.

Install the Selco Seal®.

## SEALING CORPORATION

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