



**PTFE gasket material** ■ structured PTFE sheets ■ multidirectionally exp. PTFE sheets ■ multidirectionally exp. PTFE tapes ■ monodirectionally exp. PTFE tapes ■ **Braided gland packings** ■ Carbon / Graphite packings ■ PTFE packings ■ PTFE / Aramid packings ■ Aramid packings ■ Glass packings ■ Acrylic packings ■ Ramie packings ■ Polyimid packings ■ Novoloid packings ■ Nomex packings ■ Preformed packing rings ■ **Compressed fibre sheets** ■ Carbon / Graphite / NBR ■ Aramid /NBR ■ Cellulose / NBR ■ **Graphite sheets** ■ Graphite sheets with plain metal insert ■ Graphite sheets with tanged metal insert ■ Pure graphite sheets ■ **Gaskets** ■ PTFE envelope gaskets ■ Cut gaskets ■ Gaskets with metal eyelets ■ Double jacketed gaskets ■ Spiral-wound gaskets ■ Kammprofile gaskets ■ Hand- and manhole gaskets ■ Tank lid gaskets ■ Braided gasket tapes ■ **Jampak** ■ Injection gun ■ Jampak injectable compounds ■ Seal-Cage-System ■ **Expansion Joints** ■ Metallic and Non-Metallic Expansion Joints ■ **Accessories** ■ Various packing cutters ■ Packing extractors ■ Circular gasket cutter ■ **and many more...**



## SPIRAL-WOUND GASKETS

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Sealing for a safer and greener tomorrow

Spiral-wound gaskets open a further dimension for safe and effective sealing.

The necessity to seal effectively under high pressure- and temperature variations, flange rotation and vibrations demands a gasket with adequate stress retention, flexibility and recovery. Spiral-wound gaskets have been especially designed for this purpose.

**spiral element with filler**  
for tongue and groove flange faces

**TEADIT® 911**

**with metallic inner ring**  
for use with "male and female" flanges

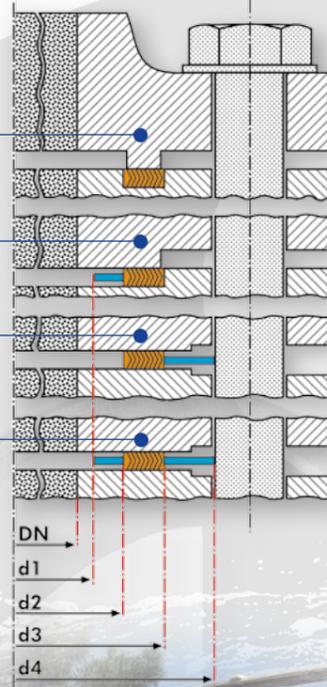
**TEADIT® 911M**

**with metallic outer ring**  
for flat face and raised face flanges

**TEADIT® 913**

**with metallic inner and outer ring**  
for flat face and raised face flanges

**TEADIT® 913M**



- Metallic outer ring:**
- ensures proper positioning and prevents over-compression.
- Metallic inner ring:**
- protects sealing element from high temperatures, prevents turbulences in piping and protects flange from corrosion;
  - prevents the inward buckling of the spiral element.

### Teadit®-Spiral-Wound gaskets

Standard dimensions according to ASME B16.20, DIN EN 1514-2 and DIN EN 12560-2

### Material for metal winding strip

Stainless Steel 304 / 1.4301, 316L / 1.4404, 321 / 1.4541, Duplex, Super Duplex, Inconel, Hastelloy, Titanium

filler material	temperature limits [°C]
PTFE .....	260
Flexible Graphit .....	450*
Mica .....	900
Ceramic .....	1200

\*[steam up to 650 °C, inert atmosphere to 800 °C]

## Spiral-wound Styles

### 911

This is simplest style of spiral wound gasket, consisting of a circular winding without centering or inner rings. Spiral wound gaskets Style 911 are mainly used in tongue and groove or male and female. They are also used in equipment with space and weight limitations.



### 911M

A style 911-M gasket is a sealing winding with an inner ring. The purpose of this ring is to fill out the space between the flanges, avoiding turbulence in the flow of the fluid or as a protection against corrosion or erosion. It is also used as a compression limit when the seating stress is greater than 210 MPa. Gaskets with PTFE filler have a tendency to inward buckle thus the use of an inner ring is recommended if the gasket is to be installed with a non-confined inside diameter.



### 913

The construction of this gasket is circular metal winding with an outer guide ring. The sealing element is made of the specified metal and soft sealing material. The standard pipe size gaskets are made to ASME B16.20 and EN 1514-2. These gaskets are used in a very wide variety of applications.



### 913M

The 913M is the standard spiral wound gasket with an inner and outer ring. The purpose of the inner ring is to fill out the space between the flanges, avoiding turbulence in the flow of the fluid or as protection against corrosion or erosion. It is also used as a compression limit. Gaskets with PTFE filler have a tendency to inward buckle thus the use of an inner ring is required by ASME B16.20. Inner rings are also required with ASME standard spiral wound gaskets with flexible graphite fillers unless the purchaser specifies otherwise and some sizes and pressure class require inner rings regardless of filler material.



### 914

Style 914 spiral wound gaskets are windings in non-circular forms like oval, rectangular and square with rounded corners, diamonds, oblong or pear shaped. Style 914 gaskets are used in boiler handholes and manholes, equipment, engine head-gaskets and exhaust systems. Inner rings should also be used for many of these applications.



### Correct selection and installation of spiral-wound gaskets:

Most gasket failures originate from wrong selection or improper gasket installation. To achieve best sealing results please consider the following:

**1. Gasket selection:** Did you choose correct size and pressure class ?  
Are the winding -, filler - and ring materials suitable for the application ?

**2. Flange control:** Are the flanges clean and surfaces free of damage ?  
Do the flanges have correct surface roughness ?

Recommended surface roughness Ra of flanges for different applications:  
**General: 3,2 - 5,1 µm Critical: 3,2 µm vacuum: 2,0 µm**

**3. Bolt control:** Are they correctly dimensioned and free of damages ?  
Is the thread and base on nut clean and well lubricated?  
**Important: torque bolts in correct sequence!**