

GAMSPIR® Spiral wound gaskets

The GAMSPIR gasket is made of a spirally wound formed steel tape and elastic sealing material. The spiral can be mounted on a steel ring or between two steel rings.

Spiral gaskets are recommended for petrochemical plants, refineries and power plants, in chemical and power systems, and wherever high working parameters and reliability are required. Thanks to such a construction the seals combine advantages of thermal resistance and elasticity of metal as well as sealing features of soft sealing materials like expanded graphite or PTFE. These gaskets seal efficiently in relatively low assembly clamps, are inflammable and resistant to blowout. Because of their undeniable advantages they are more and more frequently applied in industry.

Working conditions (parameters)

Pressure: from 2500 psi or 160 bar **Temperature:** from -220°C to 550°C

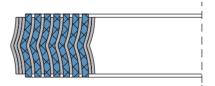
Construction

Manufactured from SS316L steel (an inner ring and a spiral), galvanized carbon steel (centring ring) and expanded graphite or PTFE (an insert in the spiral).

SWG GAMSPIR are manufactured according to the following standards:										
ASME B16.20										
PN-EN 1514-2										
PN-EN 12560-2										

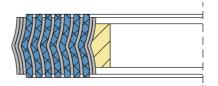
At the request of the customer it is possible to manufacture seals of another, non-standard dimension and material for different working conditions.

TYPES OF CONSTRUCTION



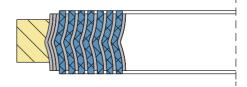
GAMSPIR®

Manufactured from a spirall wound stainless steel tape and a filler. Standard thickness of a gasket is 4.5 mm. Type GAMSPIR gasket is applied in a tongue and groove flange joints (type C/D and E/F)



GAMSPIR® I

Made of a GAMSPIR gasket and connected with an inner ring. Such a solution prevents the gasket from highly aggressive or oxidizing media, as well as from excessive distortion caused by assembly clamp. GAMSPIR I is applied for flange joints type E/F.

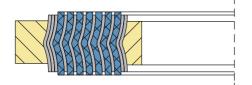


GAMSPIR® O

Made of a GAMSPIR gasket and connected with an outer centring ring. Such a solution prevents the gasket from blowout in high pressures and from too strong compression of the gasket. Additionally it facilitates concentric assembly of the gasket.



TYPES OF CONSTRUCTION



GAMSPIR® IO

Made of a GAMSPIR gasket and connected with an inner and outer (centring) ring. Thanks to such a solution the gasket features very high resistance to compression and easy assembly. This version is recommended for flat flanges with coarse pads.

Dimensions

We offer manufacturing standard gaskets according to the following standards:
EN 1514-2:2005
EN 1514-2: 2013
EN 12560-2
ASME B 16.20 for flanges according to ASME B 16.5
ASME B 16.20 for flanges according to ASME B 16.47, A series
ASME B 16.20 for flanges according to ASME B 16.47, B series

Calculating coefficients:

Marking/material			ASME s. VIII EN 13445-3/ EN 13480-3		AD-2000 Merkblatt								
							DT-UC-90/WO-O/19						
			y m		k _o k _o	k ₁	σ _m MPa	σ _r MPa	Value of the "b" coefficient of gaskets in temperatures				
				m m	N/mm				20°C	100°C	200°C	300°C	400°C
GAMSPIR I O IO	depending on a filler	graphite	35,6	2,1	49,5 b _D	1,4 b _D	20,5	5 p ₀	1	1	1	1	1
		PTFE	38,7	2,8	55,0 b _D	1,4 b _D	27,0	5,5 p ₀	1,1	1,2	1,6	-	-