

Flexitallic Products

Type Document: Literature
Product: Metal Jacketed Gaskets

Metal Jacketed Gaskets, as the name suggests, comprise of a metallic outer shell with either a metallic or non-metallic asbestos free filler. The filler material gives the gasket resilience, while the metal jacket protects the filler and resists pressures, temperatures and corrosion.

A wide range of materials are available to suit specific temperature and corrosive conditions.

Metallic:

- Aluminum
- Brass
- Copper
- Soft Iron
- Stainless Steel
- Monel[®]
- Nickel[®]
- Inconel[®]
- (Other materials on request)

Non-Metallic:

- Non-asbestos Millboard
- PTFE
- Flexicarb[®]
- Ceramic[®]

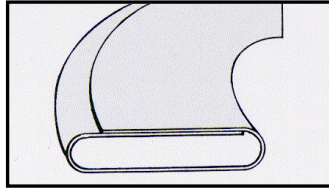
Metal Jacketed Gaskets are manufactured using hand made techniques, and are available in a wide range of sizes and configurations. They are traditionally used for heat exchanger applications, pumps, and valves, however the resilience and recovery properties of these gaskets are limited. Metal Jacketed Gaskets require exacting conditions of flange surface finish, high bolt loads, and flange flatness in order to effect a seal.

SINGLE JACKETED GASKETS

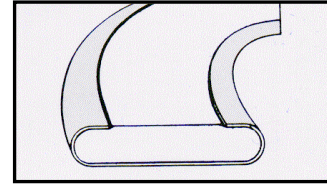
The filler material is enclosed in a metal jacket which covers the inside and outside diameter of the gasket. Style 120 has one of its contact surfaces covered and is ideally suited for comparatively narrow flange widths in circular and non-circular configurations. Style 124 is an overlapped Single Jacketed Gasket, where the filler is completely enclosed on the inside and outside diameters and on both contact surfaces. Style 124 is more suited for high temperature applications of narrow flange widths.

Typical low pressure applications include boilers, compressors, pumps, and diesel and gasoline engines. Style 120 is not recommended for standard pipe flanges. Minimum flange width 6.4mm (1/4"). Nominal gasket thickness 3.2mm (1/8").

Style 124



Style 120



DOUBLE JACKETED GASKETS

The filler material is completely enclosed by a two piece metal jacket, which covers both the inside and outside diameters and both contact surfaces.

Style 126 is similar to style Style 123 with the exception that the metal jacket is formed from a corrugated jacket providing better resilience than the Style 123, since the corrugations form multi-seals across the flange sealing face.

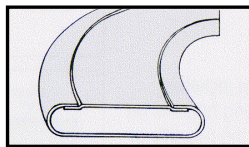
Style 127 is a double shell gasket constructed of two reversed wrap-around shells. This provides superior flange support and handleability and provides better resistance to high pressures.

Double Jacketed Gaskets are used on boiler and heat exchanger applications when ample bolting is available to correctly seat the gasket. They are designed for high pressure and temperature applications up to and inclusive of class 900. The temperature limitation of the gasket is dictated by the combination of metallic and non-metallic materials used in its construction.

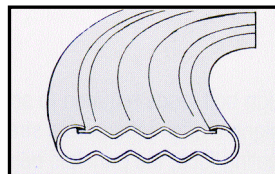
Flange widths as narrow as 8mm (5/16") can be manufactured dependent on diameter. Very large gasket diameters can also be produced. Nominal gasket thickness 3.2mm (1/8").

Gaskets can be manufactured with either integral or welded pass partition bars, in a variety of complex configurations. Some of the most common pass bar configurations are shown on the reverse side.

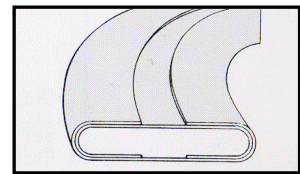
Style
123



Style
126



Style
127

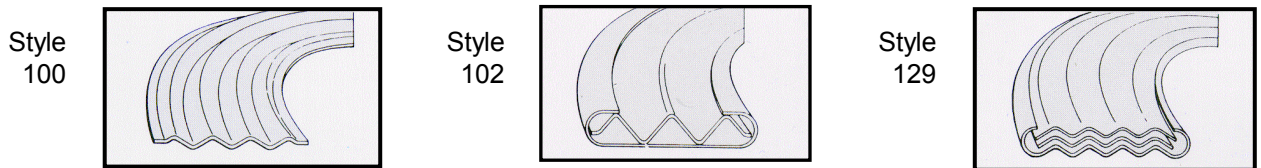


SOLID CORRUGATED METAL GASKETS

As the name suggests, the solid corrugated metal gasket is comprised solely of metal and does not contain any non-metallic fillers in its construction. The temperature limitation of the gasket is therefore only effected by the metal selected.

The corrugations provide multi-seals across the face of the gasket and inherent resilience. A minimum of three corrugations is recommended and gasket thickness is approximately 50% of the corrugation pitch. Pitch corrugations can be 3.2mm (1/8"), 4.8mm (3/16") or 6.4mm (1/4").

Typically used for high temperature applications and applications involving steam, water, gas, oil, etc. up to 1000 psi in the case of Style 129 and 102, and up to 500 psi in the case of Style 100.



SCHEDULE OF STANDARD SHAPES FOR HEAT EXCHANGER GASKETS

R	C1	C2	D1	E1	E2	E3	E4	E5
F1	F2	F3	G1	G2	G3	G4	G5	G6
G7	G8	H1	H2	H3	H4	H5	H6	H7
H8	H9	H10	H11	H12	H13	H14	I-1	I-2
I-3	I-4	I-5	I-6	I-7	I-8	I-9	I-10	I-11
I-12	J1	J2	J3	J4	J5	K1	K2	K3
K4	K5	K6	K7	K8	K9	K10	K11	

Other bar configurations available on request.



The Flexitallic Group has 25 manufacturing locations comprised of owned plants, joint ventures and manufacturing licensees in 15 countries producing products. Through its own facilities and stocking distributors, *The Flexitallic Group* has available stock in over 650 locations in 59 countries.