



Manufacturers of Metal Gaskets



TECHNICAL DATA SHEET

ElastaGraph™ flange gaskets

ElastaGraph™ gaskets are made by infusing a seamless layer or flexible graphite at varying densities and thicknesses over a corrugated metallic core. ElastaGraph utilizes a unique corrugated pattern which increases the depth of the groove and the pitch at the peak of the corrugation. This greatly improves the gasket's sealability over traditional corrugated design.

The increased pitch and groove depth increase ElastaGraph's recovery or "spring back" and reduces the surface area of the gasket for greater unit load at initial torque as well as lower minimum seating stress. This results in bolt stability and increased load retention during thermal cycling. The proprietary production process allows the graphite to be applied without the "seam" that is present in other gaskets fabricated from flexible graphite sheets. The inner diameter of the ElastaGraph is encapsulated by high-density flexible graphite, increasing sealability many times over traditional designs. The traditional designs create a leak path and contribute to stress corrosion of the metal insert. The JM Clipper process also eliminates the mylar/polyester film adhesive used in traditional gasket designs which contributes to volume and bolt torque loss.

ElastaGraph was developed specifically to solve fugitive emission and compliance problems. It also performs well in bolted joints that experience thermal cycling or limited initial bolt load. ElastaGraph is the most economical way of meeting low emission requirements.

Operating limits

Maximum Operating Temperature
1000 °F (550 °C) Steam
850 °F (450 °C) Air
PH Range 0 - 14

Material specifications:

Temperature capabilities

Cryogenic to 850 °F (460 °C) oxidizing
to 1000 °F (550 °C) steam
to 1700 °F (927 °C) non-oxidizing

Pressure ratings

Gaskets are designed for pressure class 150 and 300 (PN10 ÷ PN40)
Depending on Temperature

MATERIAL CONSIDERATIONS:

Sealing Material – Flexible graphite has been widely recognized as the material of choice in combining excellent thermal stability with corrosion resistance (nuclear grade available).

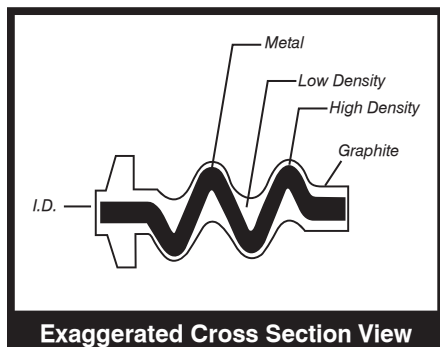
Metal Carrier – 316L /1.4404/, 304 /1.4301/

Thickness of the core: 0.6 mm, 0.8 mm

The **flexible graphite** completely covers the I.D. of the metal ring providing total corrosion resistance.

The Benefits of Multiple – Density, Multiple – Thickness Flexible Graphite

Traditional graphite products are made to a single density and only provide the benefits of that density. On the other hand, multiple – density products based on the DynaGraph process provide all the benefits of both high and low density materials.



Low Density Benefits: 40 lb / ft³ (0,64 g/cm³)

- High compression
- Good sealability on low bolt load
- Good sealability on irregular flanges
- High conformability for poor surface finishes

High density Benefits: 115 lb / ft³ (1,84 g/cm³)

- High recovery
- Low porosity, good sealability
- High – temperature resistance
- High – pressure resistance
- Improved handleability
- High tensile strength
- Better abrasion resistance

Due to the wide variety of possible installation and operating conditions, producer cannot draw a final conclusion for the gasket use in all installations/applications and therefore the data can not be used for the warranty claims. Please, do not hesitate to contact our staff to find the best solution for your application.