

GASKETS DIVISION

Gee Graphite are not new to gaskets, but we now have an additional division. Manufacturers of gaskets and sealing solutions. Converting expanded flexible graphite, PTFE, rubber, cork, mica and non-asbestos materials.

Geegraf gaskets are manufactured using state of the art CNC punching and water jet cutting equipment. With the ability to layer when cutting materials giving us a possible yield 120 gaskets per cycle meaning we can offer short lead times if required. Inside bolt circle and full face gaskets supplied to all recognized international standards, non standards gaskets cut to customer drawings and specifications.

The process has been modified over our years of experience to suit the production of gaskets with the added ability to reverse engineer. Now the most intricate designs can be cut accurately with no tooling costs offering a clean safe, smooth edge finish. Using our unique system we can offer dovetailing for larger diameter gaskets and adhesive backing for most materials.

What should you look for when selecting a gasket material?

Metal reinforcement: This provides strength and durability to maintain position in the face of the extreme conditions.

Heat-tolerant facing material: Facing material must withstand heat of exhaust without disintegration over the life of the seal. Materials behave differently over time, be sure to choose what is best for you.

Abrasion resistance: This might be a factor in joints with high thermal motion, such as joints of dissimilar metals that expand and contract at different rates. In these cases, often a clad-style material is chosen.

Low creep relaxation: Graphite products are a good example of a facing with low creep relaxation. This means it will not continue to lose thickness with the heat and time exposure, thus maintaining good flange loading to maintain the seal.



The vast array of gaskets Gee can offer:

Cork, Ceramic Paper, Paper & Rubber Gaskets

Our cork, paper & rubber gaskets offer a wide range of exceptional properties. With cork being cheap, flexible, lightweight and good for use when a high degree of compressibility is required. We can produce high quality paper gaskets to our customers specification requirements. Ceramic paper gaskets demonstrate excellent strength whilst being flexible, enabling them to withstand severe mechanical handling they are light in weight have excellent insulating properties.

Exhaust & Manifold Gaskets

The ideal characteristics of a gasket material used in the exhaust manifold is the heat tolerance and ability to withstand the temperature of the application without oxidizing, burning, or otherwise disintegrating. Offering a line of products for high-temperature applications. The gaskets should compress or conform to flange conditions and irregularities to make a good seal. The harsh environments of exhaust systems can present a challenge if you don't use acceptable gasket materials. Finding something to withstand the hot gases requires materials specifically designed to survive such conditions.

Gasket Materials

- | | |
|----------------------|-----------------|
| • Ceramic Paper | • Paper |
| • Cork | • PTFE |
| • Exhaust & Manifold | • Pure Graphite |
| • Mica | • Rubber |
| • Non Asbestos | • SSR Gasket |
| • NR Gasket | • SST Gasket |



GEENAS Non-Asbestos

GeeNAS our non-asbestos gasket jointing material contains a mixture of aramid and glass fibres with a nitrile rubber binder. It's an economical, general-purpose material for use in light to medium gasket stress applications. It exhibits good sealing and torque retention properties. Filling the spaces between two or more mating surfaces, generally to prevent leakage from or into the joining objects while under compression.

Kammprofile Gaskets

The Kammprofile/Camprofile is a composite gasket which utilises a serrated metal core with soft facing material. The metal core is machined on each contact face with concentric serrations which provide high surface stress ensuring that the soft coating flows into imperfections in the flange even at relatively low bolt loads. The result is a gasket which combines the benefits of soft cut materials with the advantages of seal integrity associated with metallic gaskets. Expanded graphite is the most common facing material used for Kammprofiles. However other materials can be used, such as PTFE for chemically aggressive applications or mica for higher temperature applications. Main applications are steel flanges and steel vessels. Special purpose dimensions are available on request. These type of gaskets can also be manufactured from a range of core materials according to media compatibility and temperature considerations.

Mica & PTFE Gaskets

MICA gaskets offer a wide range of exceptional properties. It is completely harmless and presents very high thermal and mechanical performances, allowing it to successfully replace asbestos gasket material in many applications. This very high temperature gasket sheeting material able to withstand such temperatures even in the presence of Oxygen.

PTFE gaskets work efficiently at both low and high temperatures, has excellent resistance to most mineral and organic chemicals such as acids, bases and solvents, a great choice for low bearing loads alongside high temperature sealing.

Pure Graphite, SST, SSR, NR Gaskets

We offer the complete process from selection of high purity graphite foil, punching the stainless steel and compressing with force to form the sheet followed by final inspection all carried out in house. Commonly used as gasket material in steam system applications, the oil and gas, petrochemical and chemical industries also as flange gaskets for piping and machinery.

Our Geegraf stainless steel tanged material comprises two outer layers of graphite foil with a central tanged stainless-steel core 0.1mm thick mechanically bonded therefore no need for adhesive.

Our Geegraf stainless steel reinforced graphite sheet material comprises of two outer layers of graphite with a stainless steel core 0.05mm thick.

Our Geegraf unique nickel reinforced graphite sheet contains two layers of graphite with a nickel foil core at a thickness of 0.026mm thick.

Spiral Wound Gaskets

Spiral wound gaskets have the ability to recover under the action of fluctuating loads caused by process fluid pressure and temperature changes, flange face temperature variations, flange rotation, bolt stress relaxation and creep. The gasket-sealing element on the spiral wound gaskets consists of a pre-formed metallic winding strip with layers of a softer, more compressible sealing material which, during compression, is densified and flows to fill imperfections in the flange surfaces when the spiral wound gasket is seated. The metal strip holds the filler giving the spiral wound gasket mechanical resistance and resilience.





GASKETS DIVISION

Manufacturers of gaskets
& sealing solutions



Gee Graphite Ltd, Havelock Street, Ravensthorpe Industrial Estate,
Dewsbury, West Yorkshire, WF13 3LU, ENGLAND

Tel: +44 (0) 01924 480011 Email: sales@geegraphite.com www.geegraphite.com



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