



# GASKETS

Product Overview

**BEE4**  
EMPOWERING SUPPLIER

ISO 9001	Certified
ISO 14001	Certified
ISO 45001	Certified

# ABOUT US

Established in 1974 as a single bearing shop in Durban, South Africa; BMG's aggressive growth strategy has included acquisitions, supplemented by a steady organic growth discipline. BMG attracts best-of-breed talent resulting in technical expertise that differentiates BMG in the industry. Staff are truly part of the BMG family and its success.

BMG boasts an accredited in-house technical and commercial training academy which fosters a culture of staff development and career advancement; it's all about sustainability.

The net result, is a company that reliably supplies and supports 70 000 customers in 15 countries with the widest range of industrial engineered products and expert services in Africa via 105 branches.

BMG is positioned to deliver bespoke 360 degree solutions to its customers, and subsequently return on investment to its investors and shareholders. BMG plays a pivotal role in supporting the productivity and production targets of all Industrial, Manufacturing, Mining and Agricultural sectors of the economies in the countries it serves. With an enviable reputation as Africa's largest distributor, manufacturer and service provider of the highest quality engineering consumables and components; including

- Bearings & Seals
- Power Transmission Components
- Drives, Motors and Controllers
- Hydraulics, Pneumatics and Filtration
- Heavy and Light Duty Materials Handling
- Valves and Lubrication
- Fasteners, Gaskets and Tools

BMG is a level 4 BEE contributor with ISO 9001 Quality Assurance certification. Health and safety of its employees and customers is a paramount focus and the company adheres to ISO 45001. BMG is also committed to environmental care and sustainability and strictly follows the ISO 14001 charter.

As a key contributor to the Invicta Holdings stable, BMG has played a major part in Invicta's unique achievement of being rated in South Africa's Top 100 Companies for 21 consecutive years.



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# INTRODUCTION

In the engineering world, where so many different components are involved in a simple system, gaskets are often overlooked. Because of this, many people think that a gasket is a gasket regardless of where it goes, which couldn't be more wrong. When supplying a gasket, several different factors contribute to the selection of material and type; but before learning what that is, the basics need to be understood.

## What exactly is a gasket?

Working hand-in-hand and similar to a seal, a gasket is used to seal two mating components. What makes gaskets different to seals is that unlike regular oil seals, gaskets are used in static applications. Using compression to form a seal, gaskets are made up of compressible materials that suite the working environment.

## how do they work?

Using the basic principle of compression, a gasket seals by using two surfaces compressed together with the gasket inbetween. Certain materials are also able to form around imperfections in the surface to supply an effective seal, even though there are severe indentations in the surfaces. In order for a gasket to seal efficiently, a certain torque needs to be applied to the fasteners. Under-tightening would result in leakages and over-tightening would result in the material cracking, causing leakages.

## Where are they used?

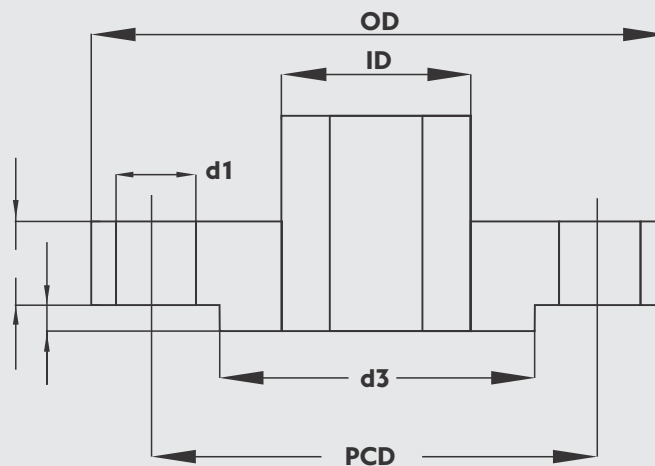
A gasket can be used on any two static mating surfaces, given that they are not too badly worn or have any deep surface indentations. Gasket products can also be used in several other instances, such as packing, door sealing and cloth materials used to insulate heat.



## Flange types

Although well known in the engineering field, people do not understand the crucial factor a flange type could have on a gasket. Often a nominal bore size is given and you are expected to immediately supply a gasket that fits correctly. With this common misconception, it is vital to understand what dimensions gaskets need to be in various sized flanges and what role they play in the effectiveness of the gasket.

In order to fully understand this, a simple chart is used to determine gasket sizes. A common flange drawing has to be read and the flange chart can be followed in order to determine the sizes of the gasket required for the particular flange:



As seen above, common dimensions can be read off of the diagram, in order for the gasket sizes to be determined. In saying so, the following dimensions need to be determined in order to correctly identify and supply a gasket:

- Inner Diameter (ID)
- Outer Diameter (OD)
- Pitched Circle Diameter (PCD)
- Hole Quantity (d1)
- Hole Diameter (d1)

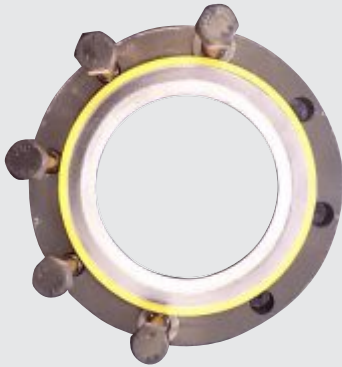
If any of these dimensions are incorrect, the gasket's effectiveness will be compromised. If the ID of the gasket is too big, sealing surface is sacrificed. If the ID is too small, flow within the pipe is restricted. If the OD is too small, sealing surface is once again sacrificed and if it is too big, the gasket is exposed to external weathering. As with the other dimensions, if the PCD, hole size or quantity is incorrect, the holes will not line up and the gasket will not fit onto its flange.

In saying this, the selection of the material is as crucial as making sure that the gasket is tightly fitted to the flange in order to get the ideal performance of the gasket.

## GASKET APPLICATIONS AND SERVICE

As important as it is to supply the correct type and size of gasket for it to work effectively, the servicing and replacement of gaskets plays a large role in the effectiveness of a gasket. If the correct procedure of inserting a gasket isn't followed, the gasket can be damaged and in effect can be rendered as a failed gasket.

The images below show spiral wound gaskets being inserted into a flange. Take note as to how the bolts are tightened, as tightening the bolts in this manner provides even distribution of torque and an even pressure over the entire surface of the gasket.



As seen in the picture on the left, the flange only needs to be opened half way in order to slip out the old ring gasket and replace it with a new one. Fast and easy maintenance with the least amount of downtime, hence the preference of ring gaskets over full face.

As seen on the right, the bolts are tightened using a cross bolt technique, while the bolts are cross-tightened from its opposing end, evenly distributing the tightening torque.

## MATERIALS

When selecting materials for a gasket, vital information is required to correctly select the material that is suitable for the environment it is going to be exposed to. If the customer is unsure of what material he requires, the following simple, yet effective factors need to be determined:

- **Surrounding Environment**

What surroundings is the gasket going to be exposed to? Is it salt water? Is there a surrounding temperature above ambient? Are there open flames? Are there any chemicals in use outside the application?

- **Temperature**

At what temperature is the medium inside and outside the pipe running? Are there peaks in the temperature and if so, what is the maximum / minimum temperature?

- **Pressure**

What pressure will the gasket be exposed to?

- **Medium**

Due to the nature of the pH difference and the different effects they will have on materials, the medium running inside the pipe of an application needs to be determined in order for the gasket to be as effective as possible without leaks.

Because acidic mediums will break down different types of materials; higher pressures will cause a blow out, whilst higher / lower temperatures will melt or ignite / freeze the materials and surrounding environments that contain a salt content, for example, will make certain materials rot. The selection of materials is impossible without these 4 factors being determined.

Two types of commonly used soft cut gaskets include: Ring and Full-Face gaskets. Full-face gaskets cover the entire surface of the flange, with bolt holes to allow the bolts to pass through. Ring gaskets use an OD and ID only, and only seal from the flange ID to the start of the bolts.

## Full-face

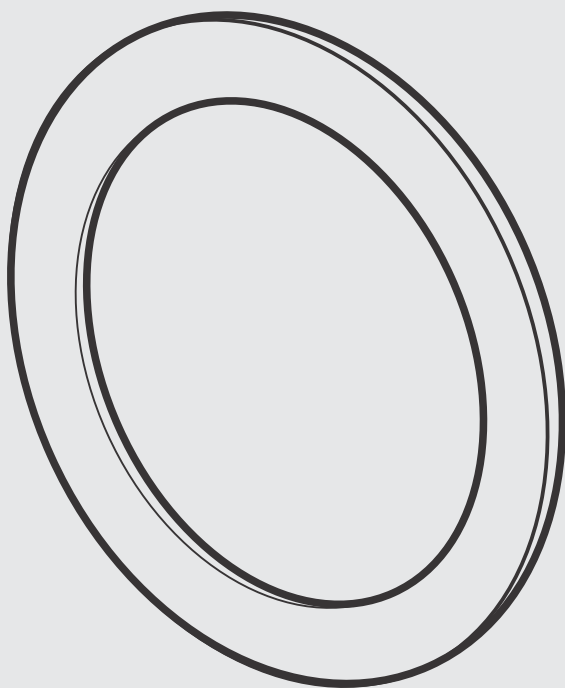
In order to correctly manufacture these gaskets, the OD, ID, PCD, bolt hole sizes and quantity need to be determined. Without any of these dimensions, the gasket cannot be manufactured. However, if the customer can supply other information, it can be cross-referenced on a flange chart to determine the dimensions. As seen on the flange chart, different standardised tables are set in place to quickly identify what set of information is required.

## Ring

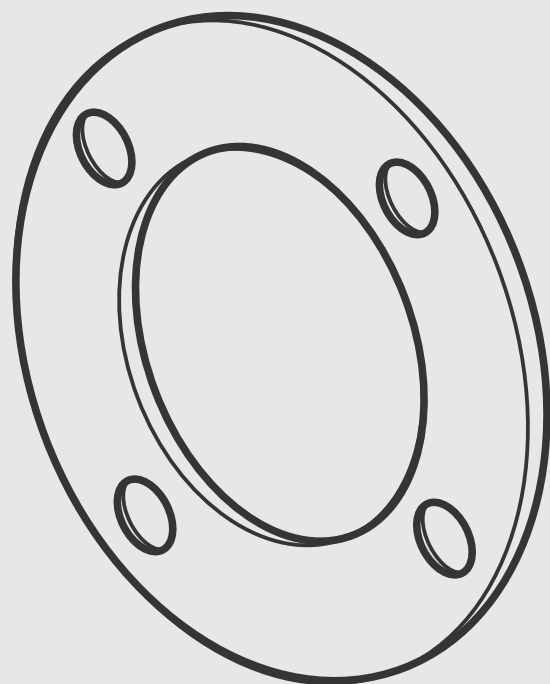
Using an OD and ID, these gaskets are more commonly required. Unlike full-face gaskets, this type of gasket can be replaced by only loosening the first half of the bolts. By doing this, the gasket can slide out and replaced, making it the preferred choice for quick maintenance. If the OD of the gasket is unknown, it can easily be determined by the following equation:

$$\text{OD} = \text{PCD} - \text{Bolt Size (of one bolt)}$$

## Examples:



**RING GASKETS**



**FULL-FACE GASKETS**

# FLANGE STANDARDS

With gasket sizes being determined by the size of their flanges, the common standard of flanges need to be well known in order to provide the service required to our customers. These standards, including, but not limited to, are:

## **BS 4504**

A British Standard, the BS 4504 Flanges are of the more common occurrences within gaskets. This class of flange makes it easy to distinguish what dimensions are required per nominal bore. Example classes of these include: 6/3, 10/3 & 16/3.

## **SABS 1123**

Being a South African British Standard, these flanges are very similar to the British Standard. These dimensions are almost identical to the BS, although the flange thicknesses differ. In the dimensions needed to manufacture gaskets correctly, the standards do not differ as the flange thicknesses have no effect on the gaskets. Example classes of these include: 600/3, 1000/3 & 1600/3.

## **BS 10**

Being a British Standard, the BS 10 flanges are classed and labelled separately.

## **ASME B16.5**

Also known as the "Pound (#)" Flange, the American Society for Mechanical Engineers Standard uses pound ratings to differentiate dimensions. When supplying a gasket, the gasket is often referred to as a "150/300/600/900/1200 Pound". Examples of these include: 150#, 300#, 600#, 900#, and 1200#.

From having a thorough understanding of these standards and the difference in all the flanges, it is crucial that the correct questions are asked to determine exactly what the gasket sizes are.





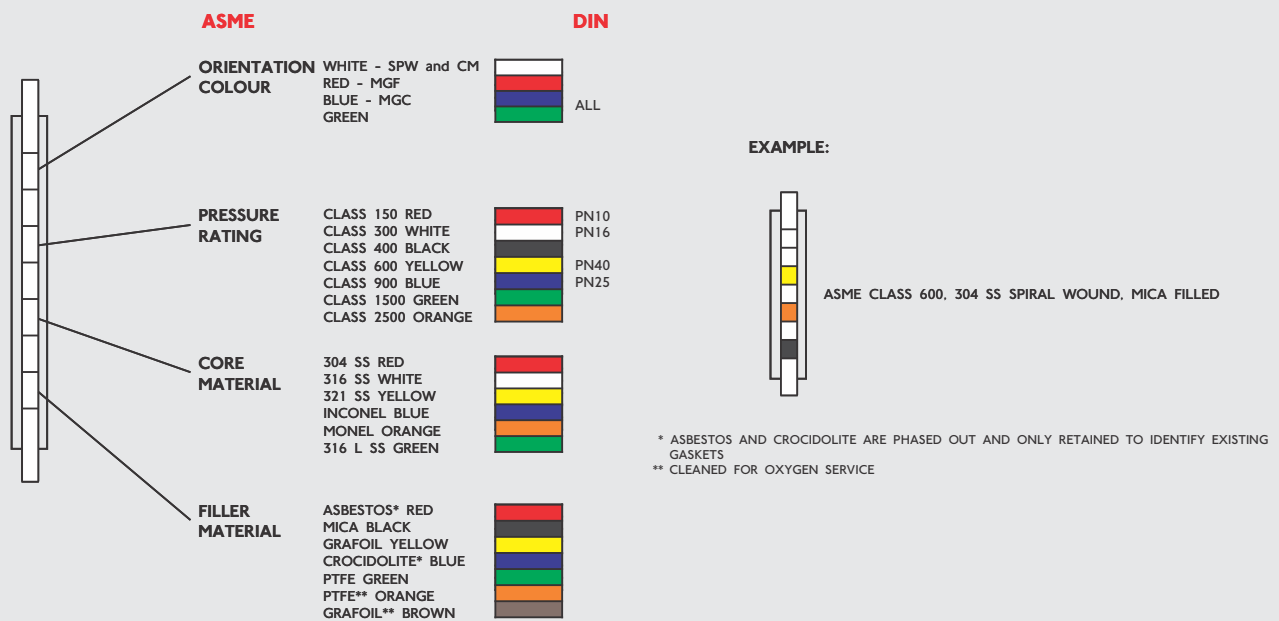
Unlike the above mentioned soft cut gaskets, spiral wound gaskets are manufactured by spirally winding a preformed metal strip and filler into a predetermined shape.

Spiral wound gaskets are available in several different materials and various different grades. Some of these include:

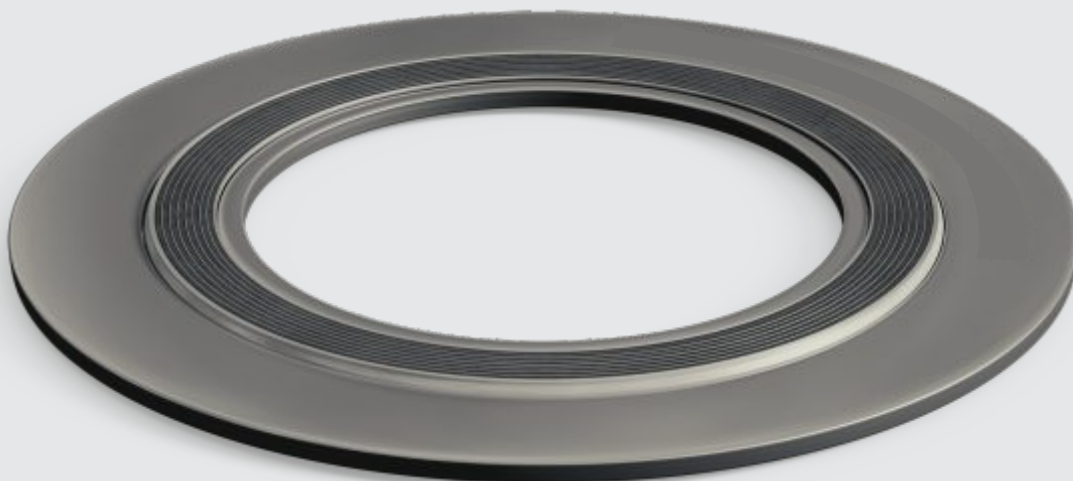
- 304 Stainless Steel rings with a graphite winding.
- 316 Stainless Steel rings with a graphite winding.
- Carbon Steel rings with graphite winding.

Graphite is used due to its high temperature rating and the rings provide the reinforcement to withstand high pressures based on the rating of which it is made.

The following chart provides more information regarding the different combinations:



A dimension chart stating all the dimensions for spiral wound gaskets and their classes can be used to identify and provide dimensions for all the spiral wound types, with ASME B16.5 being our main market.



## SOFT CUT MATERIAL TYPES

With BMG being the sole distributor of the Phoenix range, the data sheets supplied by our supplier are used when customers request data sheets on our products. Currently we do not stock the entire range, but we do have access to import the materials if necessary. However, the materials we do stock are as follows:

- Non-Asbestos General Purpose Sheeting
- Non-Asbestos Graphite Sheeting (Wire Reinforcement optional)
- Beta-Sheeting

We also supply other materials, which are not Phoenix branded, such as:

**Tanged Graphite Sheeting** – Tanged Graphite is a high-quality laminate, of which a 316 Stainless Steel sheet is used to reinforce the pure graphite.

**100% Virgin Skived PTFE Sheeting** – Made up of pure PTFE, this sheeting has excellent chemical resistance and is extremely durable.

**Food-Grade Rubber Sheeting** – Used in the food industry, this material is FDA approved, with low-swelling and is 100% non-toxic.

**Rubber Insertion Sheeting** – General purpose rubber with a cotton insert. Not suitable for seawater applications due to rotting of the materials.

**Black Neoprene Rubber Sheeting** – High-grade rubber for use in oil and fuel applications. Neoprene rubber has good weathering capabilities and is flame retardant.

**Nitrile Rubber Sheeting** – Excellent for use in a petrochemical application, but with low UV and ozone resistance.

**Silicone Rubber Sheeting** – Excellent temperature resistance.

**Automotive-Grade Cork Sheeting** – Oil resistant cork used in the automotive industry.

**Transformer-Grade Cork Sheeting** – High-quality, low-density cork used in transformers.

**Flexiod Cellulose Paper Sheeting** – A low-cost cellulose paper with excellent fuel and oil resistances at low pressure and temperature.

**Cemjo DSS Sheeting** – Used predominantly in exhaust applications, DSS is a high-temperature, steel-based material that can be used in exhaust systems of machines and motor vehicles.

**Cemjo DSA Sheeting** – Used predominantly in cylinder heads, DSA is a high-temperature, graphite-based material that can be used in cylinder heads of vehicles. In comparison to DSS, DSA has a lower shore hardness, which makes it ideal for higher pressure applications.

All these materials can be supplied in sheet form or gaskets can be cut to requirements.

With all the soft gaskets that can be cut to specification, we also supply various other materials and components to several different industries.

## PHOENIX PG U

Temperature: 0 - 200°C  
Pressure: 40 Bar Maximum  
GP - Green

## PHOENIX PG-G

Temperature: 0 - 220°C  
Pressure: 60 Bar Maximum  
Graphite - Steam

## PHOENIX PG-GW

Temperature: 0 - 220°C  
Pressure: 70 Bar Maximum  
Graphite & Wire - Steam

## PHOENIX PC-BE

Temperature: -20 - 260°C  
Pressure: 60 Bar Maximum  
Electrical Isolation

## PHOENIX PC-B

Temperature: -20 - 260°C  
Pressure: 60 Bar Maximum  
PTFE + Glass Microspheres

## PHOENIX PC-EX

Temperature: -198 - 260°C  
Pressure: 100 Bar Maximum  
Multi-Directional PTFE

## PHOENIX PC-F

Temperature: -20 - 260°C  
Pressure: 60 Bar Maximum  
PTFE + Silica

## PHOENIX PC-S

Temperature: -20 - 260°C  
Pressure: 40 Bar Maximum  
PTFE Biaxially Orientated Core

## PHOENIX PC-W

Temperature: -20 - 260°C  
Pressure: 60 Bar Maximum  
PTFE + Barium Sulphate

## PHOENIX PG-E

Temperature: 0 - 175°C  
Pressure: 40 Bar Maximum  
GP - Medium Grade

## PHOENIX PG-F

Temperature: 0 - 400°C  
Pressure: 60 Bar Maximum  
Foiled Graphite

## PHOENIX PG-O

Temperature: 0 - 220°C  
Pressure: 50 Bar Maximum  
GP - Medium-High Grade

## PHOENIX PG-Therm

Temperature: 0 - 1000°C  
Pressure: 7 Bar Maximum  
Mica Sheeting

## PHOENIX PG-X

Temperature: 0 - 220°C  
Pressure: 50 Bar Maximum  
GP - High Grade

## PHOENIX PG-Y

Temperature: 0 - 220°C  
Pressure: 50 Bar Maximum  
GP - High Grade

## NITRILE

Temperature: -20 - 80°C  
Pressure: Not Recommended  
Fuel & Oil

## NEOPRENE

Temperature: -20 - 80°C  
Pressure: Not Recommended  
Elements Resistant

## RUBBER INSERTION

Temperature: -20 - 80°C  
Pressure: Not Recommended  
GP - Cotton Reinforced

## SILICONE

Temperature: -60 - 200°C  
Pressure: Not Recommended  
High Temperature

## VITON

Temperature: -30 - 250°C  
Pressure: Not Recommended  
High Temperature

## GP RUBBER

Temperature: -28 - 80°C  
Pressure: Not Recommended  
General Purpose

## LINATEX

Temperature: -15 - 204°C  
Pressure: Not Recommended  
General Purpose

## FOOD GRADE RUBBER

Temperature: -28 - 80°C  
Pressure: Bar Maximum  
Food Grade

## DIAPHRAGM RUBBER

Temperature: -23 - 90°C  
Pressure: Not Recommended  
Nitrile - Nylon Reinforced

## Construction

Gland packing is made in a variety of shapes, sizes and constructions, from a wide range of materials. The following describes the most commonly used constructions, and the advantages of each:

- **Braid-Over-Braid**

Round braiding machines braid tubular jackets using yarns, fibres, ribbons and various other materials, either alone or in combination. Size is obtained by braiding jackets one over the other (braid-over-braid). Finished packings can be supplied in round, square or rectangular cross sections. These packings are relatively dense and are recommended for high-pressure, slow-speed applications such as valve stems, expansion joints, groove gasketing, etc.

- **Braid-Over-Core**

This type of packing is obtained by braiding one or more jackets of yarns, fibres, ribbons or other forms of materials over a core, which may be extruded, twisted, wrapped or knitted. This construction allows for a wide range of densities and different cross sectional shapes.

- **Square Braid**

Yarns, fibres, ribbons and other various materials, either alone or in combination, are processed on equipment where strands pass over and under strands running in the same direction. This packing is soft and can carry a large percentage of lubricant. Square braided packing is easy on equipment and is generally used on high-speed applications at relatively low pressure. This packing's softness makes it ideal for use on worn equipment.

- **Cross Braid**

In this type of packing, strands of the above mentioned materials are crisscross-braided from the surface diagonally through the body of the packing. Each strand is strongly locked by other strands to form a solid integral structure that can not easily unravel or come apart during application. Cross braid packing has a more even distribution of yarn density throughout and has the potential for improved lubrication retention. This packing is relatively dense, but still remains flexible. Cross braid packing is suitable for use on reciprocating and centrifugal pumps, agitators, valves, expansion joints and in grooves.



- **Natural Fibres**

Natural vegetable fibres such as flax, cotton and ramie are used to produce relative economic packing used for low-to medium-duty applications. These materials cope well with alkalis, but are not suitable for acid-based applications. Natural fibres tend to swell in water, making them suitable for marine applications.

- **Asbestos**

Asbestos was the most commonly used material until the late 1980's. This material was phased out due to health concerns, and is illegal to be sold. However, several other synthetic materials have replaced the use of asbestos.

- **Fibreglass**

Fibreglass is made out of very coarse fibres that are too abrasive for dynamic applications. Suitable for high temperature, fibreglass is used in static applications such as furnace doors.

- **Carbon / Graphite**

This material is used in severe applications where temperature and chemical stability is required. Graphite is chemically inert to acids and alkalis, with high temperature compatibility. Graphite is also self-lubricating, tough, and wear-resistant.

- **Synthetic Fibres**

Synthetic fibres are produced at a low cost and in a wide variety such as: Acrylic, Kevlar and Aramid. Synthetic fibres are highly resistant to abrasion, with a medium chemical compatibility.

- **PTFE Fibres**

Also known as Teflon, this material is inert to any chemical attack and has the lowest coefficient of friction. Low thermal conductivity makes it unsuitable for high temperature applications.

## Reinforcing

Reinforcing is a very important aspect of gland packing construction for high-pressure applications. Depending on the type of braid packing, it can be reinforced throughout the packing, or only at the corners. Typical reinforcement materials include Inconel Wire and Aramid Fibres.

In valve applications, Inconel Wire is used to reinforce carbon / graphite fibres for high temperature and pressure applications.

In pump applications, Aramid Fibres are used to reinforce graphite and / or PTFE Yarns for high-pressure applications.

## Lubricants & blocking agents

The fibre yarns in packing serve as the carrier for various types of impregnating lubricants and blocking agents, which provide not only a sealing effect between the various yarns, but also the vital function of lubrication. Packing is only as good as the lubricant it contains. It is said that 90% of the packing's effectiveness is determined by the effectiveness of the lubricant.

The lubricant forms a film around the shaft which not only prevents shaft wear, but also a seal surface that prevents the creation of a leak path that leads to loss of th

Typical lubricants used include:

- Wax
- PTFE Dispersion
- Silicon
- Molybdenum-disulphide
- Graphite Particles



# BASE MATERIALS

In discussing the different types of materials used for packing, the following packing is available from BMG:

## Natural Fibre Packing:

- Natural Fibre Packing treated with PTFE and lubricants
- Packing treated with Graphite and lubricants

## Synthetic Fibre Packing:

- Synthetic Yarn Packing treated with PTFE and lubricants (N3404)
- Synthetic Yarn Packing with Silicone Core treated with PTFE and lubricants (N3404SC)
- Synthetic Yarn Packing treated with Graphite and lubricants (N2609)

## PTFE Fibre Packing:

- PTFE Fibre, Graphite Particle Packing treated with lubricants (N1200)
- PTFE Fibre Packing treated with lubricants (N1300)
- Pure PTFE Packing (N240)

## Graphite Yarn Packing:

- Graphite Yarn Packing (N110)
- Graphite Yarn Packing with Inconel Wire Reinforcement (N1108)
- Graphite Yarn Packing with Carbon Corner Reinforcements (N1800)
- Graphite Yarn Packing with Inconel Wire Reinforcement and Carbon Jacketing (N1900)

## Carbon Fibre Packing:

- Carbon Fibre Packing treated with Graphite and lubricants (N250-3)
- Carbon Fibre Packing treated with PTFE and lubricants (N250-4)

## Aramid Fibre Packing:

- Aramid Fibre Packing treated with PTFE and Silicone lubricants (N220)
- Aramid Filament Packing treated with PTFE and Silicone lubricants (N221)
- Aramid Filament Packing treated with Graphite Silicone lubricants (N221G)
- Aramid Fibre, Corner Reinforced PTFE Yarn Packing treated with lubricants (N230A-1)
- Aramid Fibre, Corner Reinforced PTFE / Graphite Yarn Packing treated with lubricants (N230A-2)
- Aramid Fibre and PTFE Yarn Packing, Zebra Style (N230B-1)
- Aramid Fibre and PTFE / Graphite Yarn Packing, Zebra Style (N230B-2)
- Aramid Fibre and PTFE Yarn Packing, Composite (N230C-1)
- Aramid Fibre and PTFE / Graphite Yarn Packing, Composite (N230C-2)

With so many different combinations of material compositions, gland packing can be mixed and matched to best suite the application requirements.

## PTFE flange sealant

PTFE Flange Sealant is a 100% expanded PTFE Fluorocarbon material. Conforming to irregular shapes and surfaces with an adhesive backing, it's a strong and tough material capable of withstanding high and low temperatures as well as being resistant to a large range of chemicals. PTFE Flange Sealant is contaminant free, easy to apply and a low cost solution that minimizes downtime.

### Available Sizes:

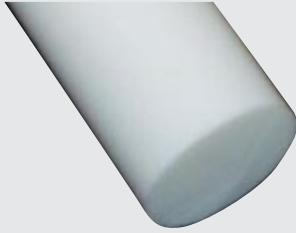
- 3mm x 2mm
- 5mm x 3mm
- 7mm x 3mm
- 10mm x 3mm
- 14mm x 5mm
- 20mm x 5mm
- 40mm x 5mm



## PTFE cord

PTFE Cord is a 100% pure PTFE sealant generally used as a non-hardening valve packing. Its permanently pliable construction allows it to fill voids and conform to mating surfaces. Due to the absence of surface lubricants and chemical fillers, this product has an unlimited shelf life.

**Application:** This sealant has a temperature range of  $-240^{\circ}\text{C}$  to  $+260^{\circ}\text{C}$  and has the ability to withstand pH 0-14. It is commonly used with steam, salt water, acids, propane and nitrogen.



# INSULATING PRODUCTS

## Millboard

A millboard is a clay bonded inorganic fibre material that has a high-temperature capability in excess of  $1000^{\circ}\text{C}$ . A millboard has a low thermal conductivity, which makes it excellent for use in thermal insulating applications.

### Applications:

- Boilers
- Furnaces



## Insulating ropes, tapes & cloth

Thermal insulation products are available in a range of forms and can be designed for folding, wrapping and conforming to a variety of shapes and sizes. The main advantage of these insulating products is that it is excellent to insulate applications at high temperatures.

### Applications:

- Boilers
- Furnaces
- Tanks
- Pipelines

### Styles:

- Tapes – Webbing and Ladder
- Ropes – Twisted, Braided & Lagging
- Cloths – Plain & Folded

### Materials:

- Glass
- Ceramic



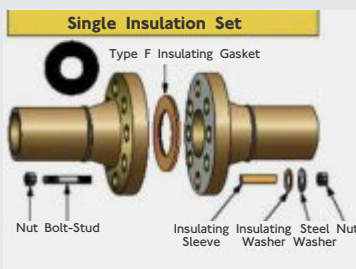
# INSULATING FLANGE SETS

Due to liquid passing through a piping system, friction is caused. This in effect causes the build up of electrons. Due to the properties of metal and its composition, excess electrons cause corrosion. This is not a desired occurrence in underground piping. Due to this issue, insulating flange sets were designed.

Insulating Flange sets consist of a set of components used to completely block off ALL metal-to-metal contact between two flanges. Due to the materials used within a set, the build of electrons is released at the specific point of the insulating set. The release of these electrons prolongs the life of the piping as corrosion build-up is less over a longer period of time.

## A standard insulating set consists of:

- **Washers** – Being a phenolic washer, these washers are very dense and do not conduct any form of current.
- **Bolts** – Being a B7 spec, these bolts (actually studs) are the only spec suitable for insulating sets.
- **Nuts** – Suiting the studs, 2H nuts are specially manufactured for the use on insulating flange sets.
- **Sleeves** – Being a phenolic sleeve, this sleeving is very dense and does not conduct any form of current.
- **Gasket** – Varying from different materials to different customers, this gasket is generally a phenolic neoprene rubber faced gasket.



## Markets

With the ability to manufacture all types of gaskets in virtually any size, BMG Gaskets has a wide scope of markets that we supply to, including:

- Oil & Gas Industry
- Petrochemical Industry
- Chemical Industry
- Pulp & Paper Industry
- Sugar Industry
- Shipping Industry
- Mining Industry
- Metal Melting Industry
- Utility Water & Electricity
- Power Generation – Steam, Nuclear, Hydro
- Automotive OEM & Aftermarket
- Pump & Valve Industry
- Drilling & Exploration
- Food & Pharmaceuticals
- Compressors
- Heavy Plant & Equipment, but to certain customer's specifications, it may also be a Pikotek® gasket. (Transnet approved)



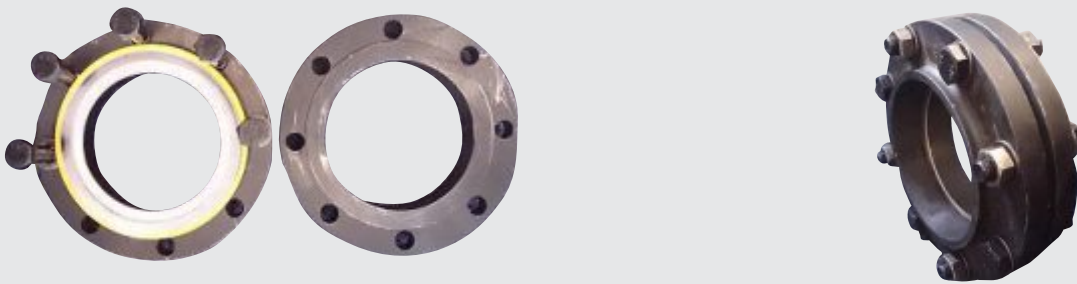


When supplying a gasket, it is often wondered why the customer contacts us for the gasket only. With a bit of initiative and drive, we are able source in and supply the flanges from a trusted supplier. Working hand-in-hand with our Fasteners Division to supply the bolts and nuts, we can supply the full set of products that can be bought from one centralized department. With having this complete set available to our customers, it can be supplied as a quick and easy solution for joining two pipes in their application, saving the customer time and money while providing excellent service.

By using only one branch within the BMG Network, this initiative has proven to be effective and has since been an add-on to our sales.

The following are examples of the complete set that can be supplied to customers. These sets include:

- Flanges
- Nuts
- Bolts
- Washers
- Gaskets



## Gasket cutters

In having the bulk of our orders in sheet form, it is known that the customer cuts their own gasket as they need it. Knowing the time that it will consume to hand cut gaskets in application, a simple, yet effective solution can be used. Supplying gasket cutters to suppliers that often cut gaskets as they need it is a simple, yet very effective solution to untidy gaskets that may cause leaks over time as apposed to how they would perform if cut correctly. The gasket cutter can be offered and supplied to the customer upon buying sheeting and would be able to make use of the technology.

Although expensive on the first purchase, the costs that will occur due to downtime when a gasket fails and needs replacing by hand cutting a gasket would severely over shadow the cost of such a cutter. For example: a gasket fails on an oil rig. With this gasket failing, the main line that pumps out the oil is spewing oil all over the deck, wasting the precious and valuable mineral for the entire duration until another gasket is hand cut to fit and re-seal the fitting. With the use of a gasket cutter, the cutting time will be substantially less, reducing the losses caused by the failure.





# BRINGING THE WORLD'S BEST BRANDS TO YOU

In the bid to procure cutting-edge components at competitive prices, BMG is able to capitalise on long-standing relationships with leading manufacturers dedicated to excellence in design and production.

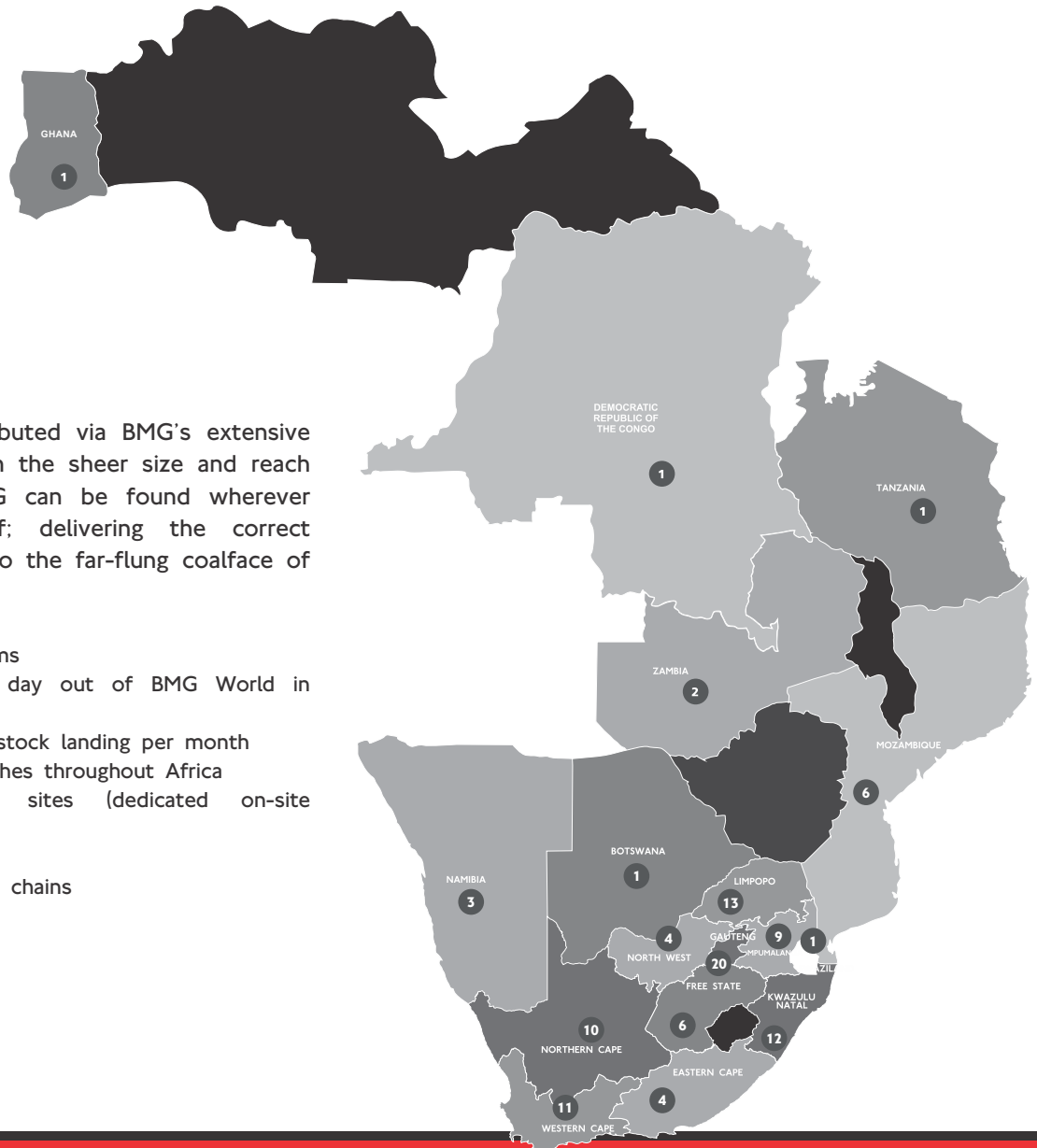
Products are imported from around the globe and brought to BMG's strategically located distribution facilities and regional service centres via the main distribution hub in Johannesburg - BMG World. A world-class facility boasting 308 000m<sup>3</sup> of fully stocked warehouse space, an accredited training facility and unlimited engineering capabilities.

## Preferred Brands:



## Our Extensive Coverage Throughout Africa

**105**  
BRANCHES



Products and services are distributed via BMG's extensive distribution network. It's through the sheer size and reach of our infrastructure, that BMG can be found wherever industry has established itself; delivering the correct components at the right time, to the far-flung coalface of our customers' operations.

- Over 300 000 product line items
- Around 4 500 transfers per day out of BMG World in Johannesburg
- Over 1 000 tons of imported stock landing per month
- 105 strategically situated branches throughout Africa
- Vendor Managed Inventory sites (dedicated on-site stockholding)
- International exports
- Locally empowered distribution chains

# Be PART

24 HR TOLL-FREE EMERGENCY  
BRANCH HELPLINE:

**0800 022 224**

WEBSITE:

**[www.bmgworld.net](http://www.bmgworld.net)**



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