



Fluid Seals



Sealing Packings

PTFE Packings

NP101 Pure PTFE Packing

Description:

This packing is diagonally braided by expanded PTFE thread tape which conforms to FDA standard. It has the features as excellent resistance to chemical and mechanical attacks, great dimensional stability and totally free of silicone, **NP101** is an ideal packing for food industry, pharmaceutical, petroleum and chemicals industry

Application:

It is a ideal packing for pump and valves, where is needed an exceptional behaviour with chemical attack, for its using in acids and bases like sulphuric, chloridric, soda, bleaches and in general all the acids and bases.

Technical Data

Item	Unit	Value
Temperature	C degree	-200 up to 260
Pressure		
Rotating	bar	20
Reciprocating		100
Valves		150
velocity	m/s	8
PH value	-	0-14
Density	g/cm3	1.4



NP101L Pure PTFE Packing with lubricant

Description:

It is made from high purity PTFE filament lubricated with mineral oil - both of which conform to FDA standards. It is also highly chemically resistant and suitable for use in caustic service. It is designed for dynamic condition. The oil can reduce the frictional factor.

Application:

It is recommended for use in rotary food processing equipment such as pumps, dryers, blenders, mixers and cookers as well as acidic mining pumps.

**Technical data**

Item	Unit	Value
Temperature	C degree	-200 up to 260
Pressure		
Rotating	bar	20
Reciprocating		100
Valves		200
velocity	m/s	15
PH value	-	0-14
Density	g/cm3	1.5

**NP104 Graphite PTFE Packing****Description:**

It is a diagonally braided packing of high strength PTFE yarn with high content of graphite particles. Recommended for shafts for almost all chemicals. Stability and long service are achieved by low coefficient of friction, great tear strength and high thermal conductivity. This self-lubricating packing does not score the shaft and minimizes sleeve replacement cost.

Application:

It is to seal alkalis, solvents, water, steam, acids except strong oxidizing acids (aqua regia, fuming nitric acid, fuming sulfuric acid, etc.) for centrifugal pumps, autoclaves, agitators, mixers, etc.

Technical data

Item	Unit	Value
Temperature	C degree	-200 up to 280
Pressure		
Rotating	bar	20
Reciprocating		100
Valves		200
velocity	m/s	15
PH value	-	0-14
Density	g/cm3	1.5

**NP103 Graphite PTFE Packing With Lubricant****Description:**

This Packing is made of 100% graphite PTFE yarn. And re-impregnated with a silicone lubricant. It is an economical graphite PTFE packing.



Application:

It is used in pumps, valves, reciprocating and rotating shafts, mixers and agitators, and can be safely used in all chemical pump applications with the exception of molten alkali materials, fluoride, fuming nitric acid and other strong oxidizing agents.

Technical data

Item	Unit	Value
Temperature	C degree	-200 up to 280
Pressure		
Rotating	bar	20
Reciprocating		100
Valves		150
velocity	m/s	15
PH value	-	0-14
Density	g/cm ³	1.6



PTP PTFE Tank Lid Packing

Description:

It is a multi-layer and multi-fiber braided packing, The outer jacket is braided from tough pure PTFE fibers with lubricant. Under this is a jacket of multiple wraps of heavy duty gauge PTFE tape. The body of the packing consists of dry loosely braided polypropylene fibers. The inner core is NBR rubber, around which is wrapped additional PTFE tape.

Application:

It is an excellent choice for sealing against virtually all chemicals. It is exceptionally resilient and can be made into endless rings in the field. It can be used in all kind of Tank Lids, hatches covers for ships, barges, road and rail transport vehicles, storage tanks etc.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	-
Reciprocating		150
Valves		200
velocity	m/s	10
PH value	-	2-13
Density	g/cm ³	1.1





Fiberglass Packings

NP102L/ NP102LG E-Glass Fiber Packing Impregnated With PTFE And Lubricant

Description:

It is diagonally braided by E-glass fiber yarns which are pre-impregnated by PTFE suspension liquid, afterward it will be re-impregnated by PTFE and lubricated by silicone oil, it is one of the most popular and ideal packings for the replacement of asbestos PTFE packing.

NP102LG is treated by Graphite additionally.

Application:

Universal packing, especially suitable for a wide range of applications for large rotary pumps in the medium pressure range.

Technical data

Item	Unit	Value
Temperature	C degree	-200 up to 280
Pressure		
Rotating	bar	20
Reciprocating		40
Valves		150
velocity	m/s	10
PH value	-	2-13
Density	g/cm3	1.4



Aramid Fiber Packings

NP113 PTFE Packing With Aramid Corner

Description:

It is made of expanded PTFE yarns with reinforced corner from continuous aramid filament, a combination of proved top qualities. It has high cross-sectional density and structural strength. This structure enhances the lubricability of aramid fiber and reinforces the strength of the pure PTFE packing. This special combination packing takes a very important role for high pressure piston pump application.

Application:

It is recommended for piston pump in the universally applicable within the PH range 2-13. It is suitable to be used in Chemical, petrochemical, pharmaceutical, food and sugar industries, pulp and paper mills, etc.

**Technical data**

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	100
Reciprocating		250
Valves		350
velocity	m/s	10
PH value	-	2-13
Density	g/cm3	1.4

**NP114 Graphite PTFE Packing With Aramid Corner****Description:**

It is made of High-quality PTFE with high content of graphite and reinforced corners from continuous aramid filament to prevent gap extrusions within the high pressure and temperature range. It has good sliding velocity, thermal conductivity, and excellent resistance to chemical attack.

Application:

It is recommended for piston pumps up to 500 bar long service live. It can be used to seal water, sewage water, hot water, oils, greases, gases, weak acids and alkaline solutions, abrasive media.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	100
Reciprocating		250
Valves		500
velocity	m/s	15
PH value	-	2-14
Density	g/cm3	1.4

**NP116 Zebra Packing Braided by Graphite PTFE And Aramid****Description:**

This zebra braided packing is made of High-quality PTFE with high content of graphite and continuous aramid filament. It has excellent lubrication ability and thermal conductivity.

**Application:**

This is a universal packing which can be used for pumps in all types of industry including chemical, petrochemical, pharmaceutical, food and sugar industries, pulp and paper mills, power stations and etc.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	100
Reciprocating		250
Valves		500
velocity	m/s	15
PH value	-	2-14
Density	g/cm ³	1.4

**NP119 Continuous Aramid Filament Packing Impregnated With PTFE****Description:**

It is made of Du Pont's kevlar yarn impregnated with PTFE dispersion and treated with lubricant. This packing is used in higher-pressure applications that are normally tolerated by other types of braided packings. Because of the steel-like strength of this yarn, it can be employed separately or as back-up rings with other types to packing go combine different features into a packing set.

Application:

It is perfectly adjustable to every kind of groove in centrifugal and alternative pumps and every rotary equipment, it is suitable to be used in chemical, petrochemical, pharmaceutical, food and sugar industries, pulp and paper mills, etc.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	70
Reciprocating		200
Valves		250
velocity	m/s	25
PH value	-	2-12
Density	g/cm ³	1.4





NP119S/NP119SG Spun Aramid Packing Impregnated With PTFE

Description:

It is diagonally braided from high quality Du Pont's Spun kevlar fiber with PTFE impregnated and lubricant additive. It shows good chemical resistance, high elasticity and very low cold flow. It can resist severe media and higher pressure. The packing is lubricated with silicone based compound for quick and easy break-in.

NP119SG is treated by Graphite additionally.

Application:

It is recommended to be used in high-pressure and dynamic equipment, turbines, and compressors, it is suitable to be used in Chemical, petrochemical, pharmaceutical, food and sugar industries, pulp and paper mills, etc.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	70
Reciprocating		150
Valves		200
velocity	m/s	25
PH value	-	2-12
Density	g/cm3	1.4



Carbon Fiber Packings

NP118/NP118G Carbonized Fiber Packing Impregnated With PTFE

Description:

It is diagonally braided from Pre-oxidized synthetic fiber (carbonized fiber) impregnated with PTFE dispersion. Pre-oxidized fiber has high strength and good thermal conductivity, and PTFE makes the packing have excellent self-lubrication. It is inert to almost all corrosive chemicals. It can replace PTFE asbestos packing within wide service range.

NP118G is treated by Graphite additionally.

**Application:**

It is recommended to be used in weak acids and alkalis or media containing few grains of solid particles. Mainly used for centrifugal pumps, plunger pumps, mixers and valves.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	20
Reciprocating		100
Valves		200
velocity	m/s	15
PH value	-	2-12
Density	g/cm3	1.4

**NP118MG/ NP118HG Carbon Fiber Packing Impregnated With Lubricant And Graphite****Description:**

It is diagonally braided from high quality continuous carbon filament impregnated with a unique graphite dispersion throughout. Individual yarns are single-end coated and single-end dried prior to braiding with high temperature non-petroleum based lubricant with graphite dispersion. It provides a low coefficient of friction and high thermal conductivity, so your process runs cooler and the packing lasts longer.

NP118HG can withstand temperature up to 800C degree.

Application:

For general applications and general service with high temperatures and high pressures in valves, pumps and sealing applications. Service with steam, oil, bleach, solvents, acids, alkalis and other products.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 500
Pressure		
Rotating	bar	50
Reciprocating		100
Valves		200
velocity	m/s	15
PH value	-	0-14
Density	g/cm3	1.4





Cotton Fiber Packings

P209W Cotton Fiber Packing With Grease

Description:

It is diagonally braided from 100% natural cotton fiber impregnated and coated with medical Vaseline, It is non-toxic and food grade white packing which can be used in food and pharmaceutical industry.

P209 is cotton fiber impregnated and coated with industrial butter, color yellow.

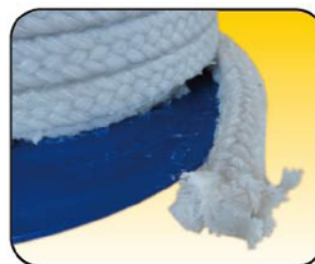
P209G is cotton fiber impregnated and coated with industrial butter and graphite, color black.

Application:

It is recommended to be used in marine, brewing and beverage industry, suitable for pumps, refiners, filters and valves work in low temperature and low pressure.

Technical data

Item	Unit	Value
Temperature	C degree	-30 up to 120
Pressure		
Rotating	bar	20
Reciprocating		20
Valves		30
velocity	m/s	15
PH value	-	6-8
Density	g/cm3	1.1



P209P/P209PG Cotton Packing Impregnated With PTFE And Lubricated

Description:

It is diagonally braided from 100% natural cotton fiber impregnated PTFE dispersion and heat resistant lubricant, it has a superior sealing and stability because of the flexibility and low friction fitting with shaft. It is an ideal replacement for asbestos PTFE packing.

P209PG has additional treatment with graphite.

Application:

It is recommended for hydraulic service, both of seawater or fresh water, it is suitable for centrifugal and alternative pumps, valves, agitators, etc.



Technical data

Item	Unit	Value
Temperature	C degree	-30 up to 120
Pressure		
Rotating	bar	20
Reciprocating		30
Valves		80
velocity	m/s	17
PH value	-	4-11
Density	g/cm3	1.3



Ramie Fiber Packing

NP108L/NP108LG Ramie Fiber Packing Impregnated With PTFE And Lubricant

Description:

It is diagonally braided from 100% natural Ramie fiber impregnated PTFE dispersion and heat resistant lubricant, Ramie is stronger than flax, cotton and jute, it has got high abrasion and extrusion resistance and low friction factor, it is a flexible readily, controllable packing which requires little maintenance and treats shafts gently.

NP108LG has additional treatment with graphite.

Application:

It is used to seal pumps, refiners, filters, valves in the brewing and beverages industry, the paper-making industry, shipbuilding and other fields. And especially used in the foodstuffs and pharmaceutical industries. It is suitable for water of all qualities, sea water, weak acids and alkalis, brines, oils, greases, celluloses mashes, and especially resistant to abrasive media.

Technical data

Item	Unit	Value
Temperature	C degree	-30 up to 120
Pressure		
Rotating	bar	20
Reciprocating		50
Valves		100
velocity	m/s	17
PH value	-	4-11
Density	g/cm3	1.3





Acrylic Fiber Packings

NP106BL Acrylic Fiber Packing With Graphite And Lubricant

Description:

It is diagonally braided from high strength acrylic fiber treated with graphite and special lubrication. The graphite increased the temperature and excellent lubricated. It is an ideal replacement for **P203** asbestos packing with graphite and lubricant.

Application:

It is a universal packing for pumps and valves, it is suitable for hot water, air, steam, mild acids and alkalis, and all kinds of organic solvents and chemicals.

Technical data

Item	Unit	Value
Temperature	C degree	-50 up to 260
Pressure		
Rotating	bar	20
Reciprocating		30
Valves		80
velocity	m/s	12
PH value	-	2-12
Density	g/cm3	1.1



NP106L/NP106LG Acrylic Fiber Packing Impregnated With PTFE And Lubricant

Description:

It is achieved interlocking braided asbestos free, synthetic fiber packing, PTFE dispersion and heat resistant lubricant is impregnated, it has a superior sealing and stability because of the flexibility and low friction fitting with shaft.

NP106LG has additional treatment with graphite.

Application:

It is suitable for centrifugal pumps, valves and dynamic equipment in Marine industry, sewage and residual applications, agriculture and enology installations, foundry and steel plants and for all sorts of applications like mining, vessels, sugar mills, heating and others.



Technical data

Item	Unit	Value
Temperature	C degree	-50 up to 260
Pressure		
Rotating	bar	20
Reciprocating		80
Valves		100
velocity	m/s	17
PH value	-	1-13
Density	g/cm3	1.3



Expanded Graphite Packings

G103M Expanded Graphite Packing With Cotton Filament Reinforcement

Description:

It is diagonally braided from high carbon content flexible graphite yarns, which are individually reinforced by cotton fiber, glass fiber, carbon fiber, etc. It has a very low friction, good thermal and chemical resistance and high elasticity.

G103F has yarns reinforced by glass filament.

G103C has yarns reinforced by carbon filament.

G103M-CI is treated with corrosion inhibitor.

Application:

These products are almost suitable to all media, such as: hot water, steam, oils, heat-exchanging liquids, acids, alkalis, ammonia, hydrogen, organic solvents, hydrocarbons, low temperature liquids, etc. They can be applied to the valves, pumps and other devices in petroleum, electricity generation, chemical, pharmaceutical and light industries.

Technical data

Item	Unit	Value
Temperature	C degree	-200 up to 650
Pressure		
Rotating	bar	80
Reciprocating		-
Valves		250
velocity	m/s	15
PH value	-	0-14
Density	g/cm3	1.1





G103S Expanded Graphite Packing With Stainless Steel Wire Reinforcement

Description:

It is diagonally braided from high carbon content flexible graphite yarns, which are individually reinforced by extra stainless steel wire based on regular filament reinforcement as mentioned in **G103M**, **G103F** and **G103C**. The wire reinforcement provides greater mechanical strength, and it is recommended to be used for high pressure and temperatures.

G103I has yarns reinforced by inconel wire.

Application:

It is a multi-service packing capable of a wide variety of uses throughout a plant.

It can be used in valves, pumps, expansion joints, mixers and agitators in high-pressure and high temperature.

Technical data

Item	Unit	Value
Temperature	C degree	-200 up to 650
Pressure		
Rotating	bar	-
Reciprocating		200
Valves		350
velocity	m/s	-
PH value	-	0-14
Density	g/cm ³	1.2



G103CC Expanded Graphite Packing With Carbon Fiber Corner

Description:

It is a multi-fiber packing, braided from high carbon content expanded graphite yarns and carbon fibers, the diagonally braided from graphite yarn, reinforced in all four corners with carbon fibers. The corners and body make the packing three times more resistant to extrusion and increase the pressure handling capabilities compared to traditional graphite packings.

Application:

It can be used in many demanding applications, both dynamic and static.

Particularly suited for high temperature and high pressure service in valves, pumps, expansion joints, mixers and agitators of pulp and paper, power station and chemical plant etc.

**Technical data**

Item	Unit	Value
Temperature	C degree	-200 up to 650
Pressure		
Rotating	bar	30
Reciprocating		100
Valves		260
velocity	m/s	18
PH value	-	0-14
Density	g/cm3	1.2

**G103IO Expanded Graphite Packing With Each Yarn Jacketed By Inconel Wire****Description:**

It is diagonally braided from high carbon content expanded graphite yarns with corrosion inhibitor. Each yarn is jacketed by inconel knitted mesh, it is very special and super packing especially for working in the condition with extremely high pressure and high temperature.

Application:

It can handle most chemical, acids and alkalis. Excellent for use in steam turbines, high temperature motor-actuated valves and for high temperature and high pressure valve applications in general.

Technical data:

Item	Unit	Value
Temperature	C degree	-200 up to 650
Pressure		
Rotating	bar	-
Reciprocating		300
Valves		500
velocity	m/s	-
PH value	-	0-14
Density	g/cm3	1.5

**G103MP Expanded Graphite Packing Impregnated With PTFE****Description:**

It is diagonally braided from high carbon content expanded graphite yarns which impregnated



with PTFE as a blocking agent thus creating a non-straining packing. PTFE makes the packing have excellent self-lubrication which will improve the packing performance in dynamic applications.

Application:

It can be used in many demanding applications, both dynamic and static. Particularly suited for high temperature and high pressure service in valves, pumps, expansion joints, mixer and agitators of pulp and paper, power station and chemical plant etc.

Technical data:

Item	Unit	Value
Temperature	C degree	-200 up to 280
Pressure		
Rotating	bar	50
Reciprocating		100
Valves		250
velocity	m/s	14
PH value	-	0-14
Density	g/cm3	1.2



Asbestos Fiber Packings

AP103L Asbestos Packing Impregnated With PTFE And Lubricant

Description:

It is diagonally braided from fine asbestos (chrysotile) fiber impregnated with PTFE and heat-resistance lubricant. It has anti-corrosive and long service properties. It is the economic packing suitable for rotary and reciprocating pumps and for valves as well.

Application:

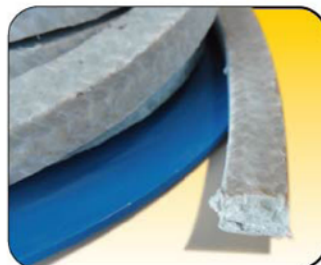
Universal packing, especially suitable for a wide range of applications for large rotary pumps in the medium pressure range.

Suited for chemical neutral and resistant to water, steam, hot air, oils, etc.



Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 280
Pressure		
Rotating	bar	10
Reciprocating		30
Valves		80
velocity	m/s	10
PH value	-	3-13
Density	g/cm3	1.2



P203M Asbestos Packing With Graphite And Lubricant

Description:

It is diagonally braided from high quality asbestos (chrysotile) fiber impregnated with graphite and oil, it has good elasticity and good sliding properties. It can be reinforced with metal wire.

P203S has yarns reinforced by stainless steel wire.

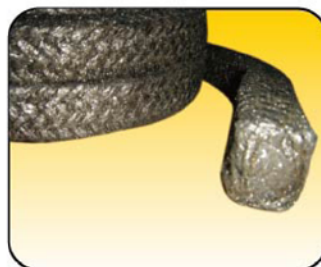
P203I has yarns reinforced by inconel wire.

Application:

Universal packing, for rotary, reciprocating pumps, in ship building and domestic fresh water pumps, it is suited for chemical neutral and resistant to water, steam, hot air, oils, etc.

Technical data

Item	Unit	Value
Temperature	C degree	-100 up to 300
Pressure		
Rotating		10
Reciprocating	bar	20
Valves		60
velocity	m/s	10
PH value	-	6-14
Density	g/cm3	1.0





Sealing Gasket

SWG Spiral Wound Gaskets

Description:

Spiral wound gaskets are special semi-metallic gaskets of great strength and resilience, therefore they are suitable for use under heavy operating conditions. Spiral wound gaskets are manufactured by spiral winding V-shaped metal strip and strip of non-metallic filler material. Spiral wound gaskets can be reinforced with an outer centering ring and/or inner retaining ring.



Applications

Pipe, valve, pump, thermal exchange, condensing tower, plain hole and man hole of flange, etc.

Petrochemical, chemical, mechanical manufacturer, power station, metallurgy, shipbuilding, medical and pharmaceutical unclear power station and navigation, etc.

Basic structure and materials:

Type	Cross section	Hoop material	Filler material	Inner, outer ring material
Basic type		AISI304, 316 ect.	Expanded	Carbon steel,
With inner ring		As specified	graphite, PTFE or	AISI304, AISI316,
With outer ring		stainless steel	other specified	and other specified
With inner, outer ring		belt	materials	materials

Main technical data

Commodity	Pressure (kgf/cm ²)	Temp (°C)	Leakage rate	Min pre-tight	Factor
Spiral wound gasket filled with expanded graphite	(Under hot water, oil, etc.) 300	In Oxidizing Media	$1.0 \times 10^{-5} \text{ cm}^3/\text{s}$	400kgf/cm ²	2.5~3
		-240~550			
Spiral wound gasket filled with PTFE	150	-200~250	$1.0 \times 10^{-5} \text{ cm}^3/\text{s}$	400kgf/cm ²	2.5~3

RJG Ring joint gasket

Description

Standard style R ring type joints are manufactured in accordance with both API 6A and ASME B16.20 size and ratings. Available in both oval and octagonal configurations, both types are interchangeable on the modern octagonal type grooved flanges.



Application:

The ring type joint was initially developed for high pressure and temperature applications found in



the petroleum industry and is primarily used in the oil field on drilling and completion equipments. However, today this product range can also be found on valves and pipework assemblies, along with some high integrity pressure vessel joints.

LGG Laminated Expanded Graphite Gasket

Description:

It is made of flexible expanded laminated sheet inserted or tanged inserted with 0.05mm or 0.1mm thick stainless steel foil. It arranges plurality of metallic foil vertically to the direction of leakage. This eliminates the transverse leakage to the gasket.

Application:

It is suitable for sealing hot water, high temperature and pressure steam, hydrogen gas, ammonia, solvents, hydrocarbon cryogenic liquid, etc, except fewer strong oxidizer.

Technical data:

Item	Unit	Value
Temperature	C degree	-200 up to 650
Pressure		
Rotating	bar	-
Reciprocating		600
Valves		600
velocity	m/s	2
PH value	-	0-14



GRING Expanded Graphite Molded Ring(Die Formed Ring)

Description:

It is made of low-sulphur and high carbon content expanded graphite foil tape without any filler and binders. It is compressed in precise moulding tools to the required density. Due to the high purity of the material, no special corrosion protection is required. In general, it has square section and V-Shaped and Wedge-shaped section

LGRING is laminated and reinforced by stainless steel foil

Application:

Bear violent alteration of temperature and pressure. It is ideal packing for valve and static seal in almost all applications. Can be used as stand-alone packing or combination other packing rings

**Technical data**

Item	Unit	Value
Temperature	C degree	-200 up to 650
Pressure		
Rotating	bar	10
Reciprocating		50
Valves		800
velocity	m/s	2
PH value	-	0-14

**PJS-O Expanded PTFE Joint Sealant Tape****Description:**

It is an inorganic sealant for static applications made of 100% PTFE . A unique process converts PTFE to a micro-porous fibrous structure, resulting a sealant with an unsurpassed combination of mechanical and chemical properties. It is supplied with a self-adhesive strip for easy fitting.

Application:

It is specially suited for sealing flanges connection, pipe systems, hydraulic and pneumatic system, etc.

Technical data:

Item	Unit	Value
Temperature	C degree	-200 up to 280
Pressure		
Fluid seal	bar	200
Gas seal		150
PH value	-	0-14

**PRCORD Expanded PTFE Soft Cord****Description:**

It is made of pure expanded PTFE, used as valve-spindle and flange seals in the chemical, pharmaceutical and food processing industries. Flanges are sealed quickly and securely by simple insertion of a ring of PTFE round cord

Application:

It is recommended for flanges, valve or faucet stems, pump housings, stuffing boxes, rotary pump shafts, reciprocating rods, centrifugal pumps, rams and expansion joints. For most acids, alkalies, solvents, fuels, air, water, steam, refrigerants, gases and liquified gases.

**Technical data**

Item	Unit	Value
Temperature	C degree	-200 up to 280
Pressure		
Fluid seal	bar	200
Gas seal		150
PH value	-	0-14

**GS/GF Pure Expanded Graphite Laminated Sheet and Foil****Description:**

It is made from high purity graphite, it is used can be expanded graphite particles formed by the high temperature expansion of repression, it retains the high temperature crystalline flake graphite, corrosion resistant, self lubricating, etc.

Application:

It is the raw materials for packing rings and various kinds of gaskets, it is used widely in chemical, automotive and pump, valve industries

Technical data:

Item	2nd grade	1st grade
Tolerance of density g/cm ³	+/-0.06	+/-0.05
Carbon content >= %	98/99	99.5
Tensile strength >= Mpa	4	5
Compressibility >= %	30	30
Recovery >= %	15	15
Sulphur content <= %	1200	700
Chlorine content <= %	50	25
Stress relaxation rate %	10	10
Ignition loss <= %	2	0.5
Temperature °C degree	-240~+650	
PH	0~14	

**Reinforced Expanded Graphite Laminated Sheet****Description:**

It is comprised of expanded graphite sheet and various steel sheets such as tanged, flat, or mesh. It has character of thermally stability, high strength and no cold flow, etc. It is an ideal material of all kinds of reinforced graphite gaskets, engine head gaskets, etc.



Application:

It is suitable for making gaskets of cylinders for are compressors, internal combustion engines and packing for different kinds of piping, and flanges with the condition of high pressure and high temperature.



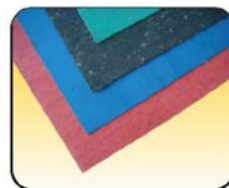
Technical data:

Ref. No.	inserted material	method of insertion	stability under compressive stress (N/mm2)	compressibility % ASTM F36A-66	recovery ASTM F36A-66	Gas permeability cm2/min DN3553
GSCST	carbon steel 0.20mm	Tanged	≥ 48	30~35	15~20	≤ 0.8
GSS304T	AISI304 steel 0.1mm	Tanged	≥ 48	30~40	15~30	≤ 0.8
GSS316T	AISI316 steel 0.1mm					
GSS304I	AISI304 steel 0.05mm	Plain insertion	≥ 45	40~50	10~15	≤ 0.4
GSS316I	AISI316 steel 0.05mm					
GSS304M	AISI304 steel mesh	Plain insertion	≥ 40	30~35	15~20	≤ 1.0
GSS316M	AISI316 steel mesh					

Asbestos Jointing Sheet

Description:

It is made from selected asbestos fiber, natural rubber(NBR for oil resistance asbestos sheets), filling materials and dye, it is compressed and calendared under high temperature and pressure into a sheet form.



Application:

It is mainly used for the equipment in acid, water, steam, etc. and also for flange of pipeline joint and so on.



Ref No.	Temp. C degree	Pressure Bar	Compressibility %	Recovery %	ASTM #3 oil under 150C+5H		ASTM Fuel A under 230C+5H	
					weight %	thickness %	weight %	thickness %
XB200	200	35	40	12	-	-	-	-
XB300	300	50	40	12	-	-	-	-
XB350	350	60	40	12	-	-	-	-
XB400	400	100	45	12	-	-	-	-
XB450	450	150	50	12	-	-	-	-
NY150	150	50	45	12	<25	<20	<25	<20
NY250	250	80	45	12	<25	<20	<25	<20
NY300	300	100	45	12	<15	<10	<15	<10
NY400	400	150	45	12	<15	<10	<15	<10
NY510	500	300	50	12	<10	<8	<10	<8

Additional treatment:

Inserted with wire mesh

Coated with graphite

Anti-sticky treatment

Available dimension:

Thickness: From 0.4mm up to 6mm

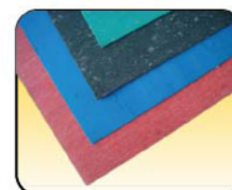
Width: 1.27m, 1.5m, and 2m

Length: 1m, 1.5m, 2m, and 4m.

Non-Asbestos Jointing Sheet

Description:

It is made from aramid fiber, vegetable fiber, mineral fiber, NR+NBR and other chemical filler, compressed and calendared under high temperature and pressure into a sheet form. It eliminates asbestos-rubber sheet essentially and thoroughly.



Application:

It is suitable for water, high temperature steam, compressed air, joint part of tubing, valve, heat exchanger, etc. It can also be used in food and medicine industrial

**Technical Data**

Ref No.	Temp. C degree	Pressure Bar	Compressibility %	Recovery %	ASTM #3 oil under 150C+5H		ASTM Fuel A under 230C+5H	
					weight %	thickness %	weight %	thickness %
1910NK	150	35	45	11	-	-	-	-
1920K	200	50	45	11	<20	<15	<20	<15
1930K	300	80	45	12	<20	<15	<20	<15
1940K	400	100	50	12	<20	<15	<20	<15

Additional treatment:

Inserted with wire mesh

Coated with graphite

Anti-sticky treatment

Available dimension:

Thickness: From 0.4mm up to 6mm

Width: 1.27m, 1.5m, and 2m

Length: 1m, 1.5m, 2m, and 4m.

WF Wool Felt Sheet Gasket**Description:**

Made from pressed white sheep hair shaped into sheet form. Used for filling or stopping oil because of its high absorbency to oil.

**Application:**

It is the material of choice for a wide range of "spacing" situations such as seals for bearings, spacers in automotive applications, and any other situation where a cushioning effect is desired between two rigid structures. Washers and gaskets are also ideal for sealing out dust and similar contaminants as well as retaining lubricants

Material composition:

Wool content: >85%

Acrylic content: <15%

Moisture: <5%

Other impurities: <3%

Specification:

Thickness: From 1mm up to 100mm

Width: 1m up to 1.8m

Density: 0.3g/cm³ -0.4g/cm³



Cork Sheet

It is made from clean granulated cork mixed with resin binder and synthetic rubber polymer.

Ref No. **CKRS**: Cork mixed with resin binder

Ref No. **CKRBS**: Cork mixed with NBR



Application:

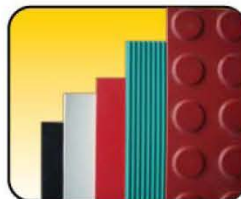
Make for gaskets of various engines of automobiles, tractors, plans, ships, and pipes petroleum, transformers, electric equipment, etc.

Technical data:

Item	Unit	Ref No. CKRBS	Ref No. CKRS
Density	kg/m ³	>270	>24
Tensile Strength	Mpa	>0.55	>0.4
Compressibility	%	15-40	15-40
Recovery	%	>75%	>75%
Flexibility	%	<12	<12
Resistance to boiling water, 3hours	-	NO DISINTEGRATION	-
Resistance to boiling Hydrochloric acid, 0.5hours	-	NO DISINTEGRATION	-
Resistance to hot oil, 3hours	-	NO DISINTEGRATION	-
Moisture content	%	<8	<8
Dimension of sheet	mm	(0.8-100)THK X 610 W. X 915 L.	

Rubber sheeting

Firewheel supplies complete range of rubber sheets, according to different requirement offers a variety of material rubber sheets, we produce all kinds of rubber products according to customer's demands.





Description	Ref No.	Density G/cm3	Hardness Shore A	Tensile strength Mpa	Elongation %
Black SBR rubber sheet	SBR BLK	1.6	70	3.5	250
Black SBR rubber sheet with insertion	SBRC BLK	1.6	70	3.5	230
Red SBR rubber sheet	SBR RED	1.6	65	3.5	280
Red SBR rubber sheet with insertion	SBRC RED	1.6	65	3.5	280
Black NBR rubber sheet	NBR	1.5	70	4.5	280
White food grade NBR rubber sheet	NBRW	1.5	65	4.5	280
Black Neoprene rubber sheet	NEOPRENER	1.5	65	4	280
Red silicone rubber sheet	SLC RED	1.25	50	7	350
Transparent silicone rubber sheet	RSSILICONE	1.25	50	7	350
Static-Resistance rubber sheet	SERR	1.5	65	6	320
Viton rubber sheet	VR	2	75	8	300
Rubber sheet with ribs	RSRIB	1.6	70	3.5	250
EPDM rubber sheet	EPDM	1.4	70	6	300
Ordinary rubber sheet	RSN	1.75	70	2	200
Rubber sheet with stud	RSSTUD	1.6	70	3.5	250

We offer a lot of color options for above mentioned rubber sheets.

All the rubber sheets could be reinforced by fabrics or metal wire insertion as requested

All the rubber sheets could have additional abrasive treatment on the surfaces as requested.

If you are interested in the rubber sheets not mentioned above, please contact our sales and technical persons.

Mica sheet

MFS-G Flexible Phlogopite Laminated sheet is a laminate, bonded with silicone binder, This sheet is flexible in ambient temperature. Possesses excellent incombustibility, heat-resistance and electric properties. Its heat-resistance goes up to 750°C.

MRS-G Rigid Phlogopite Laminated sheet is a laminate, bonded with silicone binder, This sheet is punchable. Possesses excellent incombustibility, electric and heat-resistance properties. And Its heat-resistance goes up to 750°C.



MRS-W Rigid Muscovite Laminated sheet is a laminate, bonded with silicone binder, This sheet is punchable. Possesses excellent incombustibility, electric and heat-resistance properties. And Its heat-resistance goes up to 500°C.



MFS-W Flexible Muscovite Laminated sheet is a laminate, bonded with silicone binder, This sheet is flexible in ambient temperature. Possesses excellent incombustibility, heat-resistance and electric properties. Its heat-resistance goes up to 500°C.

Application:

Above sheets can be used as liner, wrappers, tubes and spacer against high heat and voltage

MG304T It is made of flexible(or rigid) Phlogopite laminated sheets reinforced with perforated AISI304 plate without binder. This material is suitable as high temperatures gaskets at low pressures and specially designed for services where high temperatures combined with fluids could promote the oxidizing process of materials such as graphite. It has excellent incombustibility, heat-resistance and electric properties. It's heat-resistance goes up to 750°C.

Application:

Recommended for high temperature turbines, turbochargers, heat exchangers, hot dry gas applications and on the whole for high temperature services. In automotive industry is suitable to be used in exhaust manifolds and engines. It is also recommended for chemical, petrochemical industry and refining plants where high temperature operations are carried out (mainly pyrolysis and catalysis processes)