



FIBERGLASS-BASED PRODUCTS

Fiberglass Square Section Gasket

They are fully braided, dense, square/rectangular section packings with high tensile strength and performance.

It is produced by braiding glass fiber ropes in the form of hair braids, in cross-sections generally varying between 5-100 mm.

Roll lengths can vary from 25-50-100 m depending on the cross-section size. It is knitted in a square section with 3 and 4 cross stitches.



Average Weights of Standard Measures in One Meter											
Cut mm ²	4x4	6x6	8x8	10x10	12x12	14x14	16x16	18x18	20x20	25x25	30x30
Gr. / m	25	40	70	100	140	180	270	340	450	600	850

Graphite Fiberglass Gasket

The glass fiber packing is then subjected to the graphite coating process. Graphite coating reduces friction loss.

Glass fiber packing is widely used in static seal applications. It has thermal insulation and fire prevention features in systems such as containers, heaters, manhole covers and pipes. It is a material suitable for environments that are neutral in terms of chemical properties such as water, steam, air, oil and similar.



VALUE	TECHNICAL SPECIFICATIONS	
	Fiberglass gasket	Graphite Fiberglass Gasket
Operating Temperature	450°C - 550°C	450°C - 550°C
PH Ratio	5-9	5-9
Intensity	0.9-1.1 g/cm ³	1.1-1.3 g/cm ³

AVERAGE WEIGHTS OF STANDARD DIMENSIONS IN ONE METER											
Section mm ²	4x4	6x6	8x8	10x10	12x12	14x14	16x16	18x18	20x20	25x25	30x30
Gr. / m	40	50	80	120	160	250	310	400	450	700	900

Fiberglass Woven Strip

Glass fiber products are made of high temperature resistant glass fibers for environments with an operating temperature of 537 °C. It has excellent thermal resistance, high tensile strength, low thermal permeability and very good chemical resistance. It is durable, resistant to mold and harmless to health. Fiberglass products are an ideal material for industrial insulation, sealing felt and gasket applications.

Main Characteristics:

- + Heat, spark and flame resistance + Chemical resistance
- + Low thermal transmittance + High tensile strength, no tensile elongation + High dielectric strength + Does not pose a danger to health



Fiberglass Fabric

Texturized glass fiber fabric is made of bulky yarns obtained by texturing glass fiber rovings with high pressure air. It has features such as high temperature resistance, low thermal permeability coefficient, corrosion resistance, high dust retention and high filtration. It is not harmful to human health and is a very good alternative to asbestos material.

Scope of application

All types of thermal insulation and protection. Expansion joints, safety equipment, pipe insulation.

In the ship industry



TECHNICAL SPECIFICATIONS	
Weaving Style	Straight
Weight	600 - 3000 g/m ²
Thickness	0.80 - 5 mm
Width	1 - 1.5 m
Size	30 - 50 m

Operating Temperature	- 70 °C - 550 °C
Tensile Strength	W ell : 1200 - 7500 N/5 cm
	W arp : 2000 - 8500 N/5 cm
Chemical resistance, dimensional stability, good thermal property	
Low moisture absorption ability, price advantage	

Compensator

Fabric covered compensators, take the leakage with high vibration and thermal expansion and assembly of low-pressure pipe layer and is used in some places, with the aim of achieving a high sound and heat insulation. Compensators, each consists of a plurality of layers having different physical and chemical characteristics.

Fiberglass Round Section Gasket

They are fully braided, dense, circular-section packings with high tensile strength and performance.

Glass fiber ropes are braided in the form of hair braids and are generally produced in cross-sections varying between 5-100 mm.

Roll lengths can vary between 25-50-100 m depending on



Average Weights of Standard Measures in One Meter											
Diameter mm	Ø4	Ø6	Ø8	Ø10	Ø12	Ø14	Ø16	Ø18	Ø20	Ø25	Ø30
m/grad	15	24	40	60	80	110	150	190	230	350	500

Folded Pure Fiberglass Strip

The glass fiber packing is then subjected to the graphite coating process. Graphite coating reduces friction loss. Glass fiber packing is widely used in static seal applications. It has thermal insulation and fire prevention features in systems such as containers, heaters, manhole covers and pipes. It is a material suitable for environments that are neutral in terms of chemical properties such as water, steam, air, oil and similar.



Average Weights of Standard Measures in One Meter										
Section (Most x Thickness) mm x mm	20x5	20x3	25x5	25x3	30x5	30x3	40x5	40x3	50x5	50x3
Folded Glass Fiber Ribbon	200	120	250	150	300	180	400	240	500	300
Graphite Folded Glass Fiber Ribbon	233	140	291	175	349	209	466	279	582	349

Fiberglass Crochet Mesh

It has the feature of flexibility and lengthening due to being knitted with a different knitting technique.



TECHNICAL SPECIFICATIONS	
Environment	It is especially preferred on stove covers.
Heat	600 °C
Dimensions	6 - 8 - 10 - 12 - 14 mm

Silicone Coated Fiberglass Fabric

Silicon coated glass fiber fabric is coated with a specially crafted double-sided or single-sided silicon. High strength, flame blocking, high temperature resistance, chemical resistance, puncture resistance, lack of toxicity, and has similar benefits.

Applications :

- . Welding blankets . Heat protection equipment
- . Spatter protection equipment in a casting plant . Conveyor belt
- . Expansion connections . Electrical insulation
- . Chemical corrosion resistance
- . Aviation, Maritime, in the chemical industry, in power plants, in the automotive industry, the construction industry, industrial pipes and gaskets



TECHNICAL SPECIFICATIONS		Two surface	One Side
Silicone type	W et	Working Temperature	- 700C - 3000C
Weight	500g/m ²	Resistant to ozone, oxidation, light, and weather conditions	
Thick	0.5 mm	Suitability for outdoor use	
Width	1 m, 1.2 m, 1.5 m, 2 m.	Up to 10 years of service life	

Features :

- . High vibration and noise elimination . Thermal expansion compensation . 700 °C maximum operating temperature . High flexibility . Minimum reaction conditions such as the required operating force is produced with suitable different design.



SERAMIC-BASED PRODUCTS

Ceramic Seal Square Section

The high-quality ceramic yarns made from alumina-silica material are woven in a 3 and 4-strand crisscross style. This square-sectioned material possesses high temperature resistance and stability, low thermal permeability, low heat storage capacity, excellent thermal shock resistance, lightweight, and good corrosion resistance properties. It can be produced in the desired dimensions.

Average Weights of Standard Measures in One Meter											
Section mm ²	4x4	6x6	8x8	10x10	12x12	14x14	16x16	18x18	20x20	25x25	30x30
Gr. / m	25	40	55	70	100	130	165	200	260	400	520



Ceramics Circular Seal

Which is made of alumina-silica material is built with high quality ceramic fibers. Circular the material strength and high temperature stability, low thermal conductivity, low heat storage capacity, excellent thermal shock resistance and has light weight and good corrosion resistance properties. Stainless steel wire and nickel wire reinforcement options are also available.

. Industrial furnace closures . Chokes, High temperature pipes, Vehicles . Sealing and insulation equipment

Average Weights of Standard Measures in One Meter											
Diameter mm	Ø4	Ø6	Ø8	Ø10	Ø12	Ø14	Ø16	Ø18	Ø20	Ø25	Ø30
m/gr abt	15	24	40	60	80	110	150	190	230	350	500



Ceramic Fiber Roving (Screw) Packing

Definition : Which is made of alumina-silica material is built with high quality ceramic fibers. Used for high temperature applications. Yarn stainless steel wire, can be amplified with a high alloy wire and fiberglass.

- . Oven, Chimney, Kazan, Expansion Links
- . Cable and pipe wrapping Umeda
- . High temperature gasket and seal materials as



Average Weights of Standard Measures in One Meter													
Diameter mm	Ø4	Ø6	Ø8	Ø10	Ø12	Ø14	Ø16	Ø18	Ø20	Ø25	Ø30	Ø35	Ø40
m/gr abt	15	22	36	50	55	70	140	180	220	340	480	680	880

Ceramic Fiber Cloth, Wire / Wireless

Biodegradable ceramic fiber fabric is a fabric made from high quality tapping thread is water soluble. High temperature up to 1000 OC available. This fiber fabric of glass fiber and reinforced with stainless steel wire. This material, which adversely affect the insulating properties and comprises a combustible amount of binder at low temperatures.

- . Expansion connections . Security blankets and curtains . Welding blankets .
- Protective and insulating cover . Shield, gasket, cables and pipes as coil



TECHNICAL SPECIFICATIONS	
Reinforcement material	Glass fiber filaments
Weaving type	Straight
Operating temperature	1000 °C
Thick	1.5 - 5 mm
Width	1 m, 1.2 m, 1.5 m

Ceramic Fiber Blankets

It is made of high quality ceramic fiber. Lightweight, flexible and a wide variety of thickness, width and density can be performed.

- . Industrial materials in the oven, heating equipment, high temperature in the pipe coating . Electric heating boilers, turbines and nuclear thermal insulation
- . In the chemical plants lining the walls, and heating equipment, high temperature reaction . Architectural coatings and heat insulation against fire
- . To isolate the oven door and cover . High temperature resistant filter made materials . In waterproof shutter system . For the purpose of thermal insulation in shipbuilding

This material can withstand up to 1260 ° C. Low thermal conductivity with excellent handling strength, low thermal capacity, thermal shock resistance and corrosion resistance, has a very good sound absorption and fire protection.



TECHNICAL SPECIFICATIONS	
Intensity	0.064 gr./cm ³ , 0.096 gr./cm ³ , 0.128 gr./cm ³
Chemical composition	Al ₂ O ₃ : % 47; SiO ₂ : % 50, Total: Al ₂ O ₃ or SiO ₂ > % 97; Fe ₂ O ₃ : < % 1.0
Specific Heat (@ 2000°F)	0.27 Kcal/(Kg°C)
Operating Temperature	Continuous: 982 °C, Maximum: 1260 °C

Ceramic Fiber Woven Ribbons

Imaledil from alumina-silica materials are built with high quality ceramic fibers. Used for high temperature applications. Ceramic strips can be reinforced with glass fiber. 2 mm to 10 mm can be produced up to 100 meters in width and thickness of 25-100 mm. Continuous operating temperature is 982 ° C.

- . Protecting and insulating cover and curtains . Cable and pipe wrapping material .
- Expansion connections . Seals and sealing material in high temperature environments . Oven, Chimney, Boilers, Exhaust Systems

AVERAGE SIZE OF WEIGHT ON THE METERS OF STANDARDS					
Section mm ²	20x2	30x2	40x2	50x2	100x2
m/gr abt	25	35	45	55	110



Ceramic Fiber Bord (Plate)

Definition : Ceramic fiber board is formed in a material able to resist a vacuum higher gas velocities than ceramic fiber blanket. This material furnaces, boilers input and output, are widely used in industrial flue liner. Having low thermal conductivity and low thermal capacity provides rapid response on the use and rapid maintenance to be performed.

Applications :

- . In industrial furnaces . Combustion chambers, boilers and process heaters
- . Brick and monolithic refractory material to the supporting material
- . The molten aluminum and the transport of molten nonferrous metals
- . The expansion joints

Features :

- . Low thermal conductivity . Low thermal capacity . Lightness, showing the need for a second isolation .
- Excellent thermal shock resistance . The hot gas erosion resistance . To be most resistant to chemical corrosion . Cutting-use and ease of installation, low noise transmission . The molten aluminum and molten non-ferrous metal is resistant to contact . It does not contain asbestos



TECHNICAL SPECIFICATIONS				
Main characteristics	Test Method		Unit	Value
	Alloys	Al ₂ O ₃		
SiO ₂		-	-	20%
Other Metal Oxides		-	-	10%
Intensity	-	lbs./in ³ (gr./cm ³)	0.075 (2.1)	
Operating Temperature	-	°F (°C)	2,500 (1,370)	
Structural Operating Temperature	-	°F (°C)	1,430 (775)	
Compressive Strength	ASTM D-695	psi (MPa)	13,650 (90)	
Bending Strength	ASTM D-790	psi (MPa)	8,400 (58)	
Porosity of	-	%	35	
Volume Resistance	ASTM D-257	Ohm x cm	52 x 1010	
Dielectric Strength (Wide Surface Direction)	ASTM D-149	V/mil (kV/mm)	91 (3.6)	
Dielectric Constant	ASTM D-150	-	5.5	
Thermal Conductivity (648 °C)	ASTM C-177	BTU/in/hr/°F	4.69	

Ceramic Fiber Paper

Definition : Obtained by passing a multi-process are made of special ceramic fibers. Easy to cut. As the sealing material in a hot environment is very convenient. Up to 1260 ° C ceramic fiber paper applications are possible.

- . Steel and metallurgy, petrochemical, automotive, aviation, etc. . High temperature and chemical resistance, thermal insulation in the desired environment, gaskets, separators, lining . Fire, sparks, molten metal protection . High temperature electrical insulation . High temperature filtration
- . Excellent elasticity . High temperature, chemical corrosion resistance . Thermal shock stability, low thermal conductivity . Low density, high strength . The protection shape . Excellent sound insulation
- . Filtering feature . Heat resistance up to 1260 ° C.

TECHNICAL SPECIFICATIONS	
Intensity	0.160185 gr/cm ³
Chemical composition	Al ₂ O ₃ : 47%; Total Al ₂ O ₃ or SiO ₂ : > 97%; Fe ₂ O ₃ : < 1.0%
Tensile Strength	1.72 bar
Operating Temperature	Continuous: 982 °C, Maximum: 1260 °C

OTHER PRODUCTS

Yellow Oil Seal

Paraffin and synthetic additives impregnated with special oils and cotton yarn is manufactured as 2-3 times the cross-sectional square braided.

- . Ship shafts
- . Cold water engines
- . Pipe connections



VALUES	SHAFT	PISTON PUMP	VALVE
PH		2-14	
P (bar)	8	20	60
Vg (m/s)	12	1.5	2
T (°C)		80	

AVERAGE SIZE OF WEIGHT ON THE METERS OF STANDARDS												
Section mm ²	4x4	6x6	8x8	10x10	12x12	14x14	16x16	18x18	20x20	22x22	25x25	30x30
Gr. / m	40	60	70	120	170	280	350	380	530	630	850	1550

White Oil Seal

Paraffin and synthetic additives impregnated with special oils and cotton yarn is manufactured as 2-3 times the cross-sectional square braided.

- . Ship shafts
- . Cold water engines
- . Pipe connections

VALUES	SHAFT	PISTON PUMP	VALVE
PH		4-14	
P (bar)	8	20	60
Vg (m/s)	12	1.5	2
T (°C)		70	

AVERAGE SIZE OF WEIGHT ON THE METERS OF STANDARDS												
Section mm ²	4x4	6x6	8x8	10x10	12x12	14x14	16x16	18x18	20x20	22x22	25x25	30x30
Gr. / m	30	50	90	110	250	260	270	280	390	480	830	1500

Oily Hemp Seal

The industrial plant which is produced by knitting of strings Obtained from hemp. Coefficient of friction is a natural material and the durability is higher.

- . Pumps
- . In the boat
- . Salt water environments



Warehouse (Ship) Cover Grommet

Definition : EPM interior of the wick to the desired size and Nitrile O-ring onto the glass fiber yarns woven with special oil is fortified with PTFE thread topcoat. Chemical gases, petroleum products and in providing fluid sealing, see the cover of the seal function because it has a flexible structure.

- . Tankers
- . Refineries
- . Filling facilities
- . The hatch covers



Boiler Cover Gasket

Definition : These seals, graphite and rubber materials impregnated with glass fibers or ceramic fabric is manufactured by shaping hot the desired dimensions. Providing easily adaptable to uneven surfaces is an important convenience.

Wire Reinforced Cover Gasket: If requested, the wire seal made of reinforced fabric cover options can be met.

Replacing the boiler door gasket once a year is recommended.



	TECHNICAL SPECIFICATIONS			
	HEAT	PRESSURE	PH RATIO	DENSITY
Boiler Cover Gasket	500°C	30 bar	Oca.14	1.20-1.40 g/cm ³
Wire Reinforced Cover Gasket	500°C	50 bar	Oca.14	1.40-1.52 g/cm ³

Ceramic and Glass Fiber Seal Custom Manufacturing

Definition : The outer surface is woven lattice. Providing protection from external factors have gained strength and increased friction coefficient.



Crankshaft Seal

Crank shaft seal is one of the most important seal in a motor vehicle. Crankshaft seal, keeps the place that should be used to prevent contamination of the engine oil and oil of contaminants such as dust, dirt outside. Felt the harsh conditions, the pressure is designed to be resistant to heat and oil. Felt cold weather pull-up, should the expansion in hot weather. It is therefore of great importance is the quality of the crankshaft seals..

