

Ceramic Fiber Products

Ceramic fiber products are heat insulation, sound insulation, refractory and thermal insulation materials in the high temperature field, and are specially used in various high temperature, high pressure, and easy-wear environments.

Ceramic fiber products include ceramic fiber paper, ceramic fiber board, ceramic fiber profiles and other aluminum silicate products.

Ceramic Fiber Paper



Ceramic fiber paper is produced from high-purity ceramic fiber cotton and is used in the field of high temperature insulation. This product has excellent high temperature resistance and heat insulation performance, and has excellent resistance to hot melt penetration. It can be widely used in construction and glass industries, and provides excellent heat resistance and heat preservation in a limited space.

Product Advantages:

- Low thermal conductivity, low heat capacity
- Free of asbestos and corrosive substances
- Flexible texture, tear-resistant
- Excellent electrical insulation and sound insulation properties
- Excellent corrosion resistance

Applications:

- Industrial insulation, sealing, anti-corrosion materials;
- Electric heating device insulation, heat insulation materials;
- Insulation and heat insulation materials for instruments and equipment, electric heating elements;
- Insulation materials for the automotive industry.



Detailed Use:

- Iron and steel industry: sealing of flange equipment, thermal insulation of casting
- Non-ferrous metals industry: backing insulation, tundish and launder covers for pouring copper or copper-containing alloys
- Ceramic industry: Lightweight kiln car structure and hot surface lining of kiln, separation of various temperature zones and refractory materials
- Glass industry: hot bending glass, glass demoulding
- Kiln construction: filling and sealing of kiln door and roof expansion joints
- Light Industry: Electrical and Electronic Thermal Insulation and Sealing
- New energy vehicles: add heat insulation layer between battery packs

Grade		Standard	Aluminium	Zirconium	
Classification Temperature ($^{\circ}C$)		1260	1350	1450	
Working Temperature ($^{\circ}$ C)		≤1100	≤1250	≤1350	
Density (KG/m ³)		180-200			
Thermal Conductivity by mean temperature (W/m.k)		0.07 (400°C)	0.069 (400°C)	0.068 (400°C)	
		0.09 (600°C)	0.088 (600°C)	0.087 (600°C)	
		0.12 (800 ℃)	0.110 (800°C)	0.100 (800°C)	
Compressive Strength (Mpa)		0.65	0.7	0.75	
Chemical Composition (%)	Al ₂ O ₃	42-43	52-53	39-40	
	SiO ₂	53	44	44	
	ZrO ₂	-	-	15-17	
	Fe ₂ O ₃ +Ti ₂ O ₃	≤1.2	≤0.3	≤0.2	
	Na ₂ O+K ₂ O	≪0.5	≤0.3	≤0.2	
	CaO+MgO	0.3	≤0.3	≤0.2	
Size (mm)		90000x610/1220x0.5mm 60000x610/1220x1mm			
		30000x610/1220x2mm 20000x610/1220x3mm			
		15000x610/1220x4mm 12000x610/1220x5mm			
		10000x610/1220x6mm 7500x610/1220x8mm			
		6000xx610/1220x10mm 5000xx610/1220x12mm			

Technical Data:

Remarks: The above data is for reference only, the maximum temperature depends on the working environment.



Ceramic Fiber Board



The ceramic fiber board is refined by vacuum forming process, dried and machined. In addition to the excellent performance of the corresponding bulk aluminum silicate fiber cotton, various types of ceramic fiberboards have hard texture, excellent toughness and strength, and excellent wind erosion resistance.

The product does not expand when heated. Light in weight, convenient in construction, and can be cut at will, it is an ideal energy-saving material for kilns and other thermal insulation equipment.

Product advantages:

- Uniform thickness and consistent bulk density
- Low thermal conductivity, low heat capacity, good thermal insulation performance
- Excellent thermal stability and thermal shock resistance
- The surface of the ceramic fiber board is smooth and flat
- Superior mechanical strength and structural strength
- High compressive strength and good toughness
- Excellent air erosion resistance
- Easy to cut and install

Applications:

- Industrial kiln wall lining, masonry insulation
- Kiln lining of high temperature kiln, kiln car, furnace door baffle, kiln furnace temperature partition, high temperature, high heat equipment heat insulation, heat preservation, aerospace, shipbuilding industry heat insulation, fire prevention, sound insulation, insulation
- Kiln door roof expansion joint filling and sealing



Detailed Use:

- Iron and Steel Industry: Backing insulation, heat shields and mold insulation
- Non-ferrous metals industry: backing insulation, tundish and launder covers for pouring copper or copper-containing alloys
- Ceramic industry: Lightweight kiln car structure and hot surface lining of kiln, separation of various temperature zones and refractory materials
- Glass industry: Melt pool backing insulation, burner blocks
- Furnace Construction: Hot Face Refractories, Heavy Refractory Backings
- Light industry: backings for combustion chambers of industrial and domestic boilers
- Petrochemical industry: high-temperature heating furnace lining to obtain hot surface materials
- Building materials industry: thermal insulation of cement rotary kiln and other equipment

Grade		Standard	Aluminium	Zirconium	
Classification Temperat	ure (°C)	1260	1350	1450	
Working Temperature (°C)	1100	1250	1350	
Density (KG/m ³)		280-500			
Thermal Conductivity by mean		0.085 (400 ℃)			
	iy mean	0.132 (800°℃)			
temperature (W/m.k)		0.180 (1000℃)			
Compressive Strength (Mpa)		0.5			
	Al ₂ O ₃	42-43	52-53	35	
Chemical	SiO ₂	53	46	45	
	ZrO ₂	/	/	15-17	
Composition (%)	Fe ₂ O ₃	≤1.2	≤0.3	≤0.2	
	Na ₂ O+K ₂ O	≪0.5	≪0.3	≤0.2	
Size (mm)		1000x600x10-50mm 1200x1000x10-50mm			
		1200x500x10-50mm 900x600x10-50mm			
		1000x1200x10-50mm 600x400x10-50mm			
		Other sizes and shapes of ceramic fiberboard can be			
		customized according to requirements.			

Technical Data:

Remarks: The above data is for reference only, the maximum temperature depends on the working environment.

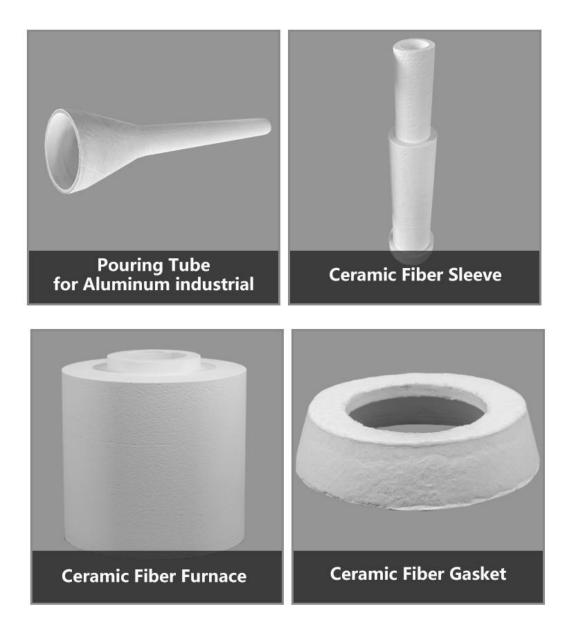


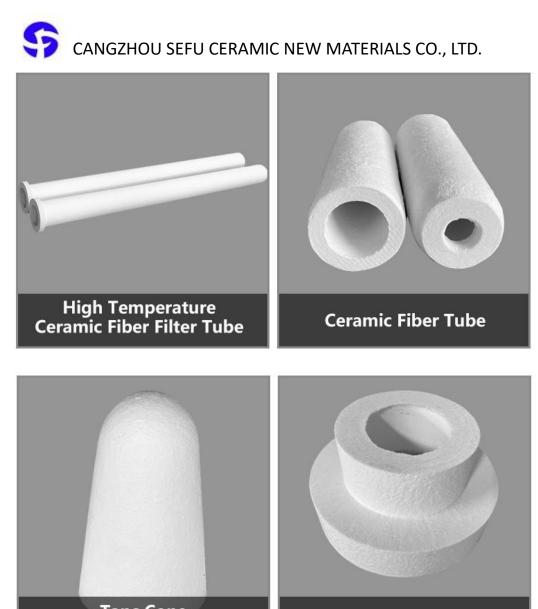
Ceramic Fiber Shapes

Ceramic fiber special-shaped parts are made of high-quality ceramic fiber cotton by vacuum forming process. It can be made into rigid and self-supporting special-shaped products with superior high-temperature performance.

Ceramic fiber special-shaped parts include tube shape, cone shape, dome shape and square box shape. Most of the special-shaped products are produced according to customer requirements, such as casting caps and casings for non-ferrous metal industry, and vacuum-formed fire watch for petrochemical industry. hole etc.

The product has high strength, accurate size, good fire resistance and heat insulation effect, and can be directly exposed to fire. The classification temperature is 1050-1430°C.





Taps Cone for Aluminum Industry

Riser Sleeves for Foundries

Product Advantages:

- Low thermal conductivity, low heat capacity
- Tough texture, strong wind erosion resistance
- Excellent construction and installation performance
- Excellent thermal shock resistance and thermal stability
- Excellent heat preservation and heat insulation effect

Applications:

- Liners for non-ferrous metal melting tanks, casting risers
- Thermal radiation insulation for domestic and industrial heating installations
- Tap Out Cone and Launders in the Aluminum Industry



- Burners, furnace doors, observation holes of industrial kilns
- High temperature experimental furnace hearth lining refractory material
- Nozzle sealing ring, pouring conduit opening, etc.

Technical Parameters:

Grade	Standard	High Aluminium	Zirconium	
Working Temperature ($^\circ\!\mathbb{C}$)	1150	1260	1450	
Shrinkage on Heating (%)	800°C×24h≤ - 3	1000°C×24h≤ - 3	1280°C×24h≤ - 3	
	200 ℃	0.055-0.065		0.060-0.070
Thermal Conductivity (w/m.k) (250kg/m ³)	400 ℃	0.110-0.120		0.105-0.125
	600 ℃	0.170-0.180		0.170-0.180
Bulk Density (kg/m³)	300~450			
Size	According to customer's requirements and drawings			

Remarks: The above data is for reference only, the maximum temperature depends on the working environment.