

## Ceramic Fiber Blanket

### Ceramic Fiber Needled Blanket

Common, standart, high-purity, alumina, zirconium, zirconium-aluminium, zirconia containing swinging and injecting fiber blanket mullite, zirconium dioxide cyrstal fiber blanket.



Working Temperature						
Item	COM	ST	HP	HA	HAZ	HZ
Specification Temp. (°C)	1100	1260	1260	1360	1360	1430
Working Temp (°C)	<1000	1050	1100	1200	1200	1350

### Applications

- Lining of Stove, Heating Equipment and high-temperature Pipeline.
- Electric Boiler, Gas Engine and heat insulation of Nuclear Power.
- Lining of high-temperature reacting and heating equipments in Chemical Enginnering.
- Heat insulation of Kiln Door and Cover.
- Fireproofing and heat insulation of High Buildings.
- Material for high temperature filtrating.

## Ceramic Fiber Sheet and Shaped Pieces

Common, standart, high-purity, alumina, zirconium-aluminium, zirconia containing ceramic fiber sheet and fire damper. Mullite, zirconium dioxide cyrstal fiber sheet and types of shaped pieces.



Working Temperature						
Item	COM	ST	HP	HA	HAZ	HZ
Specification Temp (°C)	1100	1260	1260	1360	1360	1430
Working Temp (°C)	<1000	1050	1100	1200	1200	1350

## Applications

- Liners of industrial furnace.
- High temperature liner, vehicle baffle of furnace door, disjunctive board of temperature.
- High temperature equipment insulation, heat preservation.
- Space navigation, ship building, heat insulation fireproofing, sound insulation, insulation.

## Ceramic Fiber Combination Pieces

### Ceramic Fiber Combination Piece, Anchorage Pieces

Common, standart, high-purity, Alumina, Zirconium-aluminium, Zirconia containing ceramic fiber combination pieces.



Working Temperature						
Item	COM	ST	HP	HA	HAZ	HZ
Specification Temp (°C)	1100	1260	1260	1360	1360	1430
Working Temp (°C)	>1000	1050	1100	1200	1200	1350

## Applications

The metallurgical, machinery, construction materials, petrochemicals, non-ferrous metal industries various industrial furnaces, heating device lining.

## Ceramic Fiber Paper

Standart, high-purity, Alumina, Zirconia containing, Graphite Ceramic Fiber Paper.



## Applications

- Insulation, seal and safety materials for industrial need.
- Insulation and heat insulation materials for electro thermal equipments.
- Insulation and heat insulation materials for apparatus, equipments and electro thermal components. Heat insulation materials for automobile.

## Fiber Refractory Castables

### Refractory Castables

HY-1260 fiber refractory castables, HY-1400 fiber refractory castables.



Working Temperature		
Item	HY-1260	HY-1400
Temp Classification (°C)	1260	1400

## Applications

Industrial furnace wall lining or high temperature industrial furnace insulation layer lining dorsal.  
Electric Furnace Furnace Door, observation hole, firing Tsui brick.  
Nonferrous metal, black metal melting groove.

## Zirconia Fibers

Zirconia fibers are yttria stabilized polycrystalline fibers and the only refractory fiber material which satisfies long-term usage under super-high temperature oxidizing atmosphere environments over 1600 °C. The high melting point 2700 °C of zirconia itself, non-oxidable and fine high temperature-resistant properties, imparting zirconia fibers' service temperature and better thermal insulating performance than market-existing refractory oxide fibers, such as alumina fibers and mullite fibers. The excellent high temperature stability, corrosion resistance, thermal shock resistance and non-pollution properties make zirconia fibers the best candidate for high demand refractory fiber materials. The performance includes the super-high service temperature, the best thermal insulating property, the best corrosion resistance performance, the lowest volatilization and non-pollution properties at high temperatures and so on.



### Performance Index

1- Chemical compositions	: WT% of tetragonal $ZrO_2 \geq 99\%$ .
2- Fibers microstructure	: Polycrystalline structure.
3- Shape appearance	: Translucent, look like white silks.
4- Average diameter	: 3-8 microns.
5- Long term service temperatures	: 1600-2200 °C
6- Coefficient of thermal conductivity	: 0.1-0.15 W/m.k.
7- Bulk density	: 60-150 Kg/m <sup>3</sup>
8- Shot content	: 0, not any shot in fibers.

### Working Temperature

Maximum work temperature of zirconia fibers is up to 2000 °C, even as high as 2500 °C, zirconia fibers can remain normal shape.

### Applications

- Zirconia fibers can be used in spaceflight, military and nuclear power fields.
- Zirconia fibers can be used in ceramic sintering, single crystal growth, metal smelting, petroleum cracking, materials heat treatment and scientific research fields.
- Zirconia fibers also can be used as high-temperature filtration materials and high-temperature reaction catalyst carriers, and so on.