

■ CERAMIC FIBER TEXTILES

Version: May, 2012

Ceramic fiber textiles contain the rope, tape, yarn and cloth. Luyangwool[®] ceramic fiber textiles are woven or braided from yarn consisting of refractory ceramic fiber with approximately 20% organic fiber. Inserted materials are reinforced into the yarn to increase the tensile strength of fibers. Alloy wire inserts are available for obtaining maximum strength at high temperatures. Glass filament inserts are used in applications where electrical resistance is required, Luyangwool[®] ceramic fiber textiles have been a workable insulation materials for thermal gaskets and wrapping, its unique functions and features are gaining more popularity in the high temperature insulations.



■ Categories of Textiles

Yarn, Cloth, Square braided rope
Round braided rope, Twisted rope, Tape, Sleeve

■ Features

- Low thermal conductivity
- Low heat storage
- Reduces fume emission around refractory
- Excellent thermal shock resistance
- Resistance to gas velocity
- Easy to install
- Adheres to most ceramic and metallic surface
- Excellent corrosion resistance
- Inert to most chemicals
- Impermeable to molten aluminum, zinc, copper & lead
- Asbestos free

■ Typical Applications

- Gasket and wrapping material
- Cable and wire insulation
- Welding curtains and blankets
- Furnace curtains & heat zone separators
- Fuel line insulation
- Expansion joints
- High temperature seals and packing in furnaces
- Door seals for stoves and ovens
- Thermally insulating pipe wrap
- Kiln car seals

Typical Parameters

| Description | GF Cloth | SS Cloth | GF Tape | SS Tape |
|------------------------------------|----------------|-----------------|----------------|-----------------|
| Density (kg/m ³) | 500 | 500 | 500 | 500 |
| Classification Temperature (°C) | 1260 | | | |
| Maximum Operating Temperature (°C) | 500-600 | 1000 | 500-600 | 1000 |
| Water Content (%) | ≤1 | | | |
| Organics content (%) | ≤15 | | | |
| Reinforced material | Glass Filament | Stainless steel | Glass Filament | Stainless steel |

* GF: glass filament, SS: stainless steel

Typical Parameters

| Description | GF-R-Rope | SS-R-Rope | GF-T-Rope | SS-T-Rope |
|------------------------------------|----------------|-----------------|----------------|-----------------|
| Density (kg/m ³) | 500 | 500 | 500 | 500 |
| Classification Temperature (°C) | | | 1260 | |
| Maximum Operating Temperature (°C) | 500-600 | 1000 | 500-600 | 1000 |
| Water Content (%) | | | ≤1 | |
| Organics content (%) | | | ≤15 | |
| Reinforced material | Glass Filament | Stainless steel | Glass Filament | Stainless steel |

* GF: glass filament, SS: stainless steel, R-Rope: round braided rope, T-Rope: twisted rope

| Description | GF-S-Rope | SS-S-Rope |
|------------------------------------|----------------|-----------------|
| Density (kg/m ³) | 500 | 500 |
| Classification Temperature (°C) | | 1260 |
| Maximum Operating Temperature (°C) | 500-600 | 1000 |
| Water Content (%) | | ≤1 |
| Organics content (%) | | ≤15 |
| Reinforced material | Glass Filament | Stainless steel |

* GF: glass filament, SS: stainless steel, S-Rope: square braided rope

| Description | GF-Yarn | SS-Yarn | Woolen Rope |
|------------------------------------|----------------|-----------------|----------------|
| Density (kg/m ³) | 500 | 500 | 330-430 |
| Classification Temperature (°C) | | 1260 | |
| Maximum Operating Temperature (°C) | 500-600 | 1000 | 500-600 |
| Water Content (%) | | ≤1 | |
| Organics Content (%) | | ≤15 | |
| Reinforced material | Glass Filament | Stainless steel | Glass Filament |

* GF: glass filament, SS: stainless steel

The data shown are average results of tests under standard procedures and are subject to variation. Results should not be used for specification purposes or creating any contractual obligation. For more information on the safety application or materials, please refer to the work practices and material safety data sheet.