



Product Data

Ceramic Fibre Cabled Ropes

High and Low Density

Construction:

Saveguard Cabled Ropes are manufactured from high performance C-TEX ceramic fibre yarns (high Density) or twisted Card Sliver (Low Density), re-inforced with either a wire or glass filament. C-TEX sliver and yarns are produced on traditional textile machinery by carding high purity 1260 grade ceramic fibres with a percentage of cellulose fibre to assist in the processing. The yarns are spun and combined with the relevant re-inforcing media to improve the tensile strength at extended temperatures. The yarn or sliver is first assembled and twisted together to form the required diameter of the individual plies which are then reverse twisted and balanced to produce a cabled rope.

The organic content will burn off at temperatures above 200 °C without affecting the properties of the ceramic fibre however adequate ventilation should be provided during this initial firing. Where tensile strength is important the temperature limitations of the re-inforcing media should be considered.

Properties:

Ceramic Fibres are:

- suitable for use at temperatures up to 1260C dependant on application
- resistant to most chemicals except Phosphoric, Hydrofluoric acids and strong alkalis
- are non combustible.
- have a low thermal conductivity
- resistant to thermal shock

Re-inforcements
Temp Limitations:

E' Glass filament	Suitable for temperatures up to 550 °C
Nickel Chrome Alloy Wire 601	Suitable for temperatures up to 1091C
Chrome Steel Wire	Suitable for temperatures up to 1000C

Chemical Properties

Alumino-Silicate 80%	Al ₂ O ₃	46%
	SiO ₂	53%
Cellulose 20%		tolerance +/- 5%

Availability

Diameter	6mm	9mm	12mm	20mm	25mm	40mm	50mm
Coil Length in metres	100	50	50	25	25	20	20
Grammes per metre (Low Density)	10	28	50	94	146	433	650
Grammes per metre (High Density)	15	34	60	141	195	490	750

Typical
Applications:

Bulb material for Tadpole seals
Furnace, Boiler Door Seals
Lauder Section Seals

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