

ITM-Fibermax®

Polycrystalline Mullite/Alumina (PCW) Wool and Needled Blankets
up to 1600 °C (2912 °F)



Photography: Lufner Web - www.schupp.com



ITM-Fibermax® blankets are high temperature, lightweight and flexible products manufactured from polycrystalline mullite/alumina wool (PCW) that can be exposed to temperatures up to 1600 °C (2912 °F).

The blankets contain no organic binders or other additives which cause outgassing fumes or other associated problems. In addition to excellent resistance to the most corrosive agents, ITM-Fibermax® products are also stable in oxidizing and reducing conditions. The PCW material is RCF-free and shot-free. That makes ITM-Fibermax® wool and blankets ideal to be used in environment where presence of shot is undesirable.

The blanket possesses outstanding handling strength and resiliency at elevated temperature afforded by its mineral composition and unique needling process to interlock wool in blanket. Because of its flexibility at high temperatures, ITM-Fibermax® blankets are ideally suited for various types of module systems.

Additional characteristics are:

- excellent thermal stability and thermal shock resistance
- excellent chemical stability
- excellent tensile strength
- low thermal conductivity
- low heat storage
- high heat reflectance
- excellent corrosion resistance
- excellent hot strength
- RCF-free and shot-free

Wool & Blankets – Material Properties

		Bulk Wool 1600 unchopped, chopped	Blanket 1600/100	Blanket 1600/130
SiO ₂	[%]	Al ₂ O ₃ + SiO ₂ ≥ 99	28	28
Al ₂ O ₃	[%]	72	72	72
Classification Temperature	[°C]	1600	1600	1600
	[°F]	2912	2912	2912
Max. Service Temperature – Permanent	[°C]	1600	1600	1600
	[°F]	2912	2912	2912
Density	[kg/m ³]	/	100	130
Thermal Conductivity [W/mK]	800 °C (1472 °F)	/	0.20	0.18
	1200 °C (2192 °F)	/	0.42	0.36
	1400 °C (2552 °F)	/	0.59	0.51
Linear Shrinkage, 24h at	1200 °C (2192 °F)	/	0.0	0.0
	1400 °C (2552 °F)	/	0.3	0.3
	1500 °C (2732 °F)	/	0.7	0.7
	1600 °C (2912 °F)	/	1.0	1.0
	1700 °C (3092 °F)	/

Wool & Blankets – Available Types

		Bulk Wool 1600	Blanket 1600/100	Blanket 1600/130
Standard Dimension	[mm]	-	7200 x 610	
Standard Thickness	[mm]	-	12.5 and 25	
Form		unchopped, chopped	needled	
Type of Packaging		10 kg bag of wool	roll / carton on pallet	

Special sizes or thicknesses are available on request.