CERAMIC FIBER BLANKET · BRAND: LUYANGWOOL®

Ceramic Fiber Blanket

Needled ceramic fiber blanket – four grades from 1260 °C to 1430 °C

Product Overview



LUYANGWOOL® Blanket is a high-strength, needled insulating blanket made from LUYANGWOOL® bulk fiber. Long spun fibers combined with needling give a tough, resilient blanket that resists tearing both before and after heating.

The blanket is completely inorganic and is available in several temperature grades, densities and sizes. It can be folded, compressed and encapsulated to make modules.

Key Features

- Excellent thermal shock resistance
- Excellent thermal stability
- High tensile strength
- Low thermal conductivity
- Low heat storage

Typical Applications

- Pipe wrap
- Furnace and kiln back-up insulation
- Chimney insulation
- Annealing furnace linings
- Process heater linings

Technical Data

Grade	STD Blanket			HP Blanket		HA Blanket		HZ Blanket	
Classification Temperature (°C)	1260			1260		1350		1430	
Chemical Composition (%)									
Al_2O_3	≥ 43			≥ 44		≥ 52		≥ 35	
SiO_2	≥ 54			≥ 55		≥ 47		≥ 49	
ZrO_2	–			–		–		≥ 15	
Colour	White			White		White		White	
Shot Content (%)	≤ 15			≤ 15		≤ 15		≤ 12	
Density (kg/m³)	64	96	128	96	128	96	128	96	128
Tensile Strength (kPa)	30	50	70	50	70	50	70	50	70
Permanent Linear Shrinkage (%), 24 h	≤ 2.5 at 1000 °C			≤ 2.5 at 1100 °C		≤ 3.0 at 1200 °C		≤ 3.0 at 1350 °C	
Thermal Conductivity (W/m·K)									
200 °C	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
400 °C	0.12	0.11	0.10	0.11	0.10	0.11	0.10	0.11	0.10
600 °C	0.20	0.19	0.18	0.19	0.17	0.18	0.16	0.16	0.15
800 °C	0.30	0.23	0.20	0.23	0.20	0.22	0.20	0.21	0.19
1000 °C	0.40	0.32	0.27	0.31	0.26	0.30	0.26	0.30	0.26

All values are typical average results given for guidance only; they do not constitute a guaranteed specification. Suitability for a specific application should be confirmed by the user.