Spun Ceramic Fiber Blanket

Nutec Fibratec* ceramic fiber blanket is composed of long, flexible, interwoven fibers manufactured by the "spun" process yielding a strong, lightweight yet durable blanket for applications in a temperature range from 538°C (1000°F) to 1482°C (2700°F).

Nutec Fibratec* Blanket has the heat resistance of a hard refractory with much better insulation value and the following features:

Features

- Low thermal conductivity.
- Very low heat storage.
- Very high tensile strength.
- Thermal shock resistance.
- Sound absorption.
- Quick repairs. Should lining damage occur, furnace can be cooled quickly.
- Contains no binder, no fumes or furnace atmosphere contamination.
- Contains no asbestos.
- No curing or dry out time, lining can be fired to operating temperature immediately.

Typical Applications

Refining and Petrochemical

- Reformer and pyrolysis lining.
- Tube seals, gaskets and expansion joints.
- Crude oil heater linings.

Steel Industry

- Heat treating and annealing furnaces.
- Furnace door linings and seals.
- Soaking pit covers and seals.
- Furnace hot face repairs.
- Reheating furnace and ladle covers.

Ceramic Industry

- Kiln car insulation and seals.
- Continuous and batch kilns.

Power Generation

- Boiler insulation.
- Boiler doors.
- Reusable turbine covers.
- Expansion seals pipe covering.
- High temperature pipe, duct and turbine insulation.

Others

- Insulation of commercial dryers and ovens.
- Veneer over existing refractory.
- Stress relieving insulation.
- Glass furnace crown insulation.
- Fire protection.

Typical Physical Properties		LTS	HPL	HPS	HTZ	HTS
Max. Use Limit.	°C (°F)	1000 (1833)	1260 (2300)	1315 (2400)	1425 (2600)	1482 (2700)
Continuous Use Limit	°C (°F)	900 (1652)	1160 (2120)	1200 (2102)	1325 (2417)	1380 (2516)
Melting Point.	°C (°F)	1760 (3200)	1760 (3200)	1760 (3200)	1760 (3200)	1760 (3200)
Fiber Diameter	Microns	3.0	3.0	3.0	3.0	3.0
Fiber Length.	mm(in)	203 (8)	203 (8)	203 (8)	203 (8)	203 (8)

Linear Shrinkage (%)					
24 Hr @ 1000 ∫C (1832 ∫F)	2.0	2.0	-	-	-
24 Hr @ 1100 ∫C (2012 ∫F)	-	-	1.8	-	-
24 Hr @ 1300 ∫C (2372 ∫F)	-	-	-	2.0	2.0

Chemical Analysis (%)					
AL_2O_3	42-46	45-46	44-50	33-37	52-54
SiO_2	50-60	51-52	50-56	47-51	42-46
ZrO_2	-	-	-	13-19	-
Fe_2O_3	0.7-1.5	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2
TiO_2	1.5-1.9	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2

Density: 64, 96,128 & 160 kg/m³ (4, 6, 8 & 10 lbs/ft³)