Laurel Refractory

Ceramic fiber blanket

Brief description

Laure ceramic fiber blanket is composed of long,flexible,interwoven fibers manufactured by the "blown" and the "spun" process yielding a strong, lightweight yet durable blanket for applications in a temperature range from $1100\,^{\circ}$ C to $1430\,^{\circ}$ C

Ceramic fiber blanket has the heat resistance of a hard refractory with five times better insulation value.

Features

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



Technical data

					1940
Item	Common	Standard	H Pure	H Alumina	Zirconium
AL2O3(%)	44	46	47-50	52-55	39-40
Fe2O3(%)	1.2	1.0	0.2	0.2	0.2
ZrO2(%)	-	-	-	-	15-19
Classification Temperature (°C)	1100	1260	1260	1360	1430
Working Temperature (°C)	1000	1050	1100	1200	1350
Density (kg/m3)	96/128	96/128	96/128	128/160	128/160
Permanent linear shrinkage(%)(after24 hours,density 128kg/m3)	-4 (1000°C)	-3 (1000°C)	-3 (1100°C)	-3 (1250°C)	-3 (1350°C)
Tensile strength (Mpa) density128kg/m3)	0.08-0.12	0.08-0.12	0.08-0.12	0.08-0.12	0.08-0.12

Applications

Ceramic industry

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

Steel industry

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

Refining and petrochemical

- 1.Reformer and pyrolysis lining
- 2. Tube seals, gaskets and expansion joints
- High temperature pipe, duct and turbine insulation
- 4.Crude oil heater linings

Power generation

- 1.Boiler insulation
- 2.Boiler doors
- 3.Reusable turbine covers
- Expansion seals/pipe coverings

Other

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



