

## AISI1650 | High Alumina Refractory Fibre Blanket

**Wedge AISI1650** is high Alumina Refractory Fiber based Insulation Material suitable for continuous service temperature up to 1600 °C. Due to high Alumina content it has extremely low shrinkage and provides most stable thermal and mechanical properties at high temperature. Its Polycrystalline Wool structure is based on mix of high purity mullite and corundum.

### Features & Benefits

- High thermal shock resistance
- Heat resistance, High fire resistance
- Suitable for high temperature application
- Low thermal conductivity
- Very linear shrinkage
- Very low shot content
- Excellent chemical stability
- Low heat storage
- High tensile strength

### Applications

- Industrial furnace lining
- Blast Furnace Insulation
- Steel reheating furnaces
- Heat treatment furnaces & kilns
- Forging furnaces
- Heat resistant sealing gasket
- Ceramics kilns thermal insulation
- High temperature filter materials



### Technical Properties

| Blanket Product Name                            | AISI1650-96A | AISI-1650-128A | AISI-1650-96M | AISI-1650-128M |
|---|--------------|----------------|---------------|----------------|
| Maximum Service Temperature, °C                 | 1600         | 1600           | 1600          | 1600           |
| Density, kg/m³                                  | 96           | 128            | 96            | 128            |
| Alumina, Al₂O₃                                  | 80           | 80             | 74            | 74             |
| Silica, SiO₂                                    | 20           | 20             | 26            | 26             |
| Mean Fiber Diameter, µm                         | 3.3          | 3.3            |               |                |
| Melting Temperature, °C                         | 2000         | 2000           |               |                |
| Thermal Shrinkage<br>at 24 hrs, heating @1500°C | 0.8          | 0.8            |               |                |
| Thermal conductivity, W/mK                      |              |                |               |                |
| 400°C   | 0.05         | 0.04           | 0.08          | 0.08           |
| 500°C   | 0.11         | 0.10           | 0.10          | 0.09           |
| 800°C   | 0.21         | 0.19           | 0.20          | 0.17           |
| 1000°C  | 0.32         | 0.25           | 0.27          | 0.24           |
| 1200°C  | 0.41         | 0.28           | 0.40          | 0.33           |
| 1400°C  | 0.54         | 0.35           | 0.59          | 0.48           |
| Thickness, mm                                   | 12.5 / 25    | 12.5 / 25      | 6 / 12.5 / 25 | 6 / 12.5 / 25  |
| Size, mm  | 620x7200     | 620x7200       | 610x3600      | 610x3600       |

