

CCEWOOL® Polycrystalline Wool Module



Classification Temperature: 1600°C (2912°F)
Chemical Composition: Alumina, Silica
CCEWOOL® Polycrystalline Wool Module is a high-temperature furnace lining module made from our own high-quality polycrystalline wool blanket (PCW Blanket) using a proven fiber module design. It is developed for full-fiber lining systems operating around 1300–1500°C (2372–2732°F) and is suitable for industrial furnaces and heat-treatment equipment requiring high temperature resistance, structural stability, and long service life.

The module offers good resistance to chemical attack and maintains stable insulation performance in oxidizing, reducing, and mildly corrosive atmospheres. Its low shot content and uniform fiber structure help reduce thermal conductivity and furnace heat loss, improving overall energy efficiency.

To balance performance and cost, CCEWOOL® can also provide composite modules combining Polycrystalline Wool Blanket + CCEWOOL® RCF Blanket 2600. This layered structure provides a more economical solution while maintaining the required high-temperature performance.

CCEWOOL® Polycrystalline Wool Module is available with multiple anchoring systems to suit different furnace structures. It offers efficient installation and convenient maintenance, making it a reliable full-fiber lining solution for high-temperature industrial furnaces and demanding thermal equipment.

Characteristics:

- Excellent thermal shock resistance;
- Excellent chemical stability;
- High-temperature stability;
- Low thermal conductivity;
- Low installation and maintenance costs;
- Extremely low shrinkage;

Excellent thermal insulation;
Customizable design for demanding furnace structures;
Excellent dimensional stability.

Applications:

Stress-relieving, annealing, and reheating furnaces;
Hearth-type heat-treatment furnaces and soaking pit covers;
Melting furnaces, forging furnaces, and industrial kilns;
Process heaters and combustion chamber linings;
Boiler linings and gas turbine insulation;
Incinerators and chimney linings;
Ladle covers and ladle preheaters;
Steel, aluminum, and non-ferrous metal melting furnace linings;
Hot-face linings for ceramic kilns and heat-treatment furnaces;
Reformers and cracking units;
Structural and thermal insulation for high-temperature equipment up to approximately 1600°C.

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CCEWOOL® Polycrystalline Wool Module	
Classification Temperature (°C)	1600(2912°F)
Continuous Temperature Use Limit (°C)	1500(2732°F)
Chemical Composition(%)	
Al ₂ O ₃	71-73
SiO ₂	27-29
Leachable Chlorides	Trace
Color	White
Density (kg/m ³)	128/160/196
	(8,10,12lb/ft ³)
Permanent Linear Shrinkage (%)	1400°Cx24h<1.0
Thermal Conductivity (W/m·K)	
400°C	0.09
600°C	0.16

800°C	0.22
1000°C	0.28
1200°C	0.36
1400°C	0.45