

CCEWOOL® SIC Series Silicon Carbide Products

Description:

Silicon carbide products with advantages of good wear resistance, creep resistance, good corrosion resistance, high strength, low thermal expansion coefficient, good thermal conductivity and thermal stability.

Characteristics:

The products are used in the blast furnace bottom, distiller in melting furnace body (zinc, copper, aluminum), distillation tower tray, electrolytic tank side wall crucible, all kinds of kiln roof board in silicate industry, flame proof plate kiln, cement rotary kiln and waste treatment incinerator. Silicon carbide products can effectively protect high-pressure dust and other erosion corrosion.

Application:

1. The application in non-ferrous metal smelting industry

As high temperature indirect heating materials, such as tank distillation furnace, distillation furnace tray, electrolytic aluminum tank, copper smelting furnace lining, zinc furnace arc plate, thermocouple protection tube. This is the use of silicon carbide's high temperature resistance, high strength, good thermal conductivity and shock resistance.

2. The application in steel industry

The characteristics of corrosion resistance, thermal shock resistance, wear resistance and good thermal conductivity of silicon carbide are used to improve the service life of large blast furnace lining.

3. The application in metallurgical industry

The hardness of silicon carbide is second only to diamond, which has strong wear resistance. It is the ideal material of mine bucket lining, wear resistant pipe, impeller, pump chamber and cyclone. Its wear resistance is 5-20 times the service life of cast iron and rubber, which is also an ideal material of aviation flight runway.

4. The application in building, ceramics and grinding wheel industry

By using silicon carbide's characteristics of high thermal conductivity, thermal radiation and high strength, manufacturing kiln sheet which can not only reduce kiln capacity, but also furnace installed capacity and product quality, shorten production cycle. It is an ideal indirect material for ceramic glaze baking sintering.

5. The application in energy saving

Using good thermal conductivity and thermal stability as heat exchanger, fuel consumption reduced by 20%, saving fuel by 35%, so that productivity increased by 20-30%. In particular, the pipeline discharge in the mine, the wear resistance is 6 ~ 7 times as ordinary wear-resistant materials.

Technical data and Size:

CCEWOOL® SIC Series Silicon carbide products			
Properties Brand	SIC90	SIC20	SIC10
Apparent Porosity(%)	20≥	20≥	20≥
Bulk Density	2.55≤	2.50≤	2.35≤
Cold Crushing Strength (kg/cm ²)	1000≤	900≤	800≤
SIC	90≤	20≤	10≤
AL ₂ O ₃		43≤	42≤