



Microwave sintering technology make great breakthrough at refractory material

Refractory variety, according to the level of refractoriness is divided into ordinary refractories (1580 ~ 1770 °C), high-grade refractory (1770 ~ 2000 °C) and super refractories (2000 °C above); According to the chemical properties of refractory materials into acidic, neutral and alkaline refractory refractories. In addition, there are special occasions for refractories.

Acidic refractories silicon oxide (SiO₂) as the main component, commonly used silica brick and clay. Silica brick is containing more than 93% SiO₂ siliceous products, raw materials used are silica, silica brick scrap, etc. Acid resistant brick slag erosion ability, but are vulnerable to erosion of basic slag, its high load softening temperature, close to its refractoriness, the volume does not shrink after repeated firing, even slightly inflated.

Neutral refractory main products are: corundum bricks, high alumina bricks, silicon Mo brick, mullite brick, aluminum chrome brick, aluminum carbon brick, graphite or carbon bricks. Poor thermal shock resistance, low load softness. However, due to poor alkali erosion alumina brick, it can not be applied to the conditions of use of the key parts of the complex.

Langfeng Metallic refractory metal on the basis of acidic and neutral refractories disadvantage on the use of technology research and Insignificance sintering a frequency 0,3 300GHz, ie electromagnetic wavelength range within 1mm 1m.

Microwave sintering technology refers to the use of microwave heating method makes powder material up to a certain temperature in order to achieve sintering technology. Frequency microwave equipment for microwave sintering pyrometallurgical generally 2.45GHz, there is also 28GHz, 60GHz or higher frequencies.

Langfeng Metallic microwave sintering technology low cost, high efficiency, energy saving, environmental protection, energy saving, and so fully meet the requirements of high temperature refractory material sintering technology.