

## Zirconia ceramics

### 氧化锆陶瓷

氧化锆陶瓷呈白色，含杂质时呈黄色或灰色，一般含有  $\text{HfO}_2$ ，不易分离。

应用：

具有高韧性、高抗弯强度和高耐磨性，优异的隔热性能等优点，被广泛应用于结构陶瓷和功能陶瓷领域。在结构陶瓷方面，主要有:Y-TZP 磨球、分散和研磨介质、喷嘴、球阀球座、氧化锆模具、微型风扇轴心、光纤插针、光纤套筒、拉丝模和切割工具、耐磨刀具、服装纽扣、表壳及表带、手链及吊坠、滚珠轴承、高尔夫球的轻型击球棒及其它室温耐磨零部件等。在功能陶瓷方面，其优异的耐高温性能作为感应加热管、耐火材料、发热元件使用。另外，氧化锆在热障涂层、催化剂载体、医疗、保健、耐火材料、纺织等领域正得到广泛应用。

主要产品：

电熔单斜氧化锆、等离子喷涂氧化锆粉、电熔硅酸锆微珠、电熔钙、镁、钇氧化锆，氧化锆造粒粉、熔铸锆刚玉砖等。

Zirconia ceramics are white, yellow or gray when containing impurities, generally contain  $\text{HfO}_2$ , not easy to separate.

Application:

It is widely used in structural ceramics and functional ceramics because of its advantages of high toughness, high bending strength, high wear resistance and excellent thermal insulation performance. In terms of structural ceramics, there are mainly: Y-TZP grinding balls, dispersion and grinding media, nozzles, ball valve seats, zirconia molds, micro fan axis, fiber optic pins, fiber optic sleeves, wire drawing dies and cutting tools, wear-resistant Knives, clothing buttons, watch cases and straps, bracelets and pendants, ball bearings, light golf clubs and other room temperature wear-resistant parts. In terms of functional ceramics, its excellent high temperature resistance is used as induction heating tubes, refractory materials, and heating elements. In addition, zirconia is widely used in thermal barrier coatings, catalyst carriers, medical treatment, health care, refractory materials, textiles and other fields.

Main Products:

Fused monoclinic zirconia, plasma sprayed zirconia powder, fused zirconia

micro-beads, Fused calcium zirconia, fused magnesia zirconia, fused yttrium zirconia, zirconia granulated powder, fused cast zirconia corundum bricks, etc.