

Zirconia Ceramic Ball

Zirconia Ceramic Grinding Ball Series

氧化锆磨介球系列

- → Features 特点
 - High hardness 高硬度
 - Wear resistance and corrosion resistance 耐磨损,耐腐蚀
 - Solve the pollution problem of otherr grinding media materials on the product, ensuring purity and quality 解决其他磨介材料对于产品的污染问题,保证纯度和质量
 - Antimagnetic electricity 抗磁电
 - Long service life and operating costs 使用寿命长,运行成本



→ Application 应用

High-performance bearings:

高性能轴承:

Zirconia ceramic balls can be used to manufacture high-performance bearings such as aero-engine bearings and high-speed machine tool spindle bearings. They can withstand high-speed and high-load operating conditions, reduce wear and friction, improve the service life and reliability of bearings.

氧化锆陶瓷球可用于制造高性能轴承,如航空发动机轴承、高速机床主轴轴承等,能够承受高速、高负荷的运转条件,减少磨损和摩擦,提高轴承的使用寿命和可靠性。

Mechanical seals:

机械密封件:

In mechanical sealing devices, zirconia ceramic balls can be used as sealing elements to prevent fluid leakage. For example, in equipment such as chemical pumps and compressors, it can effectively improve sealing performance and equipment operating efficiency.

在机械密封装置中,氧化锆陶瓷球可作为密封元件,用于防止流体泄漏。如在化工泵、压缩机等设备中,有效提高密封性能和设备的运行效率。









◆ Overview 概述

Precision ceramic balls have excellent properties such as high strength, goodwear resistance, corrosion resistance, high temperature resistance, electrical insulation, and nonmagnetic properties that metals do not possess. They are ideal products for use in the bearing industry, chemical industry, and valve industry. 精密陶瓷球具有高强度、耐磨性好、耐腐蚀、耐高温、电绝缘、不导磁等一系列金属不具备的优异性能,是轴承行业和化工、阀门领域理想的使用产品。

◆ Features 特点

- High hardness, goodresistance, and long service life 高硬度、耐磨损,使用寿命长
- ◆ High temperature resistance, maintaining high strength and hardness even at a high temperature of 1200°C
 耐高温,在1200°C高温下仍能具有很高的强度、硬度
- Low density and high densification 低密度、高致密性
- Self-lubricating never rusting 自润滑、永不生锈



• Low coefficient of themal expansion, high thermal shock resistance

热膨胀系数低,具有较高的抗热冲击性能

- Anticorrosion of acid and alk 耐酸碱腐蚀
- Nonmagnetic and electrical insulation 无磁电绝缘
- At high temperatures, it does not adhere to the metal and hardly reacts 高温下与金属熔体不粘连,几乎不发生反应

🔶 Standard for Precision Ceramic Balls 精密陶瓷球标准

Level 级别	Roundness Standard (ΔRSw max.) 真圆度标准	Diameter Tolerance (VDws) 直径公差	Surface Roughness (Ra max.) 表面粗糙度	Tolerance Standardfor DiameterWithin A Batch(VDwl max.)批次 内直径公差标准
G3	0.08	0.08	0.010	0.13
G5	0.13	0.13	0.014	0.25
G10	0.25	0.25	0.020	0.50
G16	0.40	0.40	0.025	0.80
G20	0.50	0.50	0.032	0.80
G24	0.60	0.60	0.040	1.20
G28	0.70	0.70	0.05	1.40
G40	1.00	1.00	0.06	2.00
G60	1.50	1.50	0.08	3.00
G100	2.50	2.50	0.10	5.00
G200	5.00	5.00	0.15	10.00