



萍乡市荣建环保化工填料有限公司

Pingxiang Rongjian environmental protection chemical packing Co.,LTD.

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中国 · 江西

萍乡市荣建环保化工填料有限公司

Ping xiang Rong jian environmental protection chemical packing Co.,LTD.

- Saving Energy Connect Us World And Future
- Located in Pingxiang City
— was famous as the "Hometown of Tower Packing."
With over 15 years of industry experience in Manufacturing & Exporting.

■ Ceramic Grinding Media Series



荣建环保化工填料有限公司
Rongjian Environmental Protection Chemical Packing Co., Ltd

About Rongjian

萍乡荣建环保化工填料有限公司位于江西省萍乡市——中国著名的“化工填料之乡”。公司专业从事陶瓷研磨介质和化工填料产品的研发与生产。

凭借先进的生产设备、经验丰富的技术团队和严格的质量控制体系，我们的产品广泛应用于矿业、陶瓷、颜料、涂料、化工、抛光和研磨等领域。

主要产品包括氧化铝研磨球、氧化锆研磨介质及其他耐磨陶瓷产品，为全球研磨作业提供高效、长寿命的解决方案。

Pingxiang Rongjian Environmental Protection Chemical Packing Co., Ltd. is located in Pingxiang, Jiangxi Province, China — well known as the “Hometown of Chemical Packing”. We specialize in the production of ceramic grinding media and chemical packing materials.

With advanced manufacturing equipment, experienced technical teams, and a strict quality control system, our products are widely used in mining, ceramics, pigments, coatings, chemical processing, polishing and grinding applications.

Our main products include alumina grinding balls, zirconia grinding media, and other wear-resistant ceramic products, providing high efficiency and long service life for grinding operations worldwide.

We have a professional production factory



PINGXIANG RONGJIAN

TECHNOLOGY IS THE GUARANTEE OF QUALITY

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Ceramic Grinding Media Series

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陶瓷磨介系列

CERAMIC GRINDING MEDIA SERIES



**FACTORY
SUPPLIER**



ISO 9001:2015
ISO 1401:2015
ISO 4501:2018

SGS



High-purity alumina beads (spheres)

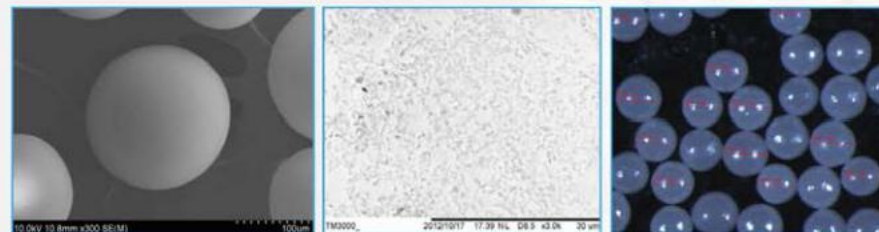
These beads are made from 4N5 high-purity alumina powder, which undergoes ultra-fine grinding to achieve nano-scale particle size, followed by rolling forming and high-temperature sintering. They feature high purity, high strength, and low wear resistance. During grinding, they are not prone to chipping or clogging grinding equipment, and are compatible with various grinding setups. With high purity and low abrasion (no contamination of feedstock elements during grinding), they are particularly suitable for grinding and dispersing high-purity alumina, luminescent materials, transparent ceramics, single crystals, diaphragms, and other powders.

外观 Appearance	白色均匀球体 White uniform spheres
材质 Material	4N Al ₂ O ₃
尺寸范围 Size Range	0.1 – 30 mm (custom sizes available)
晶相 Crystal Phase	α
比重 Specific Gravity	3.85 – 3.95
堆比重 Bulk Density	≥2.3
莫氏硬度 Mohs Hardness	9
带料磨损 Wear Loss	<3 (ton/kg)

Other Composition Analysis (ppm)

元素 Element	Na	K	Si	Fe	Mg	Ga
含量 Content	8	4	10	8	3	3

显微分析 Microscopic Analysis



产品图片 Product Images



Y-TZP Beads

Y-TZP beads contain approximately 95% zirconia, therefore they are commonly referred to as 95 Zirconia Beads or Pure Zirconia Grinding Beads. They are produced from 3Y yttria-stabilized tetragonal zirconia powder prepared by the hydrothermal process, followed by nano-scale grinding, spray drying granulation, precision forming and high-temperature sintering. The product features high hardness, excellent strength, low wear rate and high sphericity, making it suitable for various grinding equipment.

It is widely used in industries such as lithium batteries, ceramic inks, thermal transfer inks, non-metallic minerals, agrochemicals, electronic ceramics, magnetic materials, titanium dioxide, pharmaceuticals, pigments, dyes, inks and specialty chemicals, especially suitable for ultra-fine grinding and dispersion of high-viscosity materials.

Main Technical Parameters				Common Size Specifications (mm)	
Chemical Composition	Content	Physical Properties	Specifications		
ZrO ₂	95%±0.2	比重 Specific Gravity	≥6.0	00.08-0.12	00.15-0.2
Y ₂ O ₃	5%±0.2	堆积比重 Bulk Density	≥3.7	00.2-0.3	00.3-0.4
		压碎强度 Crushing Strength	>1.5KN(02mm)	00.4-0.6	00.8-1.0
		维氏硬度 Vickers Hardness	>1250	01.2-1.4	01.4-1.6
		球形度 Sphericity	0.98(Xmin/Xmax)	01.8-2.0	02.2-2.5
		自磨耗 Self-wear Rate	<0.6(ppm/h)	03±0.2	05±0.2
		抗冲击损耗 Impact Wear Rate	<0.05%/h	010±0.2	020±0.2
				Custom sizes available upon request	



Zirconia-Alumina Composite Beads (ADZ Beads)

Al₂O₃-toughened ZrO₂ (ADZ) ceramic is an important ZTC material, occupying a significant position in modern industry and science and technology. ADZ beads are fabricated by mixing industrial α-Al₂O₃ and ZrO₂ (Y₂O₃) powder in a specific proportion, followed by ultra-fine grinding, spray drying for powder preparation, forming and sintering. They share similar properties with Y-TZP beads but are more cost-effective, making them compatible with various grinding equipment.

Mainly used in lithium batteries, ceramic inks, thermal transfer inks, non-metallic minerals, pesticides, electronic ceramics, magnetic materials, titanium dioxide, pharmaceutical products, pigments, dyes, inks, specialty chemical industries and other fields.

Main Technical Parameters				Common Size Specifications (mm)	
Chemical Composition	Content	Physical Properties	Specifications		
ZrO ₂	80%	Specific Gravity	≥5.3	00.2~0.3	00.3~0.4
Y ₂ O ₃	1%	Bulk Density	≥3.3	00.4~0.6	00.8~1.0
Al ₂ O ₃	19%	Crushing Strength	>1.5KN(02mm)	01.2~1.4	01.4~1.6
		Vickers Hardness	>1300	01.8~2.0	02.2~2.5
		Sphericity	0.98(Xmin/Xmax)	03±0.2	05±0.2
		Self-wear Rate	<0.6(ppm/h)	010±0.2	020±0.2
		Impact Wear Rate	<0.05%/h	030±0.2	040±0.2
				Custom sizes available upon request	

Zircon Silicate Beads

Zirconium silicate beads are manufactured by a conventional high-temperature ceramic sintering process, using ultra-fine raw material grinding (d50 ≤ 0.8 μm) and optimized formulations. The performance of the sintered zirconium silicate beads is comparable to that of fused zirconium silicate beads. The crystal phase mainly consists of zircon, ZrO₂ and a small amount of glass phase, featuring fine grain structure and high strength.

Widely used for the grinding and dispersion of materials such as titanium dioxide (TiO₂), calcium carbonate, zirconium silicate, paints and inks.

Main Technical Parameters				Common Size Specifications (mm)	
Chemical Composition	Content	Physical Properties	Specifications		
ZrO ₂	65%	Specific Gravity	≥4.2	00.2~0.3	00.3~0.4
Y ₂ O ₃	30%	Bulk Density	≥2.5	00.4~0.6	00.6~0.8
CaO+MgO	3%	Crushing Strength	>1.2KN(82mm)	00.8~1.0	01.0~1.2
Others	2%	Vickers Hardness	>1000	01.2~1.4	01.4~1.6
		Sphericity	0.98(Xmin/Xmax)	01.8~2.0	02.0~2.5
		Self-wear Rate	<0.8(ppm/h)	02.5~3.0	05±0.2
		Impact Wear Rate	<0.05%/h	08±0.2	013±0.2
				Custom sizes available upon request	

Cerium Stabilized Zirconia Beads

Cerium stabilized zirconia beads feature a tetragonal microcrystalline structure with a fine, uniform and dense microstructure. They offer excellent wear resistance and fracture toughness, together with high hardness and high density. Their density is the highest among zirconia grinding media, enabling higher impact energy in grinding equipment and improving grinding efficiency. They are especially suitable for grinding and dispersing materials with high solid content, high viscosity and high hardness.

Widely used for ultra-fine grinding and dispersion in industries such as non-metallic minerals, paper making, calcium carbonate, paints and coatings, inks, electronic materials, lithium battery materials, magnetic materials, textile dyes and pharmaceuticals.

Main Technical Parameters			
Chemical Composition	Content	Physical Properties	Specifications
ZrO ₂	83-87%	Specific Gravity	≥6.2
CeO ₂	9-13%	Bulk Density	≥3.8
Others	2%	Crushing Strength	>1.5KN(02mm)
		Vickers Hardness	>1150
		Sphericity	0.97(Xmin/Xmax)
		Self-wear Rate	<0.6(ppm/h)
		Impact Wear Rate	<0.05%/h

Common Size Specifications (mm)	
00.2~0.3	00.3~0.4
00.4~0.6	00.6~0.8
00.8~1.0	01.0~1.2
01.2~1.4	01.4~1.6
01.8~2.0	02.0~2.5
02.5-3.0	05±0.2
Custom sizes available upon request	



95% Microcrystalline Alumina Grinding Media

95% microcrystalline alumina grinding media features moderate density, high strength, good acid and alkali resistance, low wear loss and high cost performance, making it one of the most widely used ceramic grinding media. It is suitable for various grinding equipment such as sand mills, stirring mills, batch ball mills, continuous ball mills and grinding pots.

It is mainly used for the grinding and dispersion of alumina, kaolin, calcium carbonate, quartz, zirconium silicate and metal ores such as gold, silver, nickel, zinc and lead, and is widely applied in industries including ceramics, glass, enamel, pigments, chemicals, mining and cement.

Main Technical Parameters			
Chemical Composition	Content	Physical Properties	Specifications
Al ₂ O ₃	95%	Specific Gravity	≥3.65
SiO ₂	3%	Bulk Density	≥2.3
CaO+MgO	1%	Crushing Strength	>1.5KN(82mm)
Others	1%	Vickers Hardness	>1750
		Sphericity	0.99(Xmin/Xmax)
		Self-wear Rate	<0.6(ppm/h)
		Impact Wear Rate	<0.05%/h

Common Size Specifications (mm)	
00.2~0.3	00.3~0.4
00.4~0.6	00.6~0.8
00.8~1.0	01.0~1.2
01.2~1.4	01.4~1.6
01.8~2.0	02.0~2.5
05±0.2	010±0.3
020±0.5	030±0.5
Custom sizes available upon request	

