CERAMIC BALLS - GRINDING MEDIA

Zirconia Toughened Alumina

Description:
Zirconia Toughened Alumina bead was sintered from alumina powder and zirconium silicate powder. Compared to the alumina beads, it is an economic ceramic bead to replace kaolin bead, silica sand and other natural grinding media.

Chemical Composition:

Composition	Al_2O_3	ZrO_2	SiO_2
Wt%	65-75	6-12	6-8

Physical Properties:

Specific Gravity 3.1-3.2kg/dm3	Bulk Density 2.0-2.2kg/L	Micro hardness 900kg/mm2
Compressive Strength 80kgf(2mm)	Wear Rate <70g/T	Color Shell

Zirconium Silicate Beads

Description:
Zirconium silicate beads are made from the high grade Australian zircon sand with granulating shaped method and hardened by sintering. The unique formula and producing procedure offer you a middle density and hardness, high wear resistance middle hard particles in the low to middle viscosity range slurries.

Chemical Composition:

Composition	Al_2O_3	SiO_2	ZrO_2
Wt%	60-64	30-33	7-9

Physical Properties:

Specific Gravity 4.0-4.2kg/dm3	Bulk Density 2.5-2.6kg/L	Micro hardness 1000kg/mm2	
Hardness Mohs 7.3	Compressive Strength 1100kgf(2mm)	Wear Rate <40g/T	Color Off-white

Microcrystal Alumina Beads

Description:
Microcrystal alumina bead is made from high purity alumina powder and silica powder with sintering method. The micro size of polycrystals contributes to wear resistance and idea strength. It is a wise choice to replace the carbon steel beads to grind the metallic and non-metallic mineral.

Chemical Composition:

Composition	Al_2O_3	SiO_2	Others
Wt%	91-93	6	1-2

Physical Properties:

Specific Gravity 3.5-3.7kg/dm3	Bulk Density 2.2-2.3kg/L	Micro hardness 1350kg/mm2
Compressive Strength 120kgf(2mm)	Wear Rate <200g/T	Color White

Alumina Toughened Zirconia

Description:
Alumina Toughened Zirconia bead was granulated from the ultra fine zirconium dioxide and alumina powder. The consistent micro poly-crystal benefits high compressive strength and wear resistance of beads. Although there is a lower density than T-TZP (yttria-Tetragonal Zirconia polycristal), the lower unit cost is an obvious plus. It can replace it in more application and is competent the mills with high tip speed up to 14m/s.

Chemical Composition:

Composition	Al_2O_3	ZrO_2	SiO_2
Wt%	65-75	6-12	6-8

Physical Properties:

Specific Gravity 3.1-3.2kg/dm3	Bulk Density 2.0-2.2kg/L	Micro hardness 900kg/mm2
Compressive Strength 80kgf(2mm)	Wear Rate <70g/T	Color Shell