Yttria Stabilized Zirconium Oxide Beads







•Physical Properties :

•Description :

DURA-60 is one Tetragonal Zirconia Polycristal (TZP) bead, which made from first grade yttria stabilized powder with sintered method. The sizes of internal micro crystals are less than 0.4µ m benefit excellent crushing strength and wear resistance, which guarantees cross contamination free to grinded products. It is a top option to deal with the ultra-fine particles in conventional ball mills and modern pearl mills.

DURA-60

•Specialty :

- A wide range sizes for selection: from micro bead 0.1mm to big ball 60mm;
- Fine and homogenous yttria-stablized Tetragonal Zirconia Policristal (Y-TZP): PPM wear rate suits to deal with contamination free products;
- The highest hardness and toughness: the optimal choice to grind the corrosive and abrasive material;
- Matching mills: micro beads for small capacity mills; middle size beads for high intensity mills and big ball for stirred or rolling ball

•Application :

- Ceramic pastes or powder: ceramic pastes such as aluminum oxide, silicon nitride, silicon carbide, zirconium silicate and zirconium oxide;
- Electronic pastes: noble metal pastes such as gold, platinum, palladium and silver; base metal pastes such as cuprum, nickel and zinc pastes;
- Nano material: pigments of inkjet like carbon black and magenta; pigments of LCD, color filter, diamond for polishing agent, TiO₂ for photo catalyst.

•Chemical Composition :

Composition	ZrO ₂	Y_2O_3
Wt%	94-96	4-6

Specific Gravity	Bulk Density	Micro Hardness	Compressive Strength	Wear Rate	Color
6.0-6.1kg/dm ³	3.6-3.8kg/L	1250kg/mm ²	200kgf(2mm)	<6g/T	Ivory

•Sizes :

Model	Sizes (mm)	Model	Sizes(mm)
DY1	0.1	DY16	1.6-1.8
DY2	0.2	DY18	1.8-2.0
DY3	0.3	DY20	2.0-2.2
DY4	0.4-0.6	DY22	2.2-2.5
DY6	0.6-0.8	DY25	2.5-2.8
DY8	0.8-1.0	DY28	2.8-3.2
DY9	0.9-1.1	DY30	3.0-3.5
DY10	1.0-1.2	DY35	3.5-4.0
DY11	1.1-1.3	DY40	4.0-4.5
DY12	1.2-1.4	DY45	4.5-5.0
DY14	1.4-1.6	DY50	5.0-5.5

•Sizes(balls) :

Model	Sizes (mm)	Model	Sizes(mm)
DYB6	6.0±0.3	DYB25	25.0±0.5
DYB7	7.0±0.3	DYB30	30.0±0.5
DYB8	8.0±0.3	DYB35	35.0±0.5
DYB10	10.0±0.4	DYB40	40.0±0.6
DYB12	12.0±0.4	DYB45	45.0±0.6
DYB15	15.0±0.4	DYB50	50.0±0.7
DYB20	20.0±0.4	DYB60	60.0±0.7

www.durabeads.com