

EZ GRINDING **YSZ GRINDING MEDIA**

High Dense Superior Roundness Always Shiny Surface



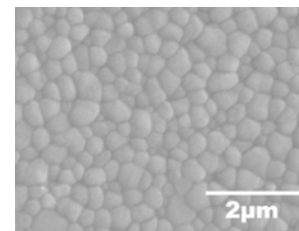
EE-TEC, Inc.
www.ee-tec.com

The advantage of *EZ Grinding*

High Dense · Small Grain Size

Near nano zirconia powder is used for the grinding beads to achieve almost theoretical density, hardness and toughness. Together with special forming process, our YSZ beads have superior micro-structure and physical properties which provides extreme wear resistance and life-time for high speed milling process.

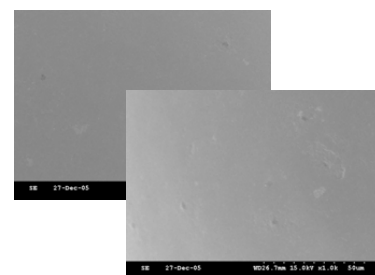
Right picture : SEM observation of the micro-structure



Always Shiny Surface Condition

Shiny surface throughout life-time results from high dense internal structure and stable chemical composition. It reduces friction between bead-bead and bead-grinding chamber which benefits temperature control, energy saving, and avoiding damage of the chamber inner wall. On the other hand, always shiny beads are easy to clean which provides time saving when changing product lines and minimizes cross contamination as well.

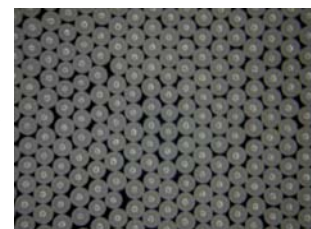
Right picture : Surface conditions of before (left) and after (right) 50 hr high speed milling



Superior Roundness and Narrow size distribution

Size distribution and roundness of the beads play the key contribution of milling efficiency. Our YSZ beads, with roundness over 96% and precise sieving size control, provides best the milling efficiency.

Right picture : Roundness and size distribution of *EZ Grinding*, 0.5mm



SPECIFICATION

Size and Roundness

Size (mm)	Range(mm)	Roundness(%)
0.1	0.1~0.15	Above 90
0.2	0.15~0.25	Above 90
0.3	0.2~0.4	Above 96
0.4	0.3~0.5	
0.5	0.4~0.6	
0.65	0.5~0.8	
0.8	0.65~0.95	
1.0	0.8~1.2	Above 96
1.5	1.3~1.7	

Customized size and range are on request

Application Fields :

Color related, Electronics, Biotech, Textile, Ceramics, Nano-grade grinding and dispersion

Physical Properties of the material

Property	Value
Density (g/cm ³)	> 6.0
Hardness (Vickers)	1200~1300
Toughness (MNm ^{-3/2})	8~10
Grain Size (μm)	< 0.4
Color	White

Chemical Composition

Composition	Content (wt %)
ZrO ₂	94.5
Y ₂ O ₃	5.1
Al ₂ O ₃	0.25
Fe ₂ O ₃	< 0.002
Na ₂ O	< 0.005



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