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## Nanobeads de alumina ZH

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# ALUMINA NANOBEADS HITO - ZH

**Hito Technical Industries, S.L.**, specialized company in the manufacture and distribution of grinding media, presence in over 40 countries, introduce a new product: Nanobeads ZH.

The Nanobeads ZH, are made with high purity raw materials and granules of nanometric sizes, with a total absence of porosity and good fracture toughness, hardness and wear rates.

This nanocrystalline structure gives to Nanobeads ZH optimal properties to be used as grinding media: high density, high hardness, high strength and low wear, being their wear ratios, fully comparable with results obtained using the Zirconium microspheres, but with more competitive price.

Moreover, to reduce even more the grinding process costs, it should be noted that there is a difference between the packing density of both types of beads, which makes much less quantities of Nanobead ZH needed to fill the mills, with consequent economic and energy savings.

Such characteristics allow to be used in high-energy mills, where a high degree of fineness is required, so that vertical and horizontal high speed mills are used in various fields such as inks, paint, advance ceramic, mining, cosmetic, pharmacy industry,...

GENERAL CHARACTERISTICS	
Main Raw Material	Calcined Alumina
Alumina Content (%)	≥ 93.5
Specific Weight (g/cm <sup>3</sup> )	3.75 ± 0.05
Colour	White
Moh's Hardness	9
Vickers Hardness (0.5 kg)	1200 ± 50
Compressive Strength (kgf-2mm)	≥ 200
Thermal Coef. Exp. (20-1000 °C)	7-8

CHEMICAL COMPOSITION	
Al <sub>2</sub> O <sub>3</sub> (%)	≥ 93.50
SiO <sub>2</sub> (%)	≥ 3.00
CaO (%)	≥ 1.20
MgO (%)	≥ 1.30
Others (%)	≥ 1.00

DIAMETERS	
0.25 – 0.34 mm	1.4 – 1.6 mm
0.34 – 0.44 mm	1.6 – 1.8 mm
0.4 – 0.6 mm	1.8 – 2.0 mm
0.8 – 1.2 mm	2.0 – 2.5 mm
1.2 – 1.6 mm	2.5 – 3.0 mm

*Data and specifications contained in this form may be subject to any change or modification by the manufacturer without notice. In case you need any clarification or you have any query, please contact our technical department.*