

### ✂ MICROSHOT YZ ARE THE FINE AND HIGH DENSITY ZIRCONIA CERAMIC BEADS FOR HIGH ENERGY SHOT-PEENING

Microshot YZ combines very fine and narrow size distributions with the highest density, hardness and toughness of Zirconia ceramic material, for high precision and high-energy peening performance.

- Maximum level of compressive stress near the surface
- Ability to treat complex and precise shapes
- Smooth surface finish to minimize crack generation
- No contamination to treated parts, thanks to chemical inertness and very low level of particle embedment

#### CHEMICAL ANALYSIS

| Typical values | Y2O3 stabilized Zirconia | Other |
|----------------|--------------------------|-------|
| wt%            | 99,5                     | < 0.5 |

#### DESIGNATION AND AVAILABLE SIZES

| Name         | Size range (µm) | Name          | Size range (µm) |
|--------------|-----------------|---------------|-----------------|
| <b>YZ300</b> | 250 – 350       | <b>YZ50</b>   | 45 – 75         |
| <b>YZ200</b> | 200 – 250       | <b>YZ50-L</b> | 20 – 80         |
| <b>YZ150</b> | 150 – 200       | <b>YZ30</b>   | 25 – 45         |
| <b>YZ100</b> | 80 – 125        | <b>YZ20</b>   | 15 – 35         |
|              |                 | <b>YZ20-L</b> | 10 – 45         |

#### PHYSICAL PROPERTIES

|                  | Typical values | Units             |
|------------------|----------------|-------------------|
| Specific gravity | 6.0            | g/cm <sup>3</sup> |
| Bulk density     | 3.2 – 3.7 (*)  | kg/l              |
| Vickers hardness | 1250           | HV1               |

(\*) Depends upon the size of the beads

#### PACKAGING

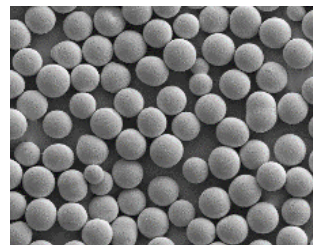
- 1kg, 5kg, 10kg, 20kg plastic containers

#### MAIN APPLICATIONS

- Ultrafine shot peening to improve fatigue strength, corrosion, pitting wear, micro-fretting
- Peening and Forming of high hardness metals

#### MAIN USERS

- Automotive
- Aeronautics
- Energy
- Biomedical



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