



Ragione Sociale  
VELTMAN ITALIA S.r.l.  
P.za Maggiore, 32  
20065 INZAGO (MI) Italia

Uffici e sede operativa  
VELTMAN ITALIA S.r.l.  
Via Ca' Treviglio  
24040 PONTIROLO NUOVO (BG) Italia  
Tel +39.02.90967999  
Fax +39.02.92010866  
@mail info@veltman-italia.it  
Web www.veltman-italia.it

Cod. Fis./Part. IVA 07007360964  
N° Iscr. C.C.I.A.A. MI-1929387

# VV022-EMPTY GLASS SPHERES

## SPECIAL EMPTY GLASS SPHERES FOR GYPSUM

VV-022 EMPTY GLASS SPHERES for mixing with Veltman synthetic gypsum, cement and other materials where it is necessary to obtain a final lightweight material with high technical-mechanical resistance. Made of soda-lime borosilicate glass, the Veltman VV-022 glass spheres have a very high strength-density ratio that guarantees them effective resistance to breaking and fragmentation during the various stages of processing, both at the artisan level and in industrial processes.

### TECHNICAL FEATURES

- Shape: Spherical
- Color: Matt White
- Material: Soda-lime borosilicate glass
- Density: 0.20 g/cm<sup>3</sup>
- Crushing load: 34 Bar / 3.4 Mpa / 500 psi
- Crush load survival: 90%
- Maximum diameter: 120 µm
- Granulometric size curve distribution:  
10% = 30 µm / 50% = 65 µm / 90% = 110 µm
- Melting point: > 600°C
- Conductivity: From 0,05 to 0,26 W/m.K at 0 °C

### BENEFITS

- Reduces the weight of products based on gypsum, cement and various compounds
- Lower viscosity increase with the same volume of additives
- Rapid dispersion in castable compounds such as gypsum or cements
- Low alkalinity and non-combustible
- Non-porous and water resistant
- High strength / weight ratio with low probability of breakage in the various processes

### APPLICATIONS

The VV-022 empty glass spheres are mainly used in combination with special Veltman gypsum to considerably reduce the final weight of the product while maintaining very high technical-mechanical strengths. Thanks to his structure and density, they can be used in multiple stages of processing, both artisanal and industrial, without the risk of breakage or fragmentation.

### DOSAGES

The recommended dosage is between 4 - 8% more than gypsum powder. The spheres must be added to the gypsum or cement powder (dry) and mixed in order to obtain a homogeneous mixture before adding the water.

With 4% more it is recommended to use a powder-water ratio of 1 kg: 0.35 L.

With 8% more it is recommended to use a powder-water ratio of 1 kg: 0.40 L.