



CeraPeen™ Peening Beads



Product Description and Technical Data:

CeraPeen™ Ceramic Peening Beads are manufactured by an electric/thermal fusion of oxides. The internal structure is made up of a crystalline ceramic phase, bonded by an amorphous silica phase, resulting in high impact properties coupled with good hardness and durability.

CeraPeen™ Peening Beads are specifically designed for peening and peen forming applications, particularly in the aerospace and precision industries. They are ideal for critical components where consistent performance, cleanliness and freedom from ferrous contamination are essential.

Compared with traditional peening media such as steel shot and glass beads, CeraPeen™ Peening Beads can achieve similar peening intensities while generating a lower surface roughness. The non-metallic composition eliminates the risk of ferrous contamination, making them suitable for applications where steel shot cannot be used.

CeraPeen™ Peening Beads enable peening at lower operating velocities, resulting in significantly less media breakdown and dust. This provides a cleaner working environment, better operator visibility and reduced maintenance requirements.

The uniform, smooth spherical shape and narrow particle size distribution ensure repeatable, consistent results, making CeraPeen™ Peening Beads the preferred choice for demanding and high-precision peening applications.



CeraPeen™ Abrasive Properties:

Shape	Smooth Spherical Beads
Hardness (HRC)	65
True Relative Density	3.85
Bead Relative Density	3.76
Bulk Density (kg/m ³)	2300
Size Standard	Z - AMS 2431/7





CeraPeen™

Peening Beads Technical Data



CeraPeen™ Abrasive Properties:

Typical Crystallographic Analysis:

Zirconia	67 %
Glassy Silica Phase	33 %

Typical Chemical Composition:

ZrO ₂	67 %
SiO ₂	30 %
Others	3 %

CeraPeen™ Available Sizes:

Grade	Microns	Inch
Z850	850 - 1180	.033 - .04
Z600	600 - 850	.023 - .033
Z425	425 - 600	.016 - .023
Z300	300 - 425	.01 - .016
Z210	210 - 300	.008 - .01
Z150	150 - 210	.006 - .008
Z100	100 - 150	.004 - .006

CeraPeen™ Packaging:

25kg Pails

CeraPeen™ Ordering Information:

Stock Code	AOT-OAZIYY
Key	Z = Z type peening bead YYY = Product Size (e.g. Z300, YYY = 300)