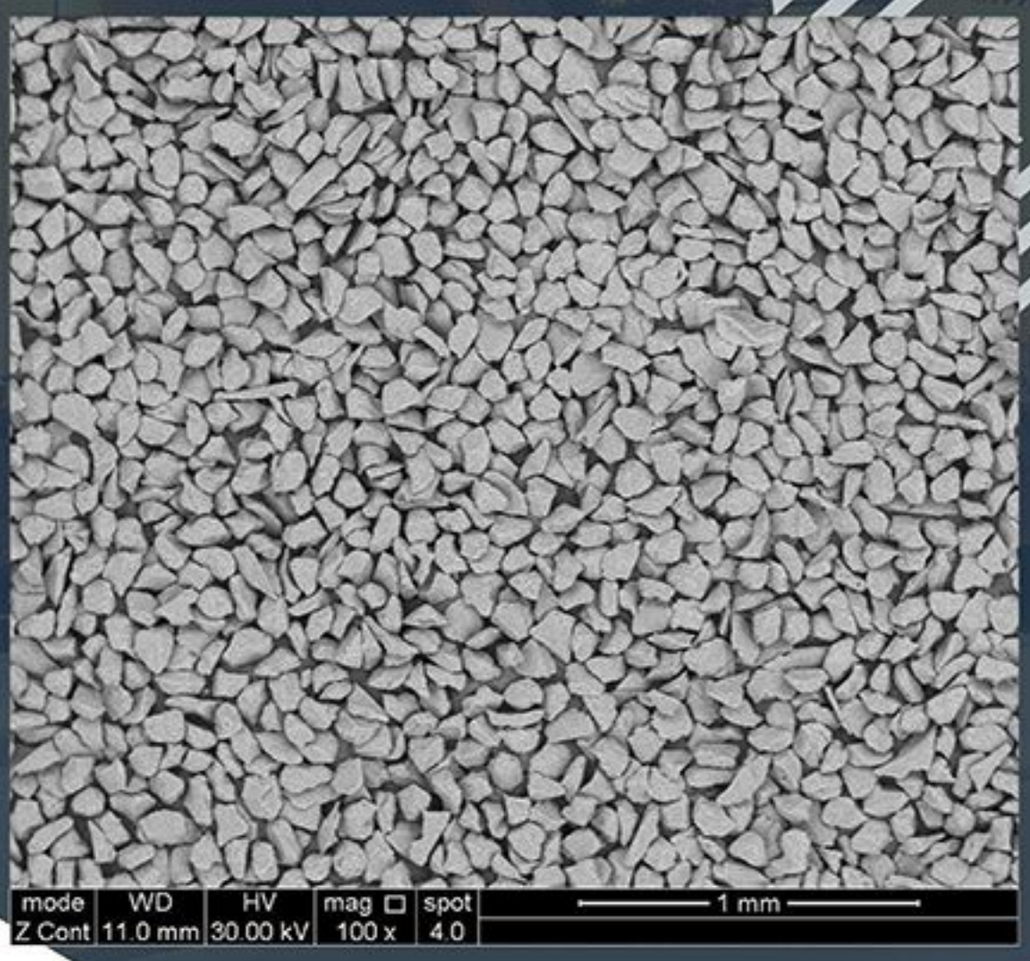
AEROSPACE COATING

WHITE
ALUMINUM OXIDE/ CORUNDUM

BLOCK SHAPE VS ROUND WHITE FUSED ALUMINA: WHICH DELIVERS THE BEST AEROSPACE SURFACE FINISH



SHERWIN-WILLIAMS®

Fractures to Maintain Sharpness

During blasting, the grain fractures along predictable planes, creating new sharp edges instead of dulling. This self-sharpening effect allows the abrasive to maintain cutting efficiency throughout its service life.

Why this matters in aerospace environments:

- Maintains a consistent surface profile across multiple passes
- Reduces operator variation and rework
- Supports stable process performance for critical bonded assemblies

Technical Advantages Over Rounded Media

Property	Block-Shaped White AO	Rounded Media
Cutting Efficiency	High, due to angled contact points	Lower, tends to burnish or glide
Surface Profile	Controlled and uniform	Often inconsistent or too smooth
Fracture Behavior	Creates fresh sharp edges	Dulls over time
Adhesion Support	Strong mechanical key for bonding	Reduced profile for coatings and adhesives

Application Suitability

This abrasive is suited for aerospace surface prep where controlled aggression is required to produce a repeatable finish. Typical uses include:

- Removal of coatings and surface films
- Pre-bonding or pre-coating surface conditioning
- Refurbishment of metallic and composite components

SHERWIN-WILLIAMS

Our white aluminium oxide is engineered with a block-shaped, angular grain that delivers controlled cutting performance for aerospace blasting applications. Its physical properties and fracture behavior are designed to support consistent, repeatable surface preparation on metals, engineered plastics, and composite parts

Block-Shaped Grain for Controlled Cutting

Unlike rounded media that tends to roll or slide across the substrate, the block-shaped grain engages the surface with defined cutting points. This produces a stable, predictable abrasive action that helps create an even micro-profile suitable for bonding and coating.

Key advantages of the block-shaped geometry:

- Direct contact with the surface for efficient coating and contaminant removal
- Reduced skidding compared to spherical or rounded media
- More consistent surface texture for uniform adhesion

Bulk Density: 1.8 to 2.0 g/cm³

The media's bulk density falls in the 1.8 to 2.0 g/cm³ range, giving it a balanced energy transfer that is well-suited for aerospace components. This density provides enough mass to generate a reliable anchor profile, without the excessive impact associated with heavier mineral abrasives.

Performance benefits of this density range:

- Strong, controlled cutting action
- Suitable for metals, composites, and engineered plastics when blast parameters are set correctly
- Helps achieve a clean, bond-ready surface without unnecessary substrate damage

SHERWIN-WILLIAMS®