Technology: SmoothEdge®

Prep Yourself

SmoothEdge®

Surface & Edge Preparations Exclusively by Tool Alliance®

Many of our new Series include SmoothEdge as a standard feature, while on others it can be added as a same-day post treatment for a small charge. Ask your Inside Sales rep about SmoothEdge today!

The Edge Preparation Process

Our cutting edges are literally too sharp for certain materials. For our carbide inserts and now increasingly for our solid carbide round tools, proper edge preparation can yield huge productivity improvements to "out of the box" tool application. Using a treatment we call SmoothEdge® and performed on machine tools developed in our own R&D lab, we've taken the mystery out of tool "break-in" and provided a consistency that can be counted on time and again. The process ranges from SmoothEdge 1, a microblasting treatment using extremely fine aluminum oxide powder (note: this procedure is standard with any coated product) to SmoothEdge 5, which adds a double cycle of honing & lubricity treatments. All five will sound and run smooth from the first cut and protect your tooling investment from unnecessary potential for chipping during your initial tooling paths. Big productivity gains can be achieved in certain applications as well due to improved chip formation and evacuation.

SmoothEdge 1

A microblasting treatment using extremely fine aluminum oxide powder to smooth the carbide surface while generating a very light edge preparation. This feature comes standard with any SmoothCoat® coating.

Uses: Highly recommended for most milling and drilling applications.

SmoothEdge 2

A lapping treatment to create extreme lubricity & smoothness with minimal edge prep on uncoated tools.

Uses: Highly recommended for milling & drilling of aluminum & other non-ferrous applications using uncoated tools.

SmoothEdge 3

Combines microblasting and lapping for a light hone with extreme lubricity.

Uses: Highly recommended for milling & drilling applications of aluminum & other non-ferrous applications using coated tools.

SmoothEdge 4

Adds a proprietary hone to the blasting and lapping cycles for a medium edge prep with excellent lubricity.

Uses: Highly recommended for milling and drilling applications involving general steels, stainless, and cast iron.

SmoothEdge 5

Doubles the honing and lapping cycle for maximum edge strength; a robust edge preparation coupled with excellent lubricity characteristics.

Uses: Highly recommended for milling and drilling applications involving stainless, high-temp alloys, and exotics.

Primary SmoothCoat recommendations:

A1 for SE3 TA for SE4 AT for SE5

Get the Edge.

Combine SmoothEdge with our other proprietary technologies to create process optimization. Our "standard" tools can be customized to create winning solutions for difficult material removal apps.