

S-CARB 3-FLUTE END MILLS

The one-of-a-kind, symmetrical 3-flute design features an engineered flute form that provides high-performance results through a full range of machining conditions. These tools are designed for aggressive aluminum and non-ferrous machining requiring a high level of material removal.



Engineered Flute Design

- Effective chip removal at high feed rates
- Lower cutting forces than comparable products

Unique Symmetrical End Gashing

- Improved balance at high spindle speeds
- Improved workpiece finish through better balance
- More effective plunging vs. conventional designs

Circular Land

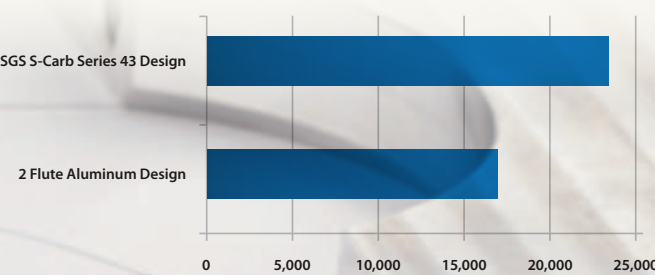
- Increased control at various speed and feed levels
- Reduced chatter

Available in Long Reach with Neck Options

- Axial slotting up to 1xD; radial profiling up to 0.5xD
- Necked design with blended diameter transitions provide clearance to reach
- Short flutes for maximum rigidity



Maximum RPM Capability
Results of Independent Lab Balance Analysis Testing per the ISO G2.5 Tolerance
1/2" Diameter Tools Equal Flute Lengths and Overall Lengths



Available with TiB2 Coating (Titanium Diboride), which provides a very smooth surface and a low affinity to cold welding, or built-up edge, which makes it optimal for titanium, aluminum (>10%) and copper applications. It has high toughness and high hardness for exceptional performance with these materials.

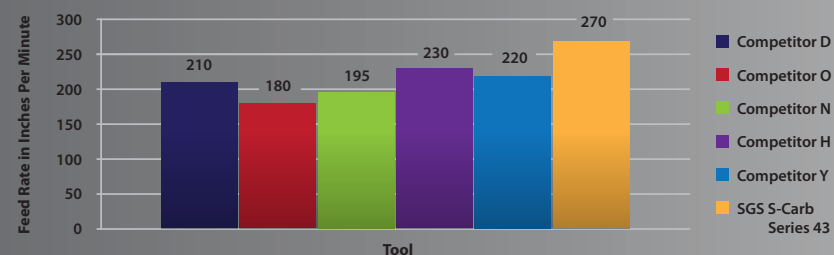
- Microhardness: 4000HV**
- Oxidation Temperature: 850°C – 1562°F**
- Coefficient of Friction: .45**
- Thickness: 1 – 2 Microns (based on tool diameter)**

S-CARB **HIGH-PERFORMANCE** END MILLS ARE IDEAL FOR **CYCLE TIME REDUCTION** IN TARGET APPLICATIONS SUCH AS:

- Aerospace**
 - Structure components
- Automotive/Motorbike**
 - Performance aluminum wheels
 - Non-ferrous housings; transmissions, manifolds, electronic pumps
- Mold & Die**
 - Non-ferrous mold cavities
- Firearms**
 - Aluminum components
- Semiconductor**
 - Aluminum vacuum chambers



SLOTING CAPABILITY: 3-FLUTE END MILLS
Maximum Feed Rate Achieved at 100% Spindle Load
on a 30 hp Vertical Mill in 6061 Aluminum @ 10,000 rpm .500" Deep Slot .500" Diameter Tool



S-CARB 3-FLUTE END MILLS FOR ALUMINUM, NON-FERROUS & NON-METALLIC MATERIALS



Performance by Design
Engineered with a specialized flute to effectively manage the size and volume of chips produced during aggressive machining.



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