



S-Carb Series 43B

Material
Aluminum Alloy - 7050-T74

Part Type
Thrust Cone

SGS Product
3/4" Dia, 3 Flute, Ball Nose End Mill

Competitor Product
0.7500" Dia. 3 Flute

Application
Milling Semi Rough-Profiling
33-5 Ae

SGS Tool Information

- 0.7500" Cutting Dia.
- 2.2500" Length of Cut
- 5.0000" Overall Length
- Bright/Uncoated Coating
- EDP: [34931](#)

Goal

The customer was looking to evaluate an alternative tooling solution to replace their current supplier while reducing cycle time and increasing tool life.

Strategy

The customer requested a tooling solution that could reduce overall costs by decreasing cycle time and increasing tool life. SGS recommended testing an S-Carb end mill to evaluate its performance against the existing process.

Result

Using the same cutting parameters with only an increase in feed rate, the SGS S-Carb reduced machining cycle time by **25%** while doubling tool life. Machining cost was reduced by **25%** and cost per part decreased by **27%**, resulting in total savings of **\$12,318**.



Learn more about the [S-Carb](#)

Total
Cost Savings
\$12,318

Machining
Cycle Time
↓ 25%

Machining
Cost
↓ 25%

Cost
Per Part
↓ 27%

Tools	Cutting Dia. (DC)	RPM	SFM	IPM	IPR	Radial Depth (AE)	Axial Depth (AP)	Coolant
SGS S-Carb (3-Flute)	0.7500"	11500	2260	174.92	0.0152	0.1500"	0.1500"	Flood
Competitor (3-Flute)	0.7500"	11500	2260	144.90	0.0126	0.1500"	0.1500"	Flood

Cycle Time
↓ 25%

Machining Cost
↓ 25%

Cost Per Part
↓ 27%

