

AG End Mills

AG Mill Roughing (For Roughing Operations)

Features:

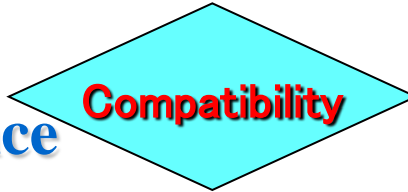
- Increased Performance in Roughing Operations
- Improved “Chip Breaking” Action with Both Fine and Heavy Tooth Serrations
- Made from HSS-Co Material
- Next Generation TiALN Coating for Improved Performance and Extended Tool Life
- Higher Radial Depths of Cut due to Improved Tool Geometry and Tooth Serrations



AG-MILL Roughing

Features of Material and Coating

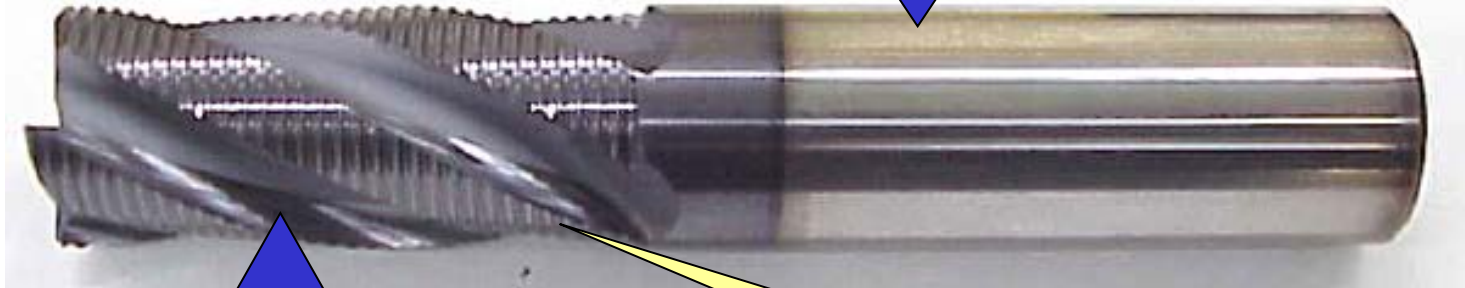
**Wear
Resistance**



**Chipping
Resistance**

High Alloyed Cobalt HSS

**Appearance of AG-Mill
Roughing Regular Length Short**



AG Coating

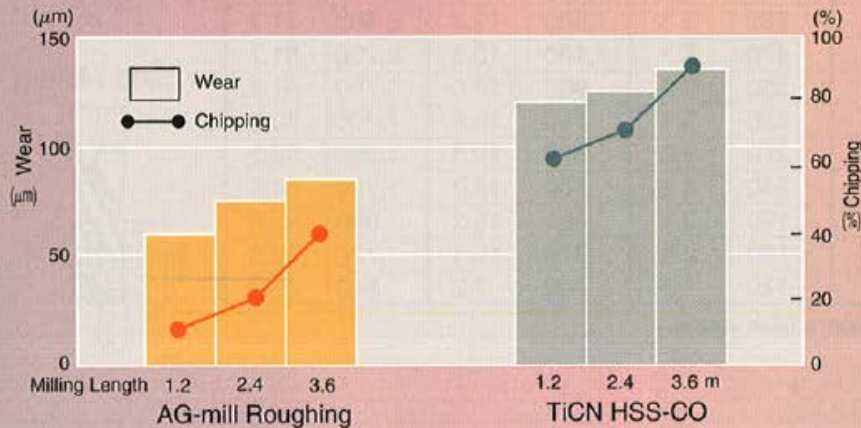
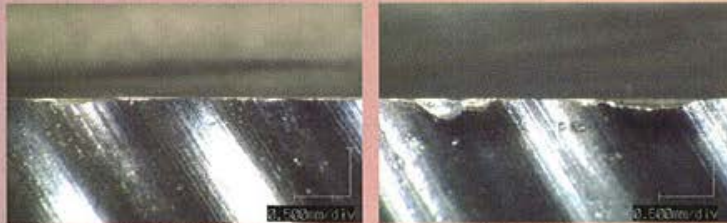
- **Heat Resistance**
- **Oxidization**
- **High Hardness**
- **High Toughness**

**Fine Pitch
Nick**

* Excellent Chipping and Wear Resistance Compared to HSS Co TICN:

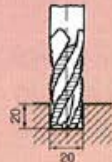
Performance

Excellent Chipping & Wear Resistance



Milling condition

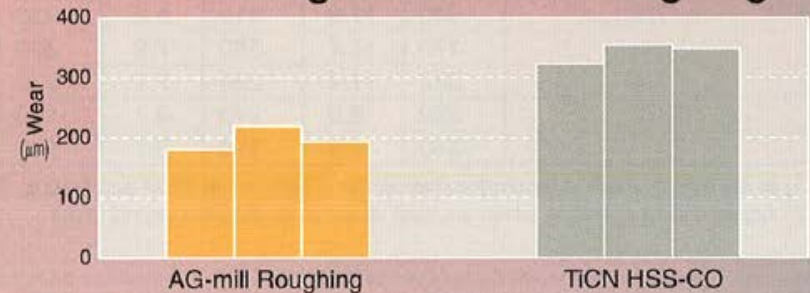
Tool : $\phi 20$ (0.787in) (AGRERS)
 Cutting Speed : 40m/min (131 SFM)
 Feed : 0.1mm/tooth (0.004 IPT)
 Work Material : 1050 (S50C), 180HB
 Cutting Fluid : Wet



Comparison of cutting chips

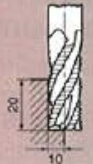
	AG-mill Roughing	Competitor
early time		
After 5m cutting		

Side milling of AG-MILL Roughing



Milling condition

Tool : $\phi 20$ (0.787in) (AGRERS)
 Cutting Speed : 355min⁻¹ (22m/min) (72.1 SFM)
 Feed : 132mm/min (5.20 IPM)
 Work Material : D2 (SKD11), 210HB
 Cutting Fluid : Wet



Work Materials:

- Suitable for Semi-Finish Operations in Structural Steels, Carbon Steels, Alloy Steels, Molds Steels, Stainless Steels, Nickel Alloys, Titanium, and Cast Iron
- Available in Fractional & Metric Sizes
- Fractional Size Range: 1/4" - 2"
- Metric Size Range: 6mm – 50mm

AG Mill Heavy (Roughing & Finishing)

Features:

- **Increased Performance in Semi-Finish Operations**
- **Made from HSS-Co Material**
- **Next Generation TiALN Coating for Improved Performance and Extended Tool Life**
- **Higher Radial Depths of Cut due to Improved Tool Geometry and Tooth Serrations in Semi-Finish Operations**
- **Excellent for Roughing in Nickel Alloys, Titanium, Inconel and Stainless**



AG-MILL Heavy (Roughing & Finishing)

* 3X the Tool Life than Regular TiCN HSS-Co End Mills.

Groove milling of AG-MILL Heavy

Excellent Chipping & Wear Resistance

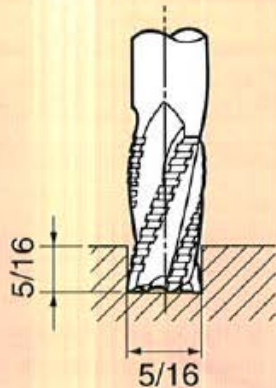
Tool : $\phi 5/16$ (AGHV)

Work Material : 1050 (S50C) 190HB

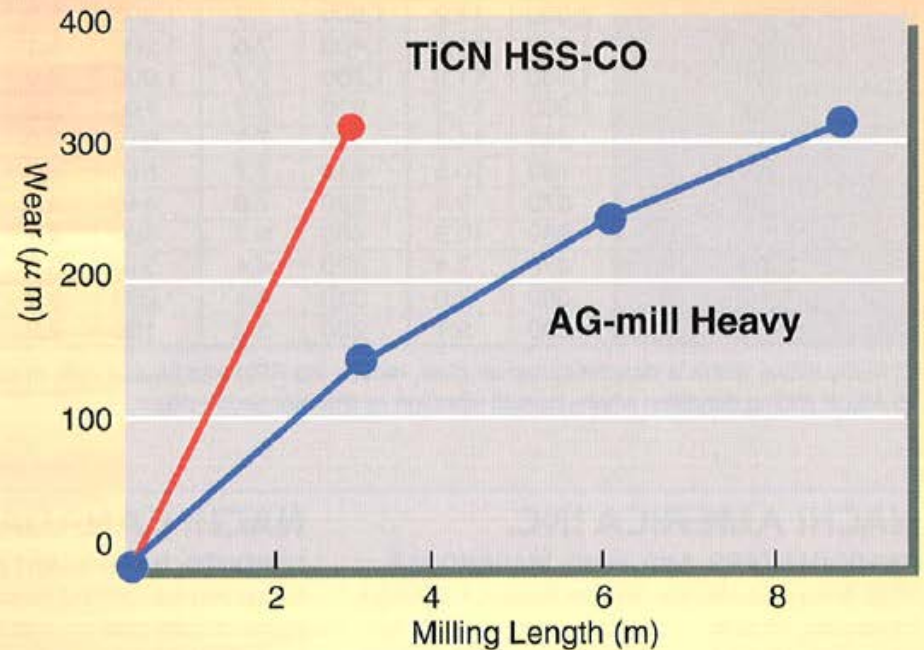
Cutting Speed : 2,390 RPM (197SFM) (60m/min)

Feed : 14.3 IPM (363mm/min),
0.0015 IPT (0.038mm/tooth)

Cutting Fluid : Wet



3X the Tool Life



Work Materials:

- Suitable for Semi-Finish Operations in Structural Steels, Carbon Steels, Alloy Steels, Molds Steels, Stainless Steels, Nickel Alloys, Titanium, and Cast Iron
- Available in Fractional & Metric Sizes
- Fractional Size Range: 1/4" - 2"
- Metric Size Range: 3mm – 50mm

Thank You