

Grind .008" (0.2 mm) Thick Saw Blade



**MACHINE:** Accura™ 1210G  
Rotary Surface Grinder

**WORKPIECE:** Ø 2.75" (70 mm)  
Metal Slitting Saw

**OPERATION:** Grind Face to .008"  
(0.2 mm) Thickness

**MATERIAL:** High Speed Steel

**OBJECTIVE:** To grind the blade to precise flatness, thickness and surface finish tolerances in a rotary surface grinder configuration.

**OPERATION DESCRIPTION:** The axis of the work spindle on the 1210G is vertical. The axis of the wheel spindle was set parallel to the floor in a traditional rotary surface grinding arrangement. The workpiece was held on a permanent magnet chuck on a hydrostatic bearing work spindle. The workpiece was ground using an 8" (200 mm) diameter, aluminum oxide wheel on a motorized wheel spindle at 7,000 SFPM (36 m/sec). The wheel was trued and dressed with a single point diamond. Water soluble coolant was used.



**NOTES:** The runout specification on the Accura hydrostatic work spindle is 5 micro-inch (0.125 µm) or better. This level of precision helps produce saw blades of ultra-uniform thickness. Gap elimination by acoustic emission sensing or wheel spindle power sensing is available as a time-saving option. The machine can also be equipped with a rotary diamond dressing system and CBN grinding wheel.