## General Grinding Steps for High Speed Steel (HSS)

## **ROUGH GRIND**

- 1. Set back clearance grinding angle.
- 2. Set wheel RPM.
- 3. Set proper distance between the wheel and the tool rest. .020" 0.5mm
- 4. Make sure wheel width matches the tracing pin width (use a square tracing pin).
- 5. Rough grind the knife until the tracing pin contacts the template.
- 6. Index the wheel toward the tool rest proper distance. .020"
- 7. Regrind the knife.
- 8. Repeat steps 1 through 7 for all knives.
- 9. Make sure all knives are even.
- 10. Dress the wheel round. Be sure to then rotate the tracing pin to the round side.
- 11. Regrind all knives while maintaining the proper distance between the wheel and the tool rest. .020"
- 12. Set up for side clearance (on any angle over 60°) and grind in areas needed, still at the rough grind angle.
- 13. Redress wheel (round). At 0° side clearance, regrind all knives while maintaining the proper wheel/tool rest relationship. .020"

## FINISH GRIND

- 1. Set proper back clearance grinding angle.
- 2. Set higher wheel RPM.
- 3. Set distance between wheel and tool rest. .020"
- 4. Make sure the wheel shape and width match tracing pin.
- 5. With coolant off, index wheel towards knife until minimal contact is made. Start coolant and proceed with grind (<u>smaller grind</u> is better).

