



Steel Part: Revolution Drill®

The customer is machining a steel component made from H13 using a horizontal Okuma L106 lathe with 200 PSI internal coolant.

The customer was unhappy with the long cycle times and short tool life. They needed a better solution to solve these issues.

The **Revolution Drill®** provided good chip formation and could drill the hole without adding time for pecking cycles.



Product: Revolution Drill® Objectives: (1) Decrease cycle time (2) Increase tool life Industry: Tool, mold, & die Part: Steel component Material: H13 Hole Ø: 1.96" Hole Depth: 5.9"	Measure	Competitor Indexable Drill	Revolution Drill®
	RPM	900	1000
	Feed Rate	0.002 IPR	0.004 IPR
	Penetration Rate	1.8 IPM	4.0 IPM
	Cycle Time	3 min 17 sec	1 min 28 sec
	Tool Life	6 holes	15 holes
	Pecking Cycle?	Yes	No



► Revolution Drill®
Holder: **R34X35-40M**
Inserts: **OP-05T308-H**

250% tool life increase

The Revolution Drill® provided:

- ✓ Good chip formation
- ✓ Decreased cycle time
- ✓ Increased tool life