

Turbine Housing Sensor: EcoCut

The customer is machining a turbine housing sensor made from 347L stainless steel. They use a Kiwi HMC with a water soluble coolant-through.

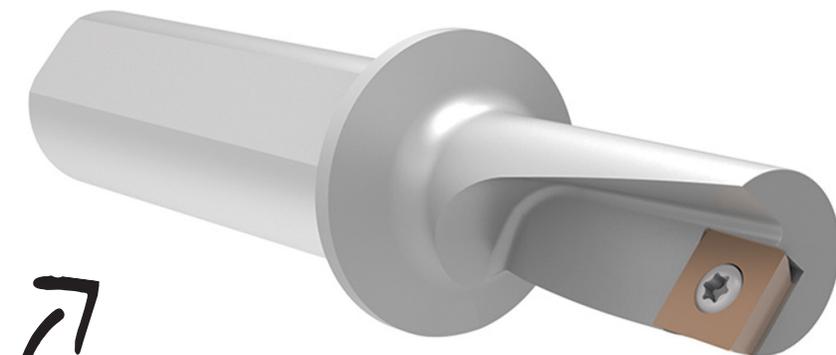
The customer was unahppy with this process and needed to reduce cycle time and decrease tooling costs.

The **EcoCut** tooling dramatically reduced the cycle time and also eliminated three tools in the production process.



		Measure	Previous Tooling	EcoCut
Product:	EcoCut	RPM	Spot drill (0.860" diameter) • Cycle time: 1 min 30 sec • Tool life: 100 parts	2832
Objective:	Decrease cycle time	Speed	Cobalt drill (0.375" Ø) • Cycle time: 1 min 26 sec • Tool life: 50 parts	350 SFM
Industry:	Renewable energy/energy	Feed Rate	Cobalt drill (0.4687" Ø) • Cycle time: 1 min 36 sec • Tool life: 50 parts	0.004 IPR
Part:	Turbine housing sensor	Penetration Rate	Line Bore (0.5" Ø) • Cycle time: 7 min 18 sec • Tool life: 70 parts	11.33 IPM
Material:	347L Stainless steel	Cycle Time	11 min 50 sec	51.6 sec
Hole Depth:	1.25"			

► EcoCut
Insert: XCNT 060202 EN CM40 Grade
Holder: EC12R-3.0D 06 H-E



92% cycle time decrease

The EcoCut provided:

- ✓ Reduced tools needed
- ✓ Decreased cycle time