



You can't put a value on peace of mind.

When you're machining difficult materials, it becomes even more crucial that you have the right tool for the job. Our customer was producing fittings for the electrical energy industry. These fittings would later be used in a harsh, damp environment, so they needed to be made from 316 stainless steel to prevent rust. However, the stainless material presented a challenge as it caused our customer's previous drill to weld inside the part twice within the first 100 parts.



Our customer tested the **4TEX Indexable Carbide Drill** using the "M" geometry inserts with AM485 coating designed to resist heat and a higher rake geometry that provides excellent chip formation in stainless steels. The 4TEX drill was exactly what our customer needed for this application. Chip formation improved, cycle time shortened, and hole quality increased. And most importantly, the 4TEX drill eliminated the catastrophic failures our customer had been experiencing before.

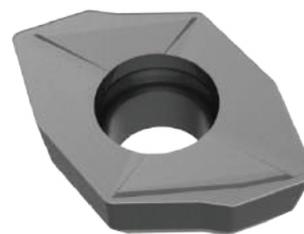
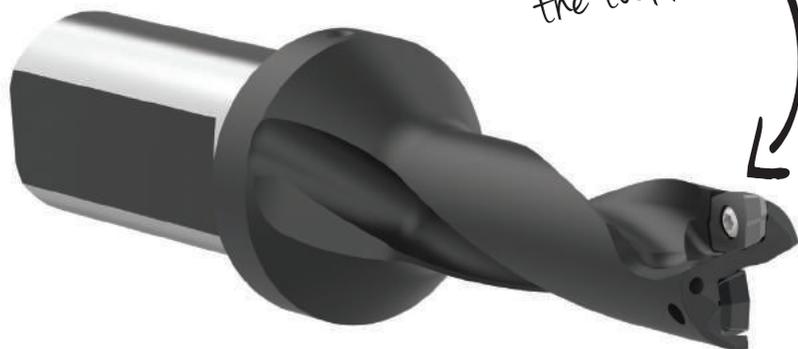
Also, because the 4TEX drill was the right tool for this application, it doubled the tool life. With their previous IC drill, our customer could get 15 parts per insert index (when the drill wasn't failing). With the 4TEX drill, our customer produced 30 parts per index (with no worries of tool failure).

The 4TEX drill provided multiple improvements and cost-savings for our customer, **but you can't put a value on worry-free machining and peace of mind – and those can be the greatest benefits of all.**

		Measure	Competitor IC Drill	4TEX® Drill
Product:	4TEX® Drill	RPM	2,716	3,056
Objectives:	(1) Eliminate tool failure (2) Improve tool life	Speed Rate	400 SFM (121.92 M/min)	450 SFM (137.16 M/min)
Industry:	Renewable energy/energy (electrical)	Feed Rate	0.0025 IPR (0.0635 mm/rev)	0.0025 IPR (0.0635 mm/rev)
Part:	Electrical fittings	Penetration Rate	6.8 IPM (172.72 mm/min)	7.64 IPM (194.056 mm/min)
Material:	316 stainless steel	Cycle Time	14 sec	12 sec
Hole Ø:	0.5625" (14.29 mm)	Tool Failure?	Yes	No
Hole Depth:	1.6100" (40.894 mm)	Tool Life (per index)	15 parts	30 parts

▶ 4TEX Drill holder
3xD length
Item No. D3040562I-075F

▶ 4TEX Drill inserts
M geometry
(stainless steel & high temp)
Item No. 4T-040203-M



The 4-sided indexable inserts with heat-resistant coating provided:

- ✓ Eliminated tool failures
- ✓ Increased tool life
- ✓ Worry-free machining