



Here's how you deal with interruptions.

Drilling stainless steel materials can be challenging, and that challenge gets amplified when the cut is interrupted. Our customer was machining coils from 316 stainless steel tubes. Using a vertical machining center, they drilled into the outer curved surface of the tubing. Sometimes the drilled holes were on the tubing centerline, but other times the holes were off-center, creating a severely interrupted cut on the angled surface.



The customer's current tooling performed well enough to achieve the required cuts in other materials, but not in stainless. Then, when the tool experienced a catastrophic failure, the customer decided enough was enough.

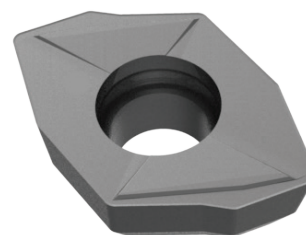
They tested the **4TEX Indexable Carbide Drill** using the "M" geometry inserts with AM485 coating designed to resist heat and a higher rake geometry that provides excellent chip formation in stainless steels. The 4TEX performed exceptionally well in the angled cut, drilling every hole with consistent results: quiet operation, no chatter, excellent hole size and finish, no exit burrs, and ideal chip formation.

The customer was impressed with the 4TEX Drill's performance in the angled cut, and they were especially thrilled that the tooling cost was over \$150 less than their previous solution. Some tools can handle interruptions, and some can't. **Find the right tool for your difficult applications** (for assistance, contact your local area Allied Field Sales Engineer).

		Measure	Competitor IC Drill	4TEX® Drill
Product:	4TEX® Drill	RPM	2058	2352
Objectives:	(1) Eliminate tool failure (2) Successful operation in difficult interrupted cut	Speed Rate	350 SFM	400 SFM
Industry:	Heat exchangers/tube sheets	Feed Rate	0.002 IPR	0.0024 IPR
Part:	Coils	Penetration Rate	4.1 IPM	5.6 IPM
Material:	316 Stainless Steel Tube	Cycle Time	5 sec	4 sec
Thickness:	3/8"	Tool Failure	Yes	No
Hole Ø:	16.50mm	Tooling Cost	\$675	\$495

▶ 4TEX Drill holder
3xD length
Item No. D3051650M-100F

▶ 4TEX Drill inserts
M geometry (stainless steel)
Item No. 4T-05T203-M



The 4-sided indexable inserts with heat-resistant coating and higher rake geometry provided:

- ✓ Eliminated tool failure
- ✓ Successful results in difficult conditions
- ✓ Decreased tooling costs
- ✓ Worry-free machining

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