T-A PRO® DRILL

Conquering chip control.

Don't let chips slow you down. Our customer who machines welding nozzles in copper was previously using a competitor drill that was running 80-85% spindle load on a new point. After 12,000 pieces, the point was overloading the machine spindle and had to be changed. Plus, they were experiencing undesirable chip control.

Looking to improve chip control and their overall process, the customer tested the ***T-A Pro drill*** with ISO-specific "N" geometry insert, designed for excellent chip control in nonferrous materials. With this combination, they were able to increase tool life, decrease cycle time, and decrease cost per hole.

Adding to the improvements provided by the T-A Pro, the customer experienced 65% spindle load on a new point and chip thickness that was .012 to .014, ultimately giving them excellent chip control—a feat they were happy to have achieved.

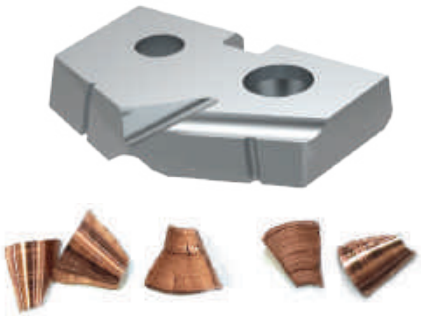
Triumph over your chip control challenges ***by letting us help you find the right solution.***

Product:	T-A Pro drill
Objective:	Improve chip control
Industry:	Industrial equipment
Part:	Welding nozzle
Material:	Copper
Hole Ø:	0.866" *(22.00 mm)*
Hole Depth:	2.000" *(50.80 mm)*
Tolerance:	+/- 0.004" *(0.10 mm)*

Measure	Competitor Drill	T-A Pro Drill
RPM	3000	3000
Speed	680 SFM *(207.26 m/min)*	680 SFM *(207.26 m/min)*
Feed Rate	0.0060 IPR *(0.15 mm/rev)*	0.0090 IPR *(0.23 mm/rev)*
Penetration Rate	18 IPM *(457.2 mm/min)*	27 IPM *(685.8 mm/min)*
Total Part Cycle Time	6.67 sec	4.44 sec
Tool Life	12,000 holes	30,000 holes
T-A Pro offered ***35%*** cost per hole savings over the competitor tooling.		

- T-A Pro holder
  Item No. HTA1C03-100F
- T-A Pro insert
  N geometry (nonferrous)
  Item No. TAN1-22.00

150% tool life increase



The TiCN coated T-A Pro insert for use in nonferrous materials provided:

- ✓ Improved chip control
- ✓ Decreased cycle time
- ✓ Increased tool life
- ✓ Decreased cost per hole