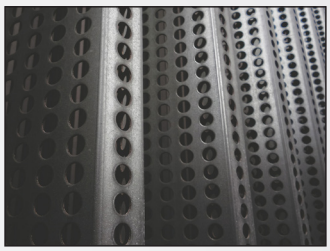
T-A PRO® DRILL

Things aren't always as they seem.



Our customer machines mold components and was using an IC drill. This seemed like the way to go as it was low cost and inserts were easily available, but with that came extra problems. Over the course of the next year, they experienced frequent tool crashes, premature tool wear, and ultimately left the customer with a less than desirable hole finish and size.

Looking to replace the indexable carbide drills with tools that had longer life, the customer turned to Allied and tested the ***T-A Pro Drill***. Using the "P" geometry insert—designed to provide increased penetration rates and tool life in steel applications—the customer achieved their desired results.

With the previous drill, the customer achieved 100 linear inches *(2.54 linear M)* or less before needing to replace the inserts. Utilizing the T-A Pro "P" geometry insert, they achieved *700* linear inches *(17.78 linear M)* of tool life and lowered the cost per hole by 94.9%. The T-A Pro also dramatically decreased the cycle time.

With the cost and time savings, the switch to the T-A Pro Drill was a no-brainer for the customer. The customer placed an order to tool up their new machine with nothing but the T-A Pro and plans to replace others as they wear out over time.

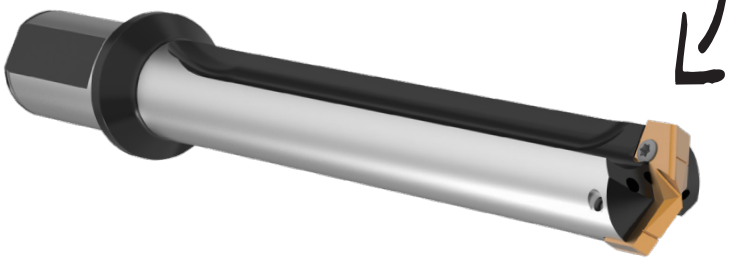
Just because it seems like a good fit doesn't mean it is the best solution.

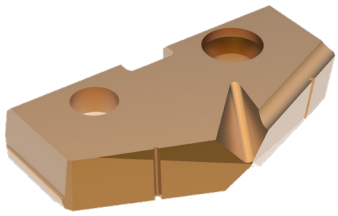
Product: T-A Pro Drill
Objective: Increase tool life
Industry: Tool, mold, & die
Part: Mold components
Material: P20 Hi-hard
Hole Ø: 1.4689" *(37.31 mm)*
Hole Depth: 6.5000" *(165.1 mm)*

Measure	Competitor IC Drill	T-A Pro Drill
RPM	590	470
Speed Rate	225 SFM *(68.58 M/min)*	180 SFM *(54.864 M/min)*
Feed Rate	0.0025 IPR *(0.064 mm/rev)*	0.010 IPR *(0.254 mm/rev)*
Penetration Rate	1.5 IPM *(38.1 mm/min)*	4.7 IPM *(119.38 mm/min)*
Cycle Time	4 min 30 sec	1 min 25 sec
Tool Life	100" linear *(2.54 linear M)*	700" linear *(17.78 linear M)*
T-A Pro offered 94.9% cost per hole savings over the competitor tooling.		

- T-A Pro Drill holder
  5xD length
  Item No. HTA3A05-150F
- T-A Pro Insert
  P geometry (steel)
  Item No. TAP3-37.31

68.5%
cycle time decrease





The steel AM300 coated T-A Pro insert provided:

- ✓ Increased tool life
- ✓ Decreased cycle time
- ✓ Decreased cost per hole