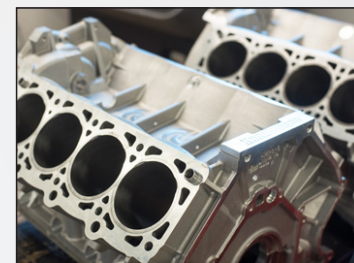




Need a solution with better tool life?

Our customer was machining engine block parts from ductile cast iron in a production cell. The replaceable tip drill they were using wasn't providing the results they needed, so they began searching for a tooling solution that would decrease machine downtime and increase productivity.



The customer tested the **T-A Pro High Penetration Replaceable Insert Drill** using the "K" (cast iron) geometry insert with Allied's multilayer TiAlN coating that provides increased abrasion resistance and tool life. The T-A Pro performed better than the customer had hoped.

Using the T-A Pro not only provided substantial tool life improvements, but it also improved the penetration rate. The previous tooling had a tool life of 1700 holes, but the T-A Pro increased that life to 3400 holes. The T-A Pro also increased penetration rates by 30%. This allowed the customer to increase their productivity.

The bottom line: Our customer had large tool savings per year with massive improvements in throughput. The advantage of the T-A Pro allowed our customer to achieve their tooling goals.

		Measure	Competitor Replaceable Insert Drill	T-A Pro Drill
Product:	T-A Pro	RPM	1819 RPM	2092 RPM
Objectives:	(1) Decrease machine downtime (2) Increase productivity	Speed	300 SFM (91.44 M/min)	345 SFM (105.156 M/min)
Industry:	Automotive	Feed Rate	0.008 IPR (0.203 mm/rev)	0.0092 IPR (0.234 mm/rev)
Part:	Engine block	Penetration Rate	14.55 IPM (369.57 mm/min)	19.25 IPM (488.95 mm/min)
Material:	Ductile Cast Iron	Cycle Time	39 seconds	29 seconds
Hole Ø:	0.6299" (16.00mm)	Tool Life	1700 holes	3400 holes
Hole Depth:	9.50" (241.30mm)			

- ▶ T-A Pro Drill holder
15xD length
Item No. HTA0C15-075C

- ▶ T-A Pro Drill inserts
K geometry
(cast iron)
Item No. TAK0-16.00

increased
tool life by
100%



The cast iron TiAlN coated T-A Pro insert provided:

- ✓ Doubled tool life
- ✓ Decreased machine downtime
- ✓ Increased productivity
- ✓ 30% increased penetration rate
- ✓ Increased tool savings per year