



## The Gift that Keeps Giving.

Not everything in life has to be a give and take. Our customer who machines fluid end frac blocks was previously having to reduce cutting parameters to achieve good chip formation and produce a successful part.

Needing better chip formation with a reduced cycle time, the customer tested Allied's **T-A Pro drill**. Using the "M" ISO-specific stainless steel insert geometry—developed for improved chip formation while minimizing exit burr—they were able to increase their speed and feed while maintaining ideal chip formation.

On top of the reduced cycle time, the T-A Pro had an increased tool life lowering the cost per hole by 58.82%. The success of the T-A Pro in this application is just another example of why the T-A Pro is more than just a good drill.

If you are looking for a solution that just keeps giving, **give us a call, and we will help you find the right solution.**



<b>Product:</b>	T-A Pro drill	<b>Measure</b>	<b>Competitor Drill</b>	<b>T-A Pro Drill</b>
<b>Objective:</b>	Reduce cycle time	<b>RPM</b>	480	545
<b>Industry:</b>	Oil & gas/ Petrochemical	<b>Speed</b>	220 SFM (67.06 m/min)	250 SFM (76.20 m/min)
<b>Part:</b>	Fluid end frac block	<b>Feed Rate</b>	0.005 IPR (0.13 mm/rev)	0.008 IPR (0.20 mm/rev)
<b>Material:</b>	15-5 PH Stainless Steel	<b>Penetration Rate</b>	2.4 IPM (60.96 mm/min)	4.4 IPM (111.76 mm/min)
<b>Hole Ø:</b>	1.75" (44.45 mm)	<b>Total Part Cycle Time</b>	500 sec	272 sec
<b>Hole Depth:</b>	20.00" (508.00 mm)	<b>Tool Life</b>	30 holes	60 holes
<b>Tolerance:</b>	+/- 0.005" (0.127 mm)	T-A Pro offered <b>58.82%</b> cost per hole savings over the competitor tooling.		
<b>Required Surface Finish:</b>	125 Ra µin (3.2 µm)			

▶ T-A Pro holder  
Item No. HTA3D15-150F

▶ T-A Pro insert  
M geometry (stainless steel)  
Item No. TAM3-44.45

45.60%  
cycle time decrease



The ISO-specific AM460 coated T-A Pro insert provided:

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

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