Valve Body: Original T-A®

The customer manufactures valves for the oil field industry using a custom-made spotting drill machine running with 60 PSI water soluble oil coolant. They are machining a valve body made from WCC cast steel.

In order to improve the production process, the customer needed to eliminate the costly tool regrinds and reduce the large amount of tool set-up time.

The **Original T-A** eliminated tool regrinds, reduced tool set-up time, and increased the tool life.



Product:	Original T-A®	Measure	Competitor	Original I-A®
Objectives:	(1) Eliminate tool regrinds	RPM	430	430
	(2) Increase tool life(3) Reduce set-up time	Speed	141 SFM	341 SFM
Industry:	Oil & gas/petrochemical	Feed Rate	0.005 IPR	0.005 IPR
Part:	Valve body	Penetration Rate	2.15 IPM	2.15 IPM
Material:	WCC cast steel	Tool Set Up Time	29 min	4 min
Hole Ø:	1.25"			

Cycle Time

Tool Life



10.5 sec

75 holes

10.5 sec

138 holes

Hole Depth: 0.375"