

Down Hole Mud Injection Tube: Original T-A®

A contract machine shop repairs and maintains equipment for the oilfield industry. They are machining a down hole mud injection tube used in offshore drilling. The tube is made from heat treated alloy steel. They are using a manual lathe running with water soluble oil coolant through the tool with a rotary coolant adapter.

Seeking to improve the production process, the customer needed to reduce the cycle time and decrease the cost of production.

The **Original T-A** lowered cycle time and increased tool life.



Product: Original T-A® Objective: Decrease cycle time Industry: Oil & gas/petrochemical Part: Mud injector tube Material: Heat treated alloy steel Hole Ø: 0.75" (19.050 mm) Hole Depth: 10.0" (254 mm)	Measure	Competitor Drill	Original T-A®
	RPM	475	750
	Feed Rate	0.005 IPR (0.127 mm/rev)	0.0065 IPR (0.165 mm/rev)
	Cycle Time	4 min 42 sec	2 min 33 sec
	Tool Life	8 holes	11 holes
	The T-A offered 59.12% cost per hole savings over the competitor tooling.		



45% cycle time decrease

► Original T-A
Holder: 27010S-100L
Insert: 151A-0024



The Original T-A provided:

- ✓ Decreased cycle time
- ✓ Lowered the cost of production
- ✓ Increased tool life