The right tool can save you some big bucks.

Sometimes, you set out with the goal to simply improve your operation processes. But if you can find some big cost savings along the way, the mission becomes an even greater success. Our customer was machining truck arm components from austempered ductile iron, a material with high abrasiveness and inconsistent hardness. The application was challenging, and the customer wasn't happy with the 190 holes their drill achieved before the inserts would ultimately fail.



The customer wanted to test the 4TEX Indexable Carbide Drill using the "K" geometry with AM480 coating designed specifically for wear-resistance in cast iron material applications. To the customer's delight, the 4TEX obliterated the tool life, increasing from 190 to 800 holes (a 320% increase). And with no tool failure, the 4TEX was already the clear choice for the customer moving forward.

However, the 4TEX provided another major benefit for the customer. They had been using a high penetration drill with an expensive insert. The 4TEX used two indexable inserts, and by using all four sides of each insert, there was a 97% decrease in the customer's cost per hole.

In the beginning, the customer wanted to improve their tool life and eliminate the tool failures. In the end, the 4TEX easily handled those goals, all while saving the customer a significant amount of money in the process. The right tool shouldn't just improve your process; it should save you money, too.

Due du etc		Measure	Competitor High Penetration Drill	4TEX [®] Drill
Product: Objectives:	4TEX [®] Drill (1) Increase tool life	RPM	794	1764
Objectives.	(2) Eliminate tool failure	Speed Rate	180 SFM (54.864 M/min)	400 SFM (121.92 M/min)
Industry:	Military/Defense	Feed Rate	0.014 IPR (0.3556 mm/rev)	0.0035 IPR (0.0889 mm/rev)
Part:	Truck arm component	Penetration Rate	11.12 IPM (282.448 mm/min)	6.18 IPM (156.972 mm/min)
Material:	Austempered ductile iron	Tool Failure	Yes	No
Hole Ø:	0.866" (21.9964 mm)	Cycle Time	5 sec	10 sec
Hole Depth:	1.050 " (82.55 mm)	Tool Life	190 holes	800 holes
		4TEX offered 97% cost per hole decrease over the competitor tooling.		

