4TEX® DRILL

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.

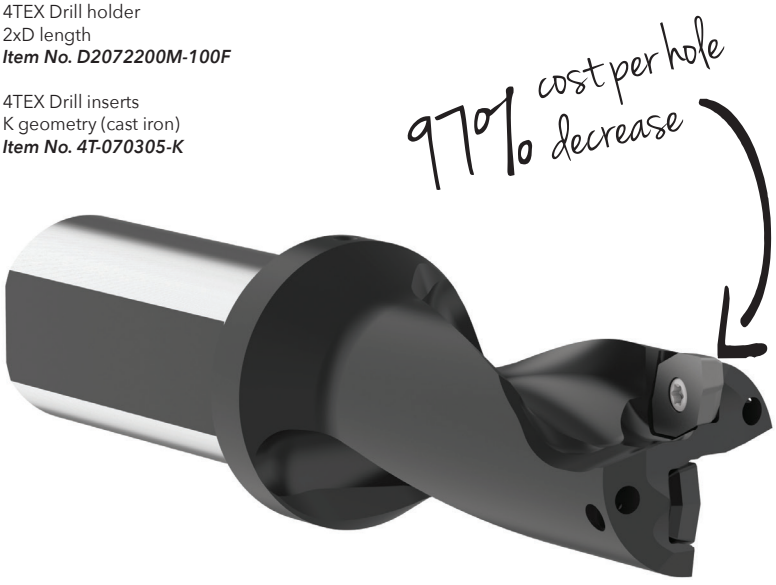
However, the 4TEX provided another major benefit for the customer. They had been using a high penetration drill with a $180 insert which gave them a cost per hole of $0.95. The 4TEX used two indexable inserts that were $13 each, giving them a cost per hole of $0.03 by using all four sides of each insert. This was a 97% decrease in the customer's cost per hole.

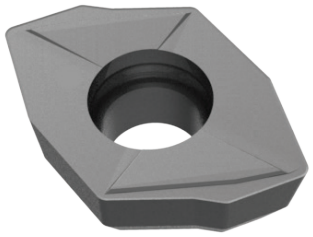
In the beginning, the customer wanted to improve their tool life and eliminate the tool failures. In the end, the 4TEX easily handled those goals, all while saving the customer a significant amount of money in the process. ***The right tool shouldn't just improve your process; it should save you money,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

Product: 4TEX® Drill
Objectives: (1) Increase tool life
(2) Eliminate tool failure
Industry: Military/Defense
Part: Truck arm component
Material: Austempered ductile iron
Hole Ø: 0.866"
Hole Depth: 1.050"

Measure	Competitor High Penetration Drill	4TEX® Drill
RPM	794	1764
Speed Rate	180 SFM	400 SFM
Feed Rate	0.014 IPR	0.0035 IPR
Penetration Rate	11.12 IPM	6.18 IPM
Tool Failure	Yes	No
Cycle Time	5 sec	10 sec
Tool Life	190 holes	800 holes
Insert Cost Per Hole	$0.95	$0.03

- 4TEX Drill holder
  2xD length
  Item No. D2072200M-100F
- 4TEX Drill inserts
  K geometry (cast iron)
  Item No. 4T-070305-K





The 4-sided indexable inserts with wear-resistant coating provided:

- ✓ Increased tool life
- ✓ Decreased cost per hole
- ✓ Eliminated tool failure
- ✓ Worry-free machining

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