

Series 135 Hi-PerCarb

Kyocera SGS Precision Tools Case Study

INDUSTRY



ENGINEERING

MATERIAL

A36 STEEL

PRODUCT

KSPT series 135 HI-PERCARB Drill

APPLICATION

Hole Drilling

COMPETITOR

Competitor's specially designed 2 comparable drill

COOLANT

SEMI- SYNTHETIC

TOOL INFORMATION

9.6 mm DIA / 61mm LOC / 103mm OAL



GOALS

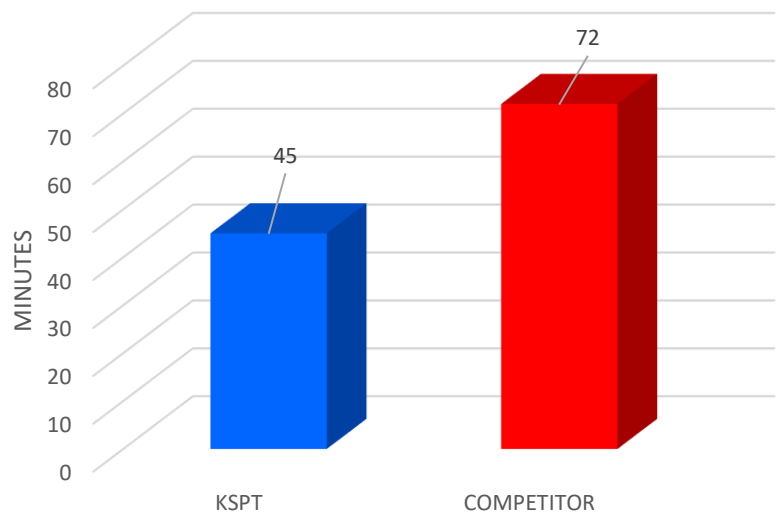
The goals of this study were to significantly reduce cost through a decrease in cycle time and increase in manufacturing efficiencies.

STRATEGY

KSPT approached this job with a series 135 HI-PERCARB drill. KSPT's series 135 HI-PERCARB, with its double margin design is ideal for improving surface finish without sacrificing speed and feed rates.

	KSPT	COMPETITOR
TOOL DIAMETER	9.6 millimeters	9.6 millimeters
SPEED	3000 RPM	1800 RPM
FEED	25 IPM	18 IPM
RADIAL CUT (AE)	N/A	N/A
AXIAL CUT (AP)	1.45"	1.45"
CYCLE TIME	45 Minutes	72 Minutes

CYCLE TIME



KSPT's series 135 HI-PERCARB, through improved efficiencies in speed and feed, decreased cycle time by 37%!



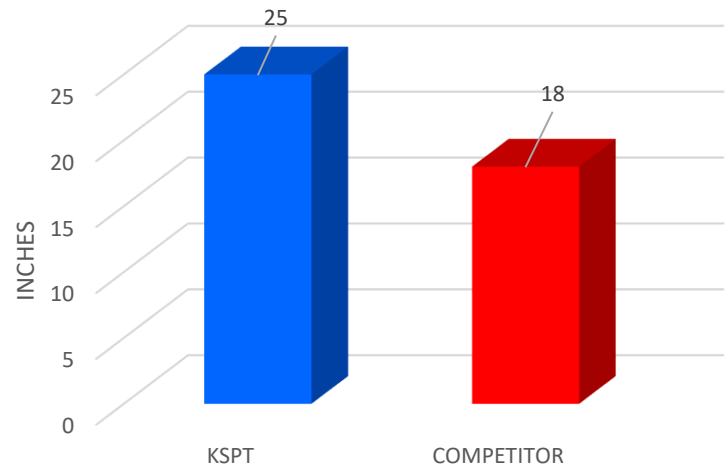
RESULTS

With its high strength and toughness, A36 steel is best suited for structural applications. The use of a superior tool in this material can make an end user's job a less stressful one. The series 135 Hi-Percarb drill was that tool in this case. It was able to capacitate a 40% higher speed as well as a 28% higher feed rate. This was essential in pursuit of a faster cycle time. The cycle time for the 135 was 37% faster than the competitor tool's cycle time. The reduced cycle time was principle in the reduction in machining cost. That machining cost was reduced by a whopping \$14,625. When you combine the amount saved in machining cost with the savings in new tool cost, the customer ended up saving a grand total of \$15,269!!!

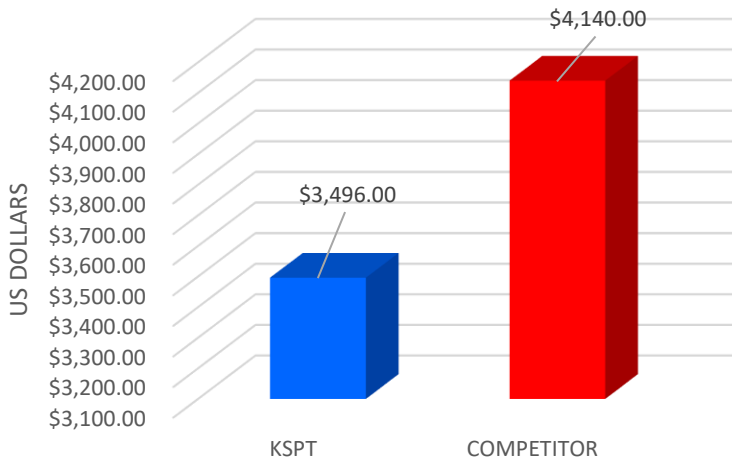
SPEED (RPM)



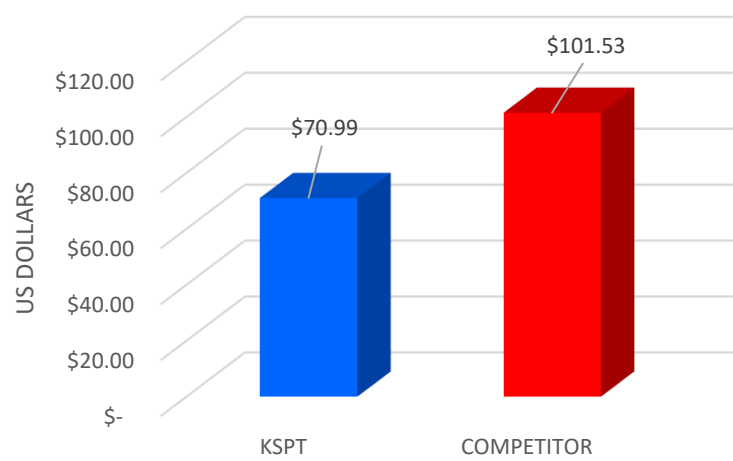
FEED (IPM)



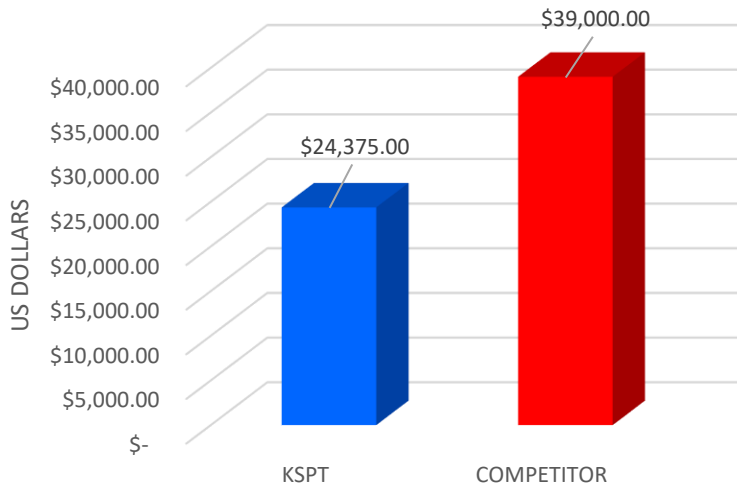
TOTAL NEW TOOL COST



TOTAL COST PER PART



TOTAL MACHINING COST



TOTAL COST

