Series 135 Hi-PerCarb

Kyocera SGS Precision Tools Case Study

INDUSTRY

AEROSPACE

HI-PERCARB®

HIGH PERFORMANCE CARBIDE DRILLS

MATERIAL

15-5 PH STAINLESS STEEL

PRODUCT

KSPT SERIES 135 HI-PERCARB Drill

APPLICATION

HOLE MAKING

COMPETITOR

JOBBER LENGTH 2 FLUTE DRILL

COOLANT

FLOOD

TOOL INFORMATION

DRILL .375in DIA / 2.4in LOC / 4.0in OAL

GOALS

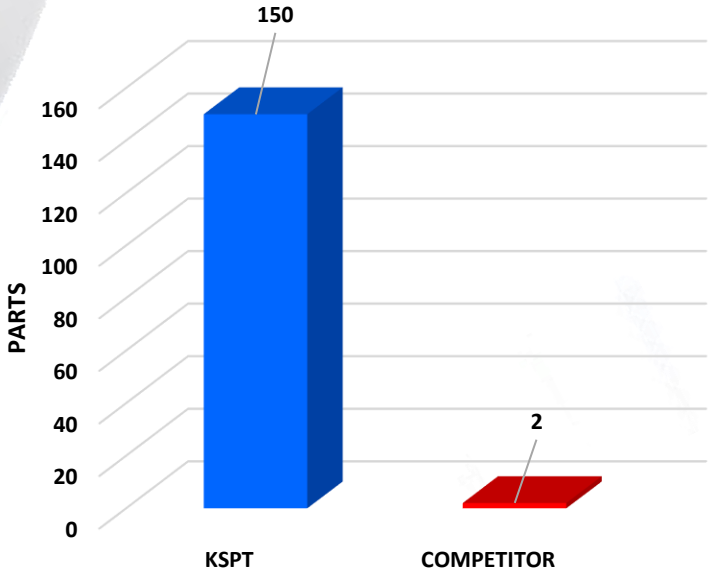
The goals of this study were to significantly reduce cost through an increase manufacturing efficiency and tool life.

STRATEGY

KSPT approached a customer who was jobber length 2 flute drill to drill holes in 15-5PH stainless steel. They were seeking a more efficient tool that could create more holes while using less tools to do it. KSPT's series 135 HI-PERCARB, with its double margin design was the ideal choice for this job.

	KSPT	COMPETITOR
SPEED	480 RPM	800
FEED	1.8 IPM	1.8 IPM
RADIAL CUT (AE)	N/A	N/A
AXIAL CUT (AP)	1in	1in
CYCLE TIME	10 MINUTES	10 MINUTES

PARTS PRODUCED BY A NEW TOOL



KSPT's series 135 HI-PERCARB was able to produce 75 times as many parts as the competitor's tool!

RESULTS

Any time you can accomplish a task and while using less to do it, it equals efficiency. In this case it equals dollar signs for the customer. A customer was seeking a way to more efficiently produce holes in 15-5PH stainless steel. Tool life for their current operation was poor and they were in search of a tool that could increase tool life. The series 135 Hi-Percarb drill was the optimal tool to accomplish such a task. Running at a reduced RPM and identical feed rates, the series 135 was able to produce 75 times as many parts as the competitor's drill because of its superior quality. Thus, the new tools needed to complete the job was reduced from 2800 to just under 40. The new tool cost, having only used 39 new tools to the 2880 of the competitor's tools, was reduced from over $104,000 to a little over $5,700. That's over a 94% reduction in new tool cost. With the decrease in tools used, there becomes less of a need for tool changes. Consequently, the tool change cost was reduced from $16,320 to $221. When all was said and done, the total cost per part was reduced by over 60% and the total cost saved by the customer was $115,102.30!!