Z-CARB HPR (TA COATED)

Kyocera SGS Precision Tools Case Study

INDUSTRY

MEDICAL

MATERIAL

17-4 PH STAINLESS STEEL (28HRc hardness)

PRODUCT

KSPT Z-CARB HPR

APPLICATION

MILLING

COMPETITOR

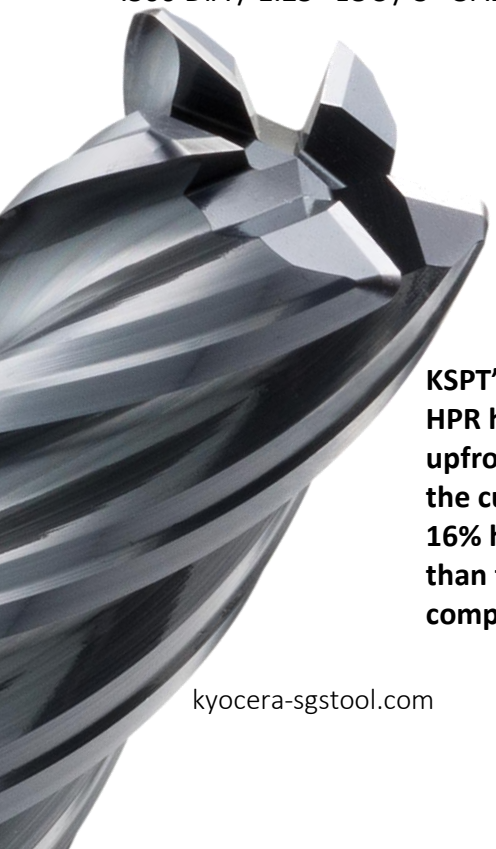
5 FLUTE END MILL

COOLANT

Flood

TOOL INFORMATION

.500 DIA / 1.25” LOC / 3” OAL



KSPT’s Z-Carb HPR had an, upfront, cost to the customer 16% higher than the competition.

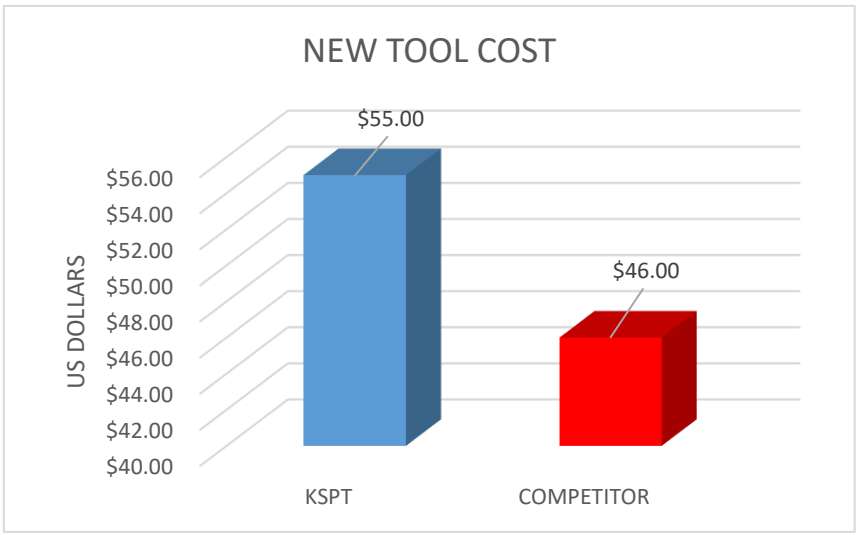
GOALS

The goals of this study were to significantly reduce job cost through increasing tool life, reducing machining time and improving manufacturing efficiency.

STRATEGY

KSPT approached this job with a 5 flute Z-Carb high performance rougher (HPR) end mill. KSPT’s Z-Carb HPR ideal for achieving high metal removal rates, while at the same time achieving an optimal surface finish. The Ti-Namite A coating was selected for its outstanding performance in stainless steel.

	KSPT	COMPETITOR
TOOL DIAMETER	.500”	.500”
SPEED	2500 RPM	2500 RPM
FEED	23.0 IPM	23.0 IPM
RADIAL CUT (AE)	.1000"	.1000"
AXIAL CUT (AP)	.600"	.600"
CYCLE TIME	36 MINUTES	36 MINUTES



RESULTS

The overall findings of this study indicate that, although **KSPT's HPR is at a higher price than the competitor's tool**, our tool was able to achieve a significantly longer tool life. The HPR was able to produce 10 parts to the competition's 3 and used just 500 total new tools versus the competitions 1,667. That's a difference of over **1,000 new tools**. Thus, **reducing the cost per part to the customer by almost $10 per part**. Additionally, with the significantly smaller number of new tools used, the tool change cost to the customer was $7,780 less with the HPR. When you combine the amount saved in tool change cost with the **total new tool cost savings of $49,182**, you get a **total job cost savings to the customer of $56,962!!**