

Z-Carb HPR

Kyocera SGS Precision Tools Case Study



INDUSTRY

Automotive

MATERIAL

Alloyed Cast Iron

PRODUCT

KSPT series Z5CR Z-Carb HPR End Mill

APPLICATION

Milling

COMPETITOR

4-Flute End Mill

COOLANT

Flood

TOOL INFORMATION

1/2" DIA / 5/8" LOC / 3" OAL



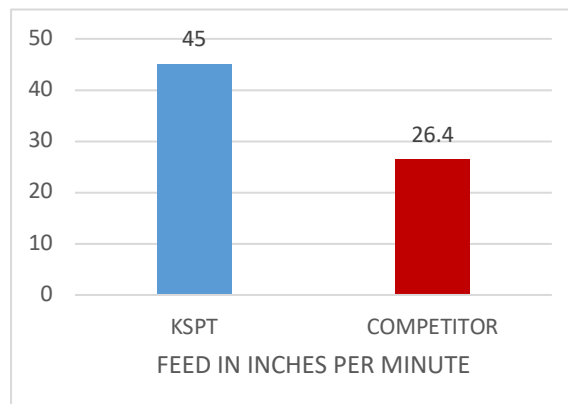
GOALS

The goals of this study were to significantly reduce tooling cost through a decreased cycle time.

STRATEGY

KSPT approached this job with a 5 flute Z-Carb HPR (high performance rougher) end mill. KSPT's Z-Carb HPR is ideal for achieving high material removal rates and superior finishes.

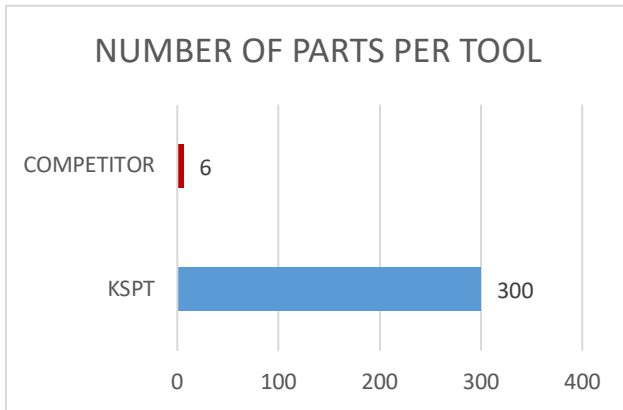
	KSPT	COMPETITOR
TOOL DIAMETER	.5"	.5"
SPEED	3000 RPM	2200 RPM
FEED	45 IPM	26.4 IPM
RADIAL CUT (AE)	.5"	.175"
AXIAL CUT (AP)	.25"	.25"
CYCLE TIME	5.63 cubic inches	1.16 cubic inches



KSPT's Z-Carb HPR allowed for a 71% increase in feed rates!

RESULTS

The overall findings of this study indicate that KSPT's Z-Carb HPR delivers advanced productivity by decreasing the total cost of the job by 22%, to a total of \$60,166.67 in job cost savings.



70%

REDUCTION IN MACHINING TIME

\$60,166.67

TOTAL JOB COST SAVINGS

39%

REDUCTION IN TOOLING COST

KSPT's Z-Carb HPR allowed for a 4900% increase in parts per tool.

