

Z-Carb HPR

Kyocera SGS Precision Tools Case Study



INDUSTRY



AEROSPACE

MATERIAL

17-4 Stainless Steel

PRODUCT

KSPT Z-Carb HPR

APPLICATION

Milling

COMPETITOR

4-Flute Roughing End Mill

COOLANT

Water Soluble

TOOL INFORMATION

.500 DIA / 1" LOC / 3" OAL



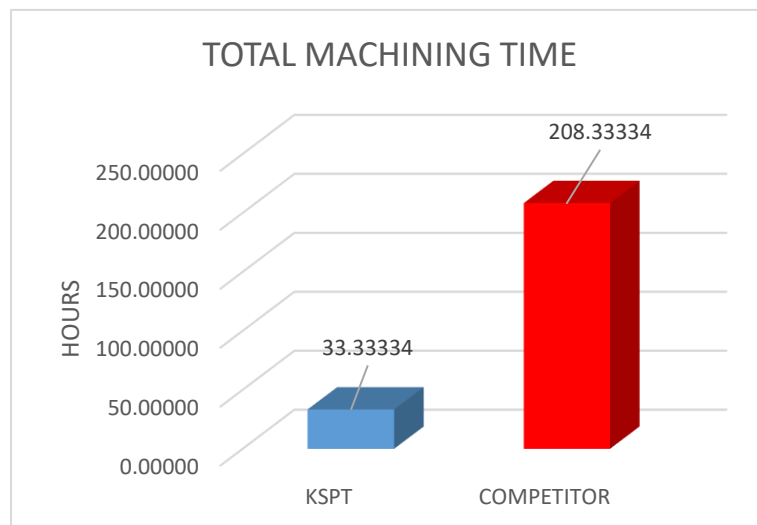
GOALS

The goals of this study were to significantly reduce cost/part through increasing tool life and reducing machining time.

STRATEGY

KSPT approached this job with a 5 flute Z-Carb HPR .03 corner radius end mill. KSPT's Z-Carb HPR supremely reduces vibration and leaves a superior surface finish over symmetrical four flute designs.

	KSPT	COMPETITOR
TOOL DIAMETER	.5"	.5"
SPEED	4500 RPM	4500 RPM
FEED	20 IPM	3.2 IPM
RADIAL CUT (AE)	.1250"	.1250"
AXIAL CUT (AP)	.1875"	.1875"
TOTAL MACHINE TIME	33.33 HOURS	208.33 HOURS

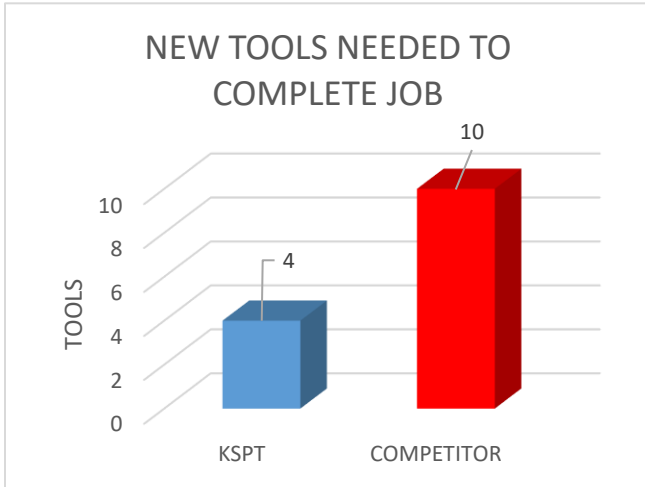


KSPT's Z-CARB HPR reduced the total machining hours by 84%!



RESULTS

The overall findings of this study indicate although KSPT's Z-Carb HPR was **priced nearly 30% higher**, our tools were able to reduce the tools needed to complete the job by 60%. With the extended tool life, combined with the **84% reduction** in total machining time, equated to a **84% reduction** in machining cost. All of these factors resulted in a **Total Job Savings of \$13,412.56**



84%

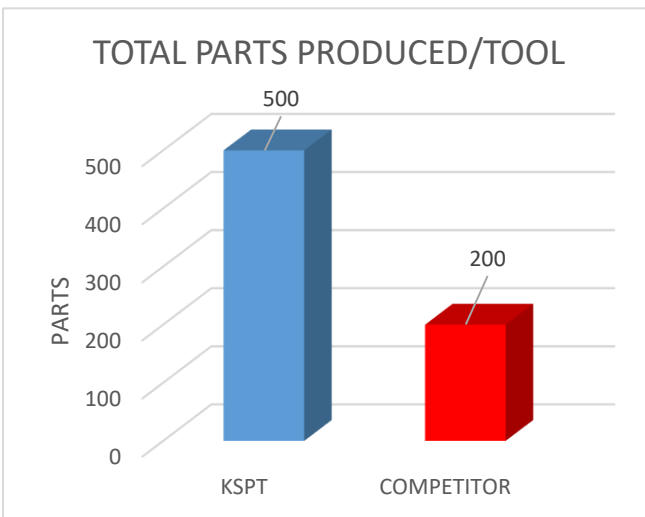
REDUCTION IN MACHINING TIME

60%

REDUCTION IN TOOLS USED

84%

REDUCTION IN MACHINING COST



\$13,412.56

TOTAL JOB COST SAVINGS

