

# SERIES 33



Kyocera SGS Precision Tools Case Study

## INDUSTRY



**AEROSPACE**

## MATERIAL

17-4 STAINLESS STEEL

## PRODUCT

KSPT SERIES 33 END MILL

## APPLICATION

MILLING

## COMPETITOR

4-Flute HIGH PERFORMANCE END MILL

## COOLANT

N/A

## TOOL INFORMATION

.1250 DIA / .375" LOC / 2.0" OAL



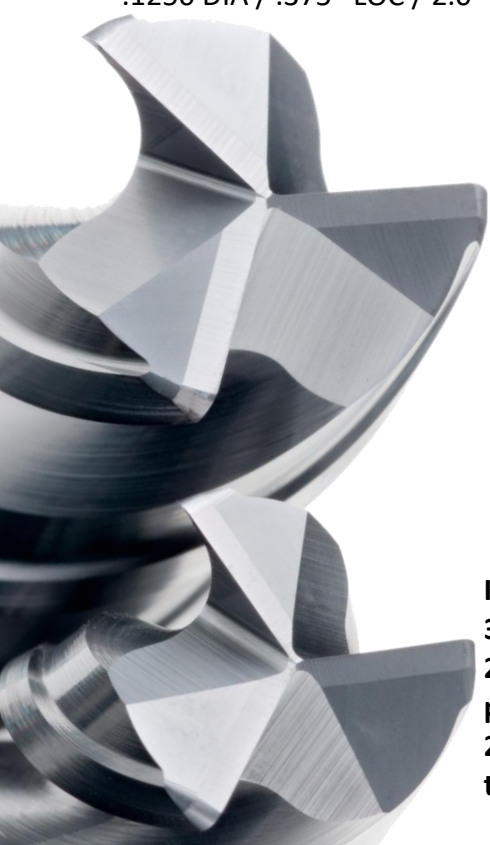
## GOALS

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

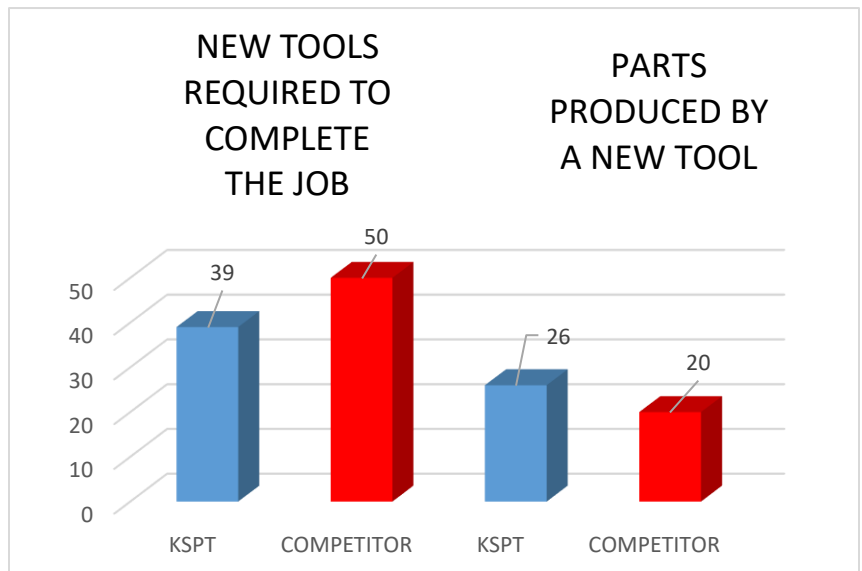
## STRATEGY

KSPT approached this job with a 3 flute Series 33 end mill. KSPT's Series 33 are ideal for aggressive ramping, pocketing, and slotting in difficult to machine materials such as stainless steel. Designed for applications challenged by heavy chip evacuation, this 3-flute design offers increased chip clearance and a reduction in harmful harmonics.

	KSPT	COMPETITOR
<b>TOOL DIAMETER</b>	.1250"	.1250"
<b>SPEED</b>	13,350 RPM	11,000 RPM
<b>FEED</b>	22.7 IPM	16.5 IPM
<b>RADIAL CUT (AE)</b>	.125"	.125"
<b>AXIAL CUT (AP)</b>	.0600"	.0600"
<b>CYCLE TIME</b>	6.19 MINUTES	18.49 MINUTES



**KSPT's series 33 produced 23% more parts with 22% less tools!!**



## RESULTS

The overall findings of this study indicate although KSPT's Series 33 has a higher list price, we were able to **save the customer a significant amount in the long run**. This was accomplished by applying a higher quality tool to the customer's process. We were able to reduce the number of new tools used as well as increase the amount of parts those tools were producing. The competitor's cycle time was almost 3 times that of the series 33 and **reduced the total machining time by over 200 total hours**. With the savings in tools used and time in the machine, the cost per part was 1/3 of what the competitor's tool could produce. These efficiencies led to a machining **cost savings of over \$15,000**. When you combine all these savings together, we were able to **save this customer a total of \$15,290.71**

