







SNAPSHOT

BACKGROUND

A large aerospace manufacturer is having production pauses while drilling 40-45HRC Inconel 718 in a two-step process.

GOALS

Reduce cycle time, spindle load, and increase tool life utilizing 1 tool rather than 2.

DETAILS

INDUSTRY

Aerospace

PART

Pin

MATERIAL

Inconel 718 40-45HRC

MACHINE

Okuma | Water Soluble 10%

SPINDLE

CAT40 Mill Turn

ORIGINAL TOOLING

Competitor Replaceable Tip Drill 8D 0.625 | 2 Flute | TiAlCrSi Multi Layer

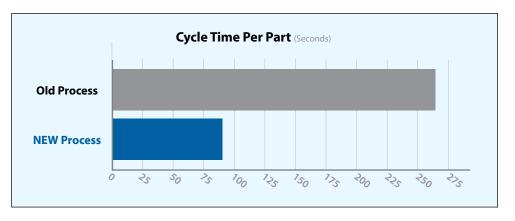
NEW TOOLING A Brand ADO 5D 0.625 | 2 Flute | EgiAs

OVER \$27,000 ANNUAL SAVINGS!

THE STRATEGY

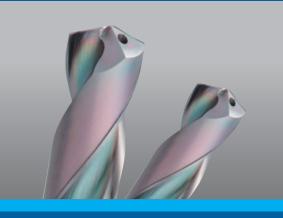
OSG brought in an A Brand ADO 5D drill to take on the opportunity. The self-centering technology of the OSG ADO allowed us to eliminate the spot drill reducing the number of tools for this application from 2 to 1. The ADO also features an R-Gash on its cutting edge. The R-Gash granted an acceptable spindle load for continuous machining with the ability to increase feed by a considerable margin.

	Original Process	NEW Process
Tool Diameter	0.625 5D Drill	
SFM	75	
RPM	458	
IPM	0.92	2.75
Hole Depth	4	
Cycle Time (Seconds)	263	89









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THE RESULTS

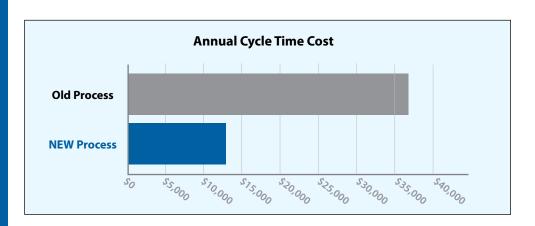
OSG was successful in increasing tool life and being more productive than the old process by reducing the tools required from 2 to 1 with the OSG A Brand ADO!

- Parts per drill increased from 5 to 16.
- Cycle time was reduced by 174 seconds per part! (263sec to 89sec)
- Tools required **reduced from 2 to 1**.
- A total savings of \$27,728

Results Overview		
Cycle Time Saved per Part (Seconds)	174	
Number of Parts Per Year	4,000	
Cycle Time Saved Annually (hours)	193.91	
Cost to Machine (Per Hour)	125	
Annual Mill Cost Savings	7,969	
Total Machining Cost Saved Annually	\$27,728	

THE CONCLUSION

OSG was able to reduce drill usage from 800 to 250 utilizing the A Brand ADO! This alone **saves \$7,629 a year!**



OVER \$27,000 ANNUAL SAVINGS!



FIND OUT MORE

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