



CASE STUDY.

EcoCut

PROJECT PROFILE: **17- 4 PH Stainless Steel Aerospace**

The end-user is machining bushings made from 17- 4 stainless steel using a Miyano lathe, with 150 PSI through-tool coolant.

+ CHALLENGE:

Previously the customer was using 4 tools to complete the job. A 0.551" (14mm) Chamdrill began the drilling process, followed by a 0.382" (9.7 mm) solid carbide drill. A 3/8" Garr end mill was brought in to perform multiple operations, including a counterbore. The boring bar then finished the hole to size, in a total cycle time of 1 minutes and 2 seconds.

Looking for performance improvements, the customer asked if Allied had a multiple operation tool that could help to reduce the cycle times in this application.

+ OUR SOLUTION:

Allied recommended a 0.551" (14mm) EcoCut tool to began the operation, followed by the 0.382" (9.7 mm) solid carbide drill. Then a 0.394" (10 mm) EcoCut tool was brought in to complete the form. The boring bar finished the part for exact size and finish tolerance, while providing edge breaks and corner radii. The new total cycle time was 55 seconds. The outcome met the customer's goals of a reduction of cycle time, which resulted in a lower cost per hole.

+ PROJECT DATA:

The overall cycle time was reduced by 7 seconds for a time savings of 11.5%, thanks to the EcoCut tooling. The cost per hole dropped from \$2.11 to \$1.40, which delivered a cost savings of 33.5%. This lower cost per hole was obtained as a result of a dramatic decrease in tooling cost due to the use of a multi-functional tool.

Allied Machine and EcoCut made a difference for the pleased customer.



*REDUCED
CYCLE TIME*