CASE STUDY.

GEN3SYS®

Medium Carbon Job Steel Shop

REDUCED CYCLE TIMES

PROJECT PROFILE:

The End-user is a subcontractor that produces precision-machined components for a variety of industries. The customer is machining a fluid connector made out of medium carbon steel using a Citizen CNC lathe running with 2000 PSI thru-tool coolant.

+ CHALLENGE:

Previously the customer was using a Guhring solid carbide drill running at the following parameters: 1817 RPM, 328 SFM, 0.0039 IPR, and 7.08 IPM. The tool drilled a 0.6889" (17.5 mm) diameter hole with a 3.1496" (80 mm) depth. The tool had a cycle time of 26 seconds and a life of 500 holes. The customer was seeking to lower their costs.

+ OUR SOLUTION:

AMEC recommended the GEN3SYS® High Penetration Drilling System using insert item #5C117H-17.5 and holder #60717S-20FM running at a speed of 1817 RPM, 328 SFM, 0.0059 IPR, and 10.7 IPM. The results of the test met the customer's expectations. The GEN3SYS® tooling reduced cycle time to only 17 seconds while matching the previous tool life of 500 holes. By increasing productivity and reducing cycle time, the customer succeeded in decreasing their cost of production.

+ PROJECT DATA:

Thanks to the successful performance of the GEN3SYS® tooling, the customer succeeded in reducing the cycle time and lowering their cost of production.