



## CASE STUDY.

### GEN3SYS® Mild Steel Heat Exchanger

#### PROJECT PROFILE:

The End-user is manufacturing components for heat exchangers made out of medium carbon steel using a Weaver HMC with 210 PSI thru-tool coolant.

#### + CHALLENGE:

Previously the customer was using a WNT solid carbide drill running at the following parameters: 1405 RPM, 279 SFM, 0.010 IPR, and 14.0 IPM. The tool drilled a 0.7580" (19.25 mm) diameter hole to a 3.35" (85 mm) depth. The tool had a cycle time of 15 seconds and a life of 600 holes. Seeking to streamline their production, the customer wanted to decrease their costs.

#### + OUR SOLUTION:

AMEC recommended the GEN3SYS® High Penetration Drilling System using insert item #5C118H-.758 and holder #60718H-25FM running at the recommended parameters of 1405 RPM, 279 SFM, 0.010 IPR, and 14.0 IPM. The results of the test were excellent and met the customer's expectations. The GEN3SYS® tooling increased the tool life by 50% to 900 holes while achieving superior chip control. The customer's goal of decreasing their costs was met.

#### + PROJECT DATA:

Thanks to the successful performance of the GEN3SYS® tooling the customer increased productivity and decreased their costs.



*REDUCED COST  
OF PRODUCTION*