



CASE STUDY.

PROJECT PROFILE:

GEN3SYS[®]

Heat Exchanger

An End-user is manufacturing heat exchangers for the oil industry. They are using a QuickDrill™ Gantry running with 68.95 BAR coolant to machine tube sheet for heat exchangers made out of A356 structural steel.

+ CHALLENGE:

Previously the customer was using an Iscar ChamDrill running at the following parameters: 2000 RPM, 121M/min, 0.330mm/rev, and 660.4mm/min. The tool had a cycle time of 18.7 seconds and a life of 375 holes. The tool created a 95.25mm deep hole with a 19.25mm diameter. Looking to improve their production, the customer wanted to increase tool life and reduce their cost of production.

+ OUR SOLUTION:

AMEC suggested the GEN3SYS[®] High Penetration Drilling System using insert item #5C118H-.758 and holder #60718H-100F running at a speed of 1798 RPM, 108.20M/min, 0.368mm/rev, and 660.4mm/rev. The tool had a cycle time 18.7 seconds. The results were excellent. The GEN3SYS[®] tooling increased tool life to 560 holes and achieved a superior surface finish. Additionally, the customer lowered their cost of production. With the AMEC cost per hole being only \$0.266 compared to the competitor's cost per hole of \$0.418, the customer saved a total of \$1,525.76 or 36.5%.

+ PROJECT DATA:

Not only did AMEC enable the customer to increase tool life and achieve a superior surface finish, but the customer also lowered their cost of production.



EXTENDED TOOL LIFE