



## CASE STUDY.

### PROJECT PROFILE:

# GEN2 T-A<sup>®</sup> A36 Structural Steel

The end-user is machining structural plates made from A36 using a Peddinghaus machine, with mist coolant.

#### + CHALLENGE:

Previously the customer was using a Kennametal KenTIP drill, running at the following parameters: 630 RPM, 0.0067 IPR, (0,170 mm/rev) which resulted in 4.2 IPM (96 mm/min). The tool drilled a 0.875" (22,2 mm) diameter thru hole to a depth of 1.0 inches (25,4 mm). The tool had a cycle time of 14.3 seconds and a tool life of 1000 holes. Looking for performance improvements, the customer asked if Allied could improve cycle time and tool life.

#### + OUR SOLUTION:

Allied recommended GEN2 T-A using insert item 4C11H-0028 and holder 23015S-100F. The tooling ran at a speed of 725 RPM, 0.0083 IPR (0,2 mm/rev) which resulted in 6 IPM (152 mm/min). The tool had a cycle time of 10 seconds and a tool life of 1150 holes. The outcome met the customer's goals of tool performance improvements.

#### + PROJECT DATA:

GEN2 T-A Drilling System made a significant difference for the customer. The cycle time was reduced from 14.3 seconds to 10 seconds, and the cost per hole dropped from \$0.134 to \$0.066, for a considerable cost savings of 50.7%.

It was impressive to the customer that the less expensive Allied tool out performed the much higher-priced Kennametal tool.



*REDUCED  
CYCLE TIMES*