CASE STUDY.

GEN3SYS®

PROJECT PROFILE: **A36 Structural Steel**

The end-user is machining structural steel plates made from A36, 200Bhn, using a FICEP A-31 plate machine, with mist coolant.

LOWER COST PER HOLE

+ CHALLENGE:

Previously the customer was using a Kennametal KSEM drill, running at the following parameters: 625 RPM, 0.010 IPR, (0,25 mm/rev) which resulted in 6.25 IPM (158,75 mm/min). The tool drilled a 1.1875" (30,16 mm) diameter thru hole to a thickness of 2.5 inches (63,50 mm). The tool had a cycle time of 34 seconds, a tool life of 120 holes per insert, and typically 12 insert changes per drill body.

The customer was using a lot of high priced Kennametal KSEM drills. Looking for improvements, they wanted to reduce their cost per hole.

+ OUR SOLUTION:

Allied recommended the GEN3SYS® High Penetration Drilling System, using insert item number 5C129H-0106 and holder 60329S-125F. The tool ran at the same operating parameters as the KSEM tool. GEN3SYS® delivered improved performance as it increased the number of holes drilled in identical the cycle time of 34 seconds: 125 holes per insert, 13 insert changes per drill body.

This improvement provided a real savings to the customer. The cost per hole while using the KSEM tool was $2.19, but with GEN3SYS®, the cost per hole dropped to $1.57.

+ PROJECT DATA:

GEN3SYS® reduced the cost per hole and increased the tool life of both the holders and inserts, which resulted in an overall decrease in the cost of production of 28.19%