



## CASE STUDY.

# GEN2 T-A<sup>®</sup>

## PROJECT PROFILE: **Structural Steel Scaffoldings**

The end-user is machining structural steel tubes for galvanized towers, using a custom built, Air Liquid machining center with mist coolant.

### + CHALLENGE:

Previously the customer was using a Kyocera Inserted Drill, running at the following parameters: 800 RPM, 0.004 IPR, (0.10 mm/rev) which resulted in 3.15 IPM (80.00 mm/min). The tool drilled a thru hole, diameter 0.709" (18.00 mm) to a thickness of 0.236 inches (6.00 mm). The tool had a cycle time of 4.4 seconds and a tool life of 2100 holes.

The current holders were failing on a regular basis. Looking for a reliable solution and performance improvements, Allied was asked to provide the answers they were looking for.

### + OUR SOLUTION:

Allied recommended GEN2 T-A<sup>®</sup> using insert item 45IH-18 along with a special length, diameter specific body. The tooling ran at a speed of 800 RPM, 0.010 IPR (0.26 mm/rev) which resulted in 8.19 IPM (208.00 mm/min). The tool had a cycle time of 1.7 seconds and a tool life of 4000 holes. Allied Machine and GEN2 T-A<sup>®</sup> made a significant difference for the customer, as the outcome met their goals of tool performance and reliability.

### + PROJECT DATA:

GEN2 T-A<sup>®</sup> provided the reliable solution the customer was looking for. Allied helped to reduce the machine run time from 4.4 to 1.7 seconds, for a time savings of 61.3%, resulting in the cost per hole dropping from \$0.14 to \$0.11, for a dollar savings of 21.4%.



*INCREASED  
PRODUCTION  
EFFICIENCY*