



CASE STUDY. **Structural Steel T-A[®]** PROJECT PROFILE: **Structural I-Beam Construction**

The end-user is drilling I-Beams made out of structural steel using a Ficep structural beam drilling machine center with mist coolant.

+ CHALLENGE:

Previously the customer was using a YG-1 spade drill running at the following parameters: 650 RPM, 0.010 IPR (0,25 mm/rev), which resulted in 6.5 IPM (165,1 mm/min). The tool drilled a 0.875" (22,23 mm) diameter hole to a 0.4375" (11,11 mm) depth. The drill had a tool life of only 20 holes. The poor tool performance was brought to the attention of one of their technicians, who was already familiar with Allied. The next day, Allied tooling was brought in to replace YG-1 for testing. Looking for real improvements, the customer wanted to get more tool life out of the drill inserts.

+ OUR SOLUTION:

Allied recommended the Structural Steel T-A[®] drilling system, using insert item 151A-0028-TW and holder 25010H-0041S052. The tool ran at a speed of 440 RPM, 010 IPR(0,25 mm/rev), which resulted in 4.4 IPM (111,7 mm/min). The outcome was amazing as Allied was able to deliver 1500 holes with one tool versus the 20 holes provided by YG-1's best efforts.

The customer was able to take advantage of Allied's vast experience in the structural steel drilling niche. Allied's wide variety of stocked solutions to specific customer problems allowed for a remarkable increase in tool life.

+ PROJECT DATA:

The Allied Structural Steel T-A[®] drilling system soundly defeated the competition as the cost per hole was reduced from \$2.02 to just \$0.22. The greatly extended tool life clearly met the customer's requirements, while reducing the cost per hole for a savings of an amazing 89%.



*EXTENDED
TOOL LIFE*