



## CASE STUDY. **T-A<sup>®</sup> High Impact Notch Point**

PROJECT PROFILE: **Structural Steel**      **Machine Job Shop**

The end-user is drilling large welded stacked plates, made of A516 material, GR70 approx 20 Rc. Their total thickness is 2½" (63,5 mm), with gaps from 1/16" to 1/8", (1,59 mm to 3,18 mm) offering inconsistent face entry due to a wavy surface. They are using a TOS horizontal boring machine with flood coolant.

### + CHALLENGE:

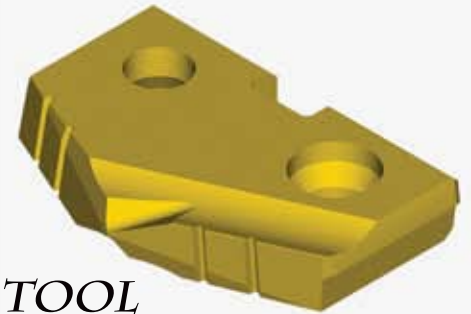
This application had multiple brands of drills competing for the job, including YG-I, Dormer, and Gühring. All of them suffered a catastrophic failure. Looking for a solution to this problem, Allied Machine & Engineering Corp. was tested and was the only tool that successfully completed this test, greatly reducing lost time due to tooling failures.

### + OUR SOLUTION:

Allied recommended the T-A<sup>®</sup> Drilling System, using insert item 152H-1.015-IN and holder 22020S-004I. The tooling ran at the following parameters: 375 RPM, 0.014" IPR (0,36 mm/rev), resulting in 5.2 IPM (132,08 mm/min). A Rotary Coolant Adapter (RCA), with approximately 80 PSI was implemented to improve chip evacuation. Allied established chip control utilizing the T-A<sup>®</sup> Drilling System as it successfully drilled 200 holes per insert, 2 ½" deep resulting in 500 linear inches of drilling.

### + PROJECT DATA:

Allied delivered what the end-user was looking for... a tool that completed the job, despite the challenging application that caused all competitive tooling to fall short of their objectives.



***TOOL  
PERFORMANCE  
CONSISTENCY***