



CASE STUDY.

BT-A

PROJECT PROFILE:

P20 Alloy Steel Automotive

The end-user is manufacturing large automotive molds made out of P20 (28-32 Rc) using a Schienke Tri Spindle Deep Hole Drilling Machine with Canola Base Soluble Oil coolant a 280 PSI.

+ CHALLENGE:

Previously the customer was using a Botek Type O1 Gundrill running at the following parameters: 600 RPM, 0.0012 IPR (0,03 mm), which resulted in 0.7 IPM (17,7 mm). The tool drilled a blind hole, with cross holes, to a 1.156" (29,5mm) diameter and to a hole depth of up to 102" (2590,8 mm). The tool overall process took 20 hours. The existing drilling methods were not cost effective due to inconsistent tool life and very low penetration rates. The customer wanted to find a better tool. Elapse time: 214.1 hours, (@ \$85/hour= 18,198.50). Add the tool cost of \$4,350.00, the net cost of this operation was \$22,548.50

+ OUR SOLUTION:

Allied recommended the BT-A tool using insert item 4C12H-0105-HE and holder BTA2-805-1.1560. The tooling ran at a speed of 575 RPM, 0.009 (0,0228mm) IPR which resulted in 5.2 IPM (132 mm). The outcome was excellent as the customer found the better tool they were looking for. Elapse time: 59.6 hours, (@ \$85/hour= \$5,066.00). Add the tool cost of \$1,178.76, the net cost of this operation was \$6244.76

+ PROJECT DATA:

What was a 20+ hour process, fell dramatically to 7 overall hours. The shop supervisor was so impressed, he stated, "At this point their performance (BT-A) out weighs the cost. Just get them here if you can." BT-A made a huge difference for this customer, providing a time savings of over 65%.



*TOOL
PERFORMANCE
CONSISTENCY*