



## CASE STUDY.

### ASC 320<sup>®</sup> Alloy Steel

#### PROJECT PROFILE:

The End-user is manufacturing components for military Humvee vehicles. The customer is machining a bracket made out of high strength alloy steel using a Mazak Nexus 510C VMC running with water soluble coolant.

#### + CHALLENGE:

Previously the customer was using an OSG solid carbide drill running at the following parameters: 766 RPM, 90 SFM, 0.007 IPR, and 5.36 IPM. The tool drilled a 0.4490" diameter hole to a 0.75" depth. The tool had a cycle time of 8.5 seconds and a life of 2500 holes. Unsatisfied with their current production process, the customer wanted to decrease their costs.

#### + OUR SOLUTION:

AMEC recommended the ASC 320<sup>®</sup> Solid Carbide Drill item #335M11400A21M running at a speed of 995 RPM, 117 SFM, 0.008 IPR, and 7.96 IPM. The results were excellent and met the customer's expectations. The ASC 320<sup>®</sup> tool reduced cycle time to 5.6 seconds and matched the previous tool life of 2500 holes. The customer succeeded in decreasing their costs and saved \$166.40 per 2500 holes.

#### + PROJECT DATA:

Thanks to the successful performance of the ASC 320<sup>®</sup> tool, the customer was able to increase productivity and lower their costs to save 32% per 2500 holes.



*INCREASED  
PRODUCTION  
EFFICIENCY*