



CASE STUDY.

PROJECT PROFILE:

ASC 320[®]

High Strength Alloy Steel

An End-user is manufacturing and maintaining equipment for the oilfield industry. The specific part being machined is a component of the jaws that screws pipe together on an oil rig and is being made out of high strength alloy. They are using a Mazak VMC with 1000 PSI coolant through the tool to produce their products.

+ CHALLENGE:

Previously, the customer was using a 0.500" diameter Jobber length drill to establish the 4.7" deep hole. They then finished drilling the part with an extended length cobalt drill running at a speed of 90 SFM and 0.004 IPR. The complete operation had a cycle time of 109.54 seconds and drilled 447 inches. Seeking to improve their production process, the customer wanted to reduce cycle time and decrease their cost of production.

+ OUR SOLUTION:

AMEC suggested using a 0.500" diameter ASC 320[®] solid carbide drill item #390E05000A21M. They recommended running the tool at a speed of 200 SFM and 0.010 IPR. The results were quite stunning. Not only did the ASC 320[®] tool eliminate the pilot drill, it also lowered cycle time to only 18.43 seconds and drilled 484 inches. The total cost savings was \$1,008.22 or 72.96%.

+ PROJECT DATA:

By dramatically reducing cycle time, the customer was able to increase both profits and shop capacity. Not only does the customer now consider AMEC as a cost saving partner, they have also ordered 6 different sizes of ASC 320[®] drills for other applications.



REDUCED CYCLE TIMES