CASE STUDY.

ASC 320®

Alloy Steel

PROJECT PROFILE:

An End-user is manufacturing and maintaining components for offshore oil rigs. They are using a Johnsford VMC with 1000 PSI coolant through the tool. The part they are machining is a component for a locking collar for an offshore pipe wrench made out of alloy steel.

REDUCED CYCLE TIMES

+ CHALLENGE:

Previously the customer was spot drilling the part using a 27/64 cobalt drill. The hole being drilled is 0.421" in diameter and 1.20" deep and is the tap drill size for ½ -13 threaded hole. Running at a speed of 110 SFM and 0.004 IPR, the machine's cycle time was 23.53 seconds and the tool drilled 468 inches. Seeking to improve their production process, the customer wanted to decrease machine cycle time.

+ OUR SOLUTION:

Allied recommended an ASC 320® 3.5"x diameter carbide drill item #335E04219A21M. It was advised that the tool be run at a speed of 300 SFM and 0.011 IPR. The results were outstanding. With a cycle time of 9.4 seconds, the tool reduced total cycle time by 14.13 seconds. The tool drilled 2016 inches and eliminated the spot drill operation. Additionally, the ASC 320® tooling reduced the cost of production and increased shop capacity. The customer received a total cost savings of $564.45 or 63.76%.

+ PROJECT DATA:

Using the Allied process, the customer not only reduced cycle time but also decreased their cost of production while increasing shop capacity.