



CASE STUDY.

PROJECT PROFILE:

GEN3SYS[®] Grey Cast Iron Agricultural

The end-user is manufacturing transmission housings made out of grey cast iron using a horizontal Okuma machine, with 1000 PSI semi-synthetic coolant.

+ CHALLENGE:

Previously the customer was using a Sumitomo solid carbide drill running at the following parameters: 1518 RPM, 0.013 IPR (0.33 mm/rev), which resulted in 19.7 IPM (500.4 mm/min). The tool drilled a 0.826" (21 mm) diameter through-hole to a 3.622" (92 mm) depth. The drill had a tool a life of 110 minutes and 2,170" linear inches. The cycle time was 11 seconds. Looking for improvements, the customer wanted to reduce the cost per hole.

+ OUR SOLUTION:

Allied recommended GEN3SYS[®] using insert item 5C220H-2I-CI and holder 60520H-100F. The tooling ran identical speeds and feeds as the competitive tool, but outperformed it in tool life as it was able to run more than 170 minutes, for an additional 60 minutes of running time. This equates to a tool life of 3,350 inches versus the competitor's offering of 2,170 inches.

+ PROJECT DATA:

The outcome was excellent and met the customer's goals of reducing the cost per hole by simply getting more productivity out of the Allied tool, which delivered 35.3% longer tool life. The cost per hole was reduced from \$.5429 to \$.3740, providing a cost savings of over 31%.



*LOWER
COST PER HOLE*