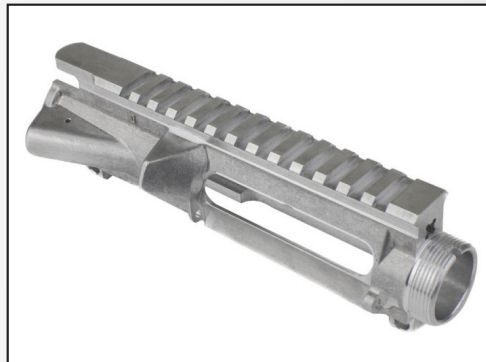




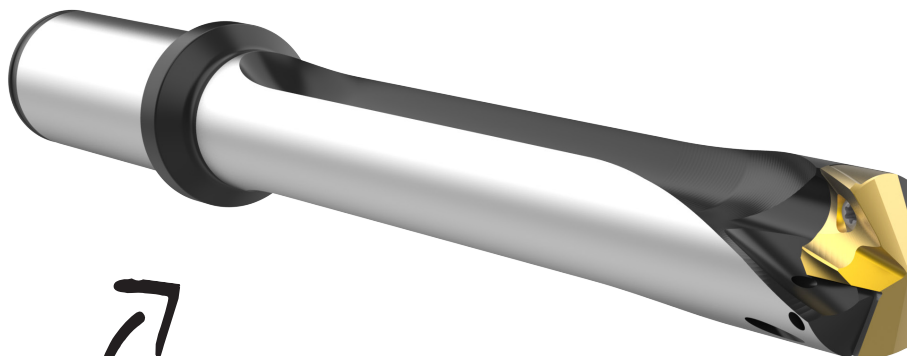
AR Upper Receiver: GEN3SYS® XT PRO

The customer is manufacturing AR upper receiver castings for the firearms industry. The parts are made from cast aluminum. Previously, the customer was using a solid carbide twist drill to perform the operation. The twist drill achieved a tool life of 2700 linear inches. The customer needs to increase tool life without sacrificing hole quality.

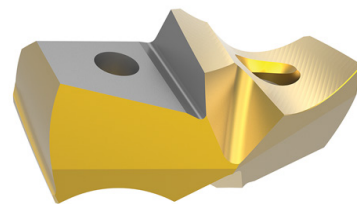
Allied's **GEN3SYS® XT Pro** drilling system with non-ferrous geometry insert achieved 9000 linear inches of tool life, a 233% increase over the twist drill. The parameters were kept the same to create a level test, which resulted in the same cycle time for both tools. But with the XT Pro drilling over 3x more linear inches, the customer was pleased with the increase in tool life.



Product: GEN3SYS® XT Pro	Measure	Competitor	GEN3SYS® XT Pro
Objectives: Improve tool life	RPM	5000	5000
Industry: Firearms	Speed	1300 SFM	1300 SFM
Part: AR upper receiver	Feed Rate	110 IPM	110 IPM
Material: Cast aluminum	Cycle Time	2.46 sec	2.45 sec
Hole Ø: 0.998"	Tool Life	2700 inches	9000 inches
Hole Depth: 4.500"	Cost Per Hole	\$0.215	\$0.103



- ▶ GEN3SYS® XT Pro insert (N) Non-ferrous geometry
Item No. XTN24-25.3
- ▶ GEN3SYS® XT Pro insert holder
Item No. HXT1024S-100F



233% tool life increase

The GEN3SYS® XT Pro provided:

- ✓ Increased tool life
- ✓ Decreased cycle time
- ✓ Decreased cost per hole

Copyright © 2021 Allied Machine and Engineering Corp.- All rights reserved.