



## CASE STUDY.

### PROJECT PROFILE:

## AccuPort 432<sup>®</sup>

Nodular Iron

A worldwide valve manufacturer is machining hydraulic manifolds made out of nodular iron. They are using Makino M3000 Pallet Line with a through-coolant delivery system to manufacture their products.

### + CHALLENGE:

Previously, the customer produced the ports using 3, sometimes 4 tools, and finishing with a formed reamer. This process resulted in long cycle times and increased downtime as a result of multiple tool changes. Because the customer is running multiple transfer lines and unmanned machining centers, this method is not acceptable. Therefore, the customer was looking to increase production efficiency to keep up with product demand.

### + OUR SOLUTION:

AMEC recommended the AccuPort432<sup>®</sup> process. They suggested the customer use several AccuPort432<sup>®</sup> port contour cutters including contour cutter 5 item #J1926-05Z-063F, cutter 6 item #J1926-060-075F, cutter 8 item #J1926-080-075F, cutter 10 item #J1926-101-100F, and cutter 12 item #J1926-122-125F. They suggested running these tools at a speed of 300 SFM and 8.0 IPM. The results were excellent. Adhering to AMEC's recommended parameters, the customer was able to reduce their cycle by 85% with the AccuPort432<sup>®</sup> tooling. This reduction did not include the reduction in downtime due to tool changes and re-sharpening.

### + PROJECT DATA:

Because they no longer had to regrind the special form reamers, the customer eliminated their tool room re-sharpening area. Due to the success of the AMEC tooling, the customer has now converted all their porting operations to the AccuPort432<sup>®</sup> tool.



*INCREASED  
PRODUCTION  
EFFICIENCY*