



CASE STUDY



TRIAD NC DIECAST & PARTS MFG ELIMINATE TAPPING FLUID, REDUCE CYCLE TIMES

Situation Summary

- This company has a modern machining facility equipped with CNC vertical, turning, and horizontal machines that extends their business beyond casting. Customer is utilizing Quakercool 7350 semi-synthetic fluid to tap aluminum and brass parts. While form tapping, the operation requires the use of tapping fluid added directly into the hole to make acceptable taps. Soft water along with high pressure operations is creating foam issues for the customer.
- Customer operations: horizontal milling, drilling and tapping.
- Metals machined: A356 and 713 cast aluminum, leaded and unleaded brass.

Customer Stated Goal

- Elimination of additional tapping fluid
- Reduction in cycle times
- Eliminate foam in high pressure, 1000 psi, and through-coolant tooling

Steps To Solution

Benz recommended the use of **BENZ KOOL 1300** to accomplish the stated customer goals. **BENZ KOOL 1300** is a high performing semi-synthetic with multi-metal capabilities that is designed to provide optimal tool life and surface finish. The product has shown to be very low foaming in deionized water.

Results

- By utilizing **BENZ KOOL 1300**, the customer was able to eliminate the use of the tapping fluid which resulted in reduced cycle times by 10 seconds per part or 16 minutes per 100 parts.
- **BENZ KOOL 1300** ran foam-free in their high pressure, through-tool metalworking fluid application. The fact that the customer is in a soft water region, provides additional confidence that the product is performing optimally to support their goals.