

Castrol® Hysol® 11 FF provides cost savings for military parts machining

Situation

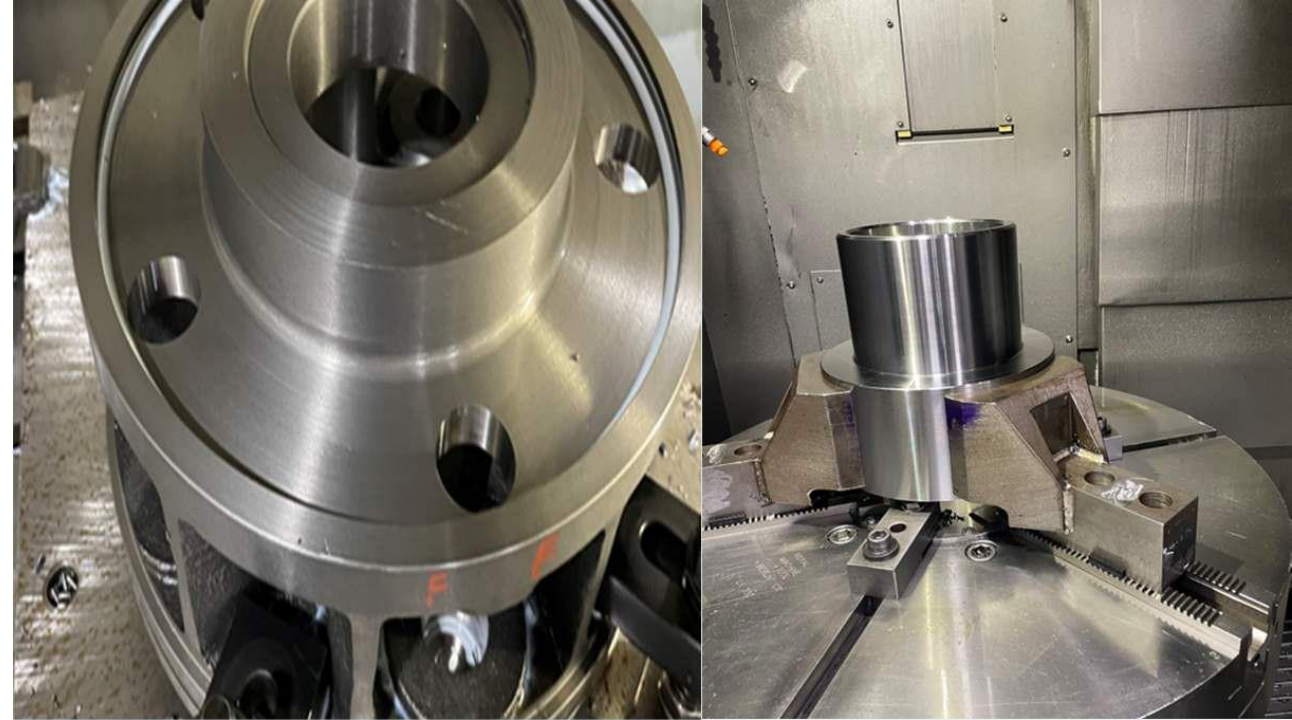
A US supplier of machined military propeller shaft and gear parts became frustrated by increasing fluid costs coupled with a lack of support from the existing metalworking fluid supplier. They sought a coolant which could meet their strict specifications while also ensuring competitiveness in the given market. As a result of Castrol's strategic relationship with this customer (supplying Hysol® MB 50), we were given the opportunity to participate along with five other suppliers to offer a new solution.

Solution

The customer required an affordable option when machining steel while continuing to use the more robust Hysol MB 50 for aluminum machining. Their current general-purpose coolant required concentrations of up to 20%. Castrol proposed our newest soluble coolant, **Hysol 11 FF** for the steel applications. Due to its compatibility, Hysol MB 50 can be added to the Hysol 11 FF when the customer switches from steel to aluminum for short runs. This helps the customer eliminate fluid dumps while achieving the needed lubricity for good aluminum finishes.

Outcome

Successful trials with Hysol 11 FF resulted in no further competitive trials conducted by the customer. Operators requested the new coolant due to less irritation and lower mist. The plant was so pleased with the performance and cost that they converted the entire steel machining area and are evaluating a similar conversion at their other facilities.



- Reduced coolant usage - \$20,000 annual savings
- Lower downtime for changing fluids and cleaning systems
- Eliminated the need for lubricity additives
- Improved part quality & less aluminum staining
- High operator acceptance