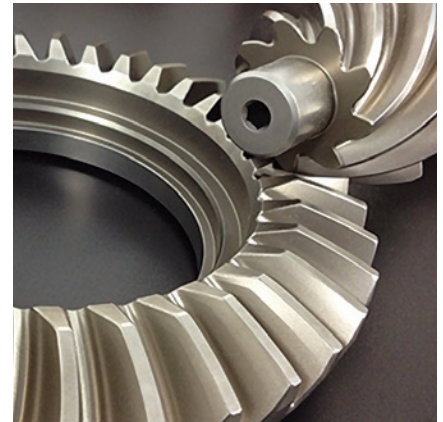


XTREME CUT 290

In addition to eliminating foam and subsequent downtime, XTREME CUT 290 reduced coolant usage, which would save the manufacturer 49% in annual coolant cost.



The Challenge

This manufacturer is a subsidiary of a global supplier of ball screws, safety rods, and gears to the aerospace industry. They have several Okuma VMCs that run full production with parts that have long cycle times. They were experiencing significant foam with the semi-synthetic coolant being run, which was causing operator intervention to clean up.

QualiChem recommended XTREME CUT 290. The initial justification for the test was to improve foam control, which was ultimately achieved. However, after a few weeks of testing, the manufacturer began to realize measurable savings as a result of a drop in concentrate usage. It was taking less XTREME CUT 290 to keep the systems running than with the incumbent coolant. As a result of this improvement, QualiChem was given the opportunity to test grinding coolant and a gear grinding oil.

Process and Equipment

MACHINES	Okuma Vertical Machining Centers
MATERIALS	6Al 4V Titanium, Steel, and Aluminum
INCUMBENT PRODUCT	Semi-synthetic coolant
OPERATIONS	Various vertical machining operations

RESULTS AT-A-GLANCE

	INCUMBENT	XTREME CUT 290
FOAM	Significant and disruptive	None
CONCENTRATE USED	4.4 gal/day	1.65 gal/day
USAGE RATE	Benchmarked	Reduced by 62.5%
COOLANT COST	\$28 /gal	\$38 /gal
COOLANT COST PER MACHINE	\$123.20 /day	\$62.70 /day*

** This would result in reducing annual coolant cost by 49%!*

For more information or to request a free trial, please contact your local QualiChem Distributor or QualiChem Sales Engineer.

The Solution

XTREME CUT 290

Premium Series Extreme Duty Semi-Synthetic

Designed for the most difficult machining applications, XTREME CUT 290 is formulated to improve tool life on difficult aerospace alloys such as nickel alloys, titanium, and stainless steels.

XTREME CUT 290 provides the performance level of a heavy-duty soluble oil without the unpleasant odors or high usage rates associated with soluble oils. XTREME CUT 290 has excellent bioresistance resulting in long fluid life in both central systems and individual sumps. It has a tight, stable emulsion that imparts excellent tramp oil rejection and product stability.

The Results

Running XTREME CUT 290, the following benefits were realized:

- Eliminated foam, resulting in more consistent tool performance and less operator required maintenance
- Coolant usage rate was reduced by 62.5%
- Annual coolant cost was reduced by 49%

The manufacturer maintains their coolant at a 10% concentration. They found that using XTREME CUT 290 required significantly less concentrate than the incumbent coolant to keep the machines at 10%.

