CASE STUDY | CUSTOM TOOL MANUFACTURER | SOUTH CAROLINA

XTREME GRIND TS

XTREME GRIND TS outperformed the competition, and delivered a cost savings up to 50%. Our GTL grinding oil runs exceptionally clean, making it well-suited for this manufacturer's 22 Transor one-micron filtration systems.

The Challenge

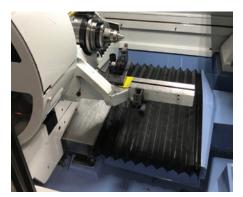
This custom tool manufacturer is a member of a global industrial group. Their 60,000 square foot manufacturing facility, located in upstate South Carolina, provides engineered cutting tool solutions primarily for the automotive and aerospace industries.

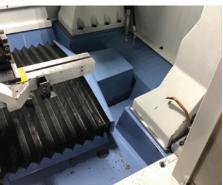
To keep their grinding oils running clean, they use Transor Filtration Systems which are the industry leading filtration system for tool and cutter grinding. These systems provide one-micron filtration which allow for tighter tolerances, lower maintenance costs, and faster cycle times. The manufacturer invested in 22 Transor systems, with a total capacity of 9000 gallons, to feed their 40+ grinders with exceptionally clean oil.

To select the best grinding oil for their needs, they tested three synthetic grinding oils: QualiChem XTREME GRIND TS, a gas-to-liquid base grinding oil, and two different competitors' hydrocrack base grinding oils. QualiChem XTREME GRIND TS outperformed the competition, offering a 50% cost savings over one and a 20% cost savings over the other.

Process and Equipment

MACHINES	ANCA, WALTER & REINECKER multiple-axis tool grinding machines
MATERIALS	Carbide containing 6-10% cobalt
COMPETITOR PRODUCTS	Hydrocrack base cutting oils
OPERATIONS	Grinding with diamond wheels



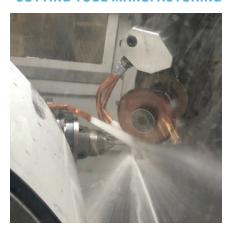


Above is one of the grinder cabinets after running XTREME GRIND TS for 3 months. The cleanliness of the machine ensures that the grinder operates at peak performance in terms of accuracy and reliability.

Continued on next page.

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

CUTTING TOOL MANUFACTURING



The Solution

XTREME GRIND TS

Premium Series Gas-to-Liquid Grinding Oil

XTREME GRIND TS is an ultra-low viscosity grinding fluid designed primarily for tool and cutter grinding applications. Its excellent wetting properties and low viscosity keep the grinding zone clean of debris. Made from exceptionally clean gas-to-liquid (GTL) synthetic oils, XTREME GRIND TS meets the specifications for one-micron filtration systems, and does not contain additives such as fat, sulfur, chlorine or phosphorous which can interfere with the filtration process.

The Results

Running XTREME GRIND TS, the following benefits were realized:

- Better overall performance at a lower cost
- Reduced usage
- Their Transor filtration systems ran at lower temperatures, and ran more efficiently
- High operator acceptance
- No odor and less misting



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CASE STUDY | CUSTOM TOOL MANUFACTURER | GREER, SC



The manufacturer invested in 22 Transor systems with a total capacity of 9000 gallons in order to feed their 40+ grinders with exceptionally clean oil.

The Trial

The manufacturer tested 3 grinding oils: QualiChem XTREME GRIND TS, a gas-to-liquid base grinding oil, and two different competitors' hydrocrack base grinding oils. XTREME GRIND TS outperformed the competition, making it the manufacturer's grinding oil of choice.

RESULTS AT-A-GLANCE		
	QualiChem XTREME GRIND TS vs. the competitors' grinding oils	
COST SAVINGS	A 50% cost savings over one and a 20% cost savings over the other	
USAGE RATE	Reduced usage by 5% to 10%	
FILTRATION PERFORMANCE	The Transor systems ran at lower temperatures and collected more of the grinding swarf	
MACHINE CLEANLINESS	There was significantly less carbide sludge in the machines and in the clean tanks of the Transor systems.	
ODOR & MIST	Odorless and low misting	

