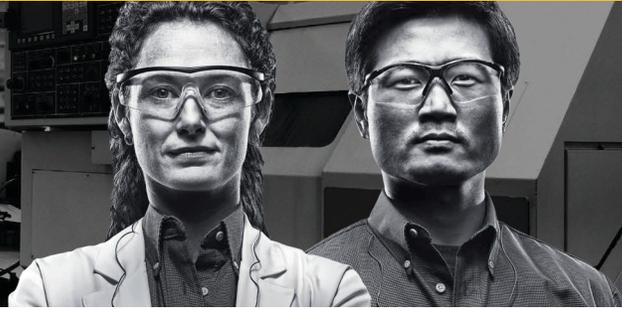


# CASE STUDY



## PRECISION MACHINING HEAVY EQUIPMENT COMPONENTS

### QUAKERCOOL® 750

#### CHALLENGES

A major manufacturer of precision pins, planet shafts and sleeves for trucks and heavy equipment was experiencing microbiological mold and fungi issues, including some machine rusting. The customer turned to Quaker looking for the following solutions:

- » New coolant with equal to or better tool life
- » No microbiological problems
- » Overall cost savings

#### THE SOLUTION

Quaker analyzed the customer's challenges and recommended QUAKERCOOL® 750 due to its excellent micro-biological growth resistance and superior tool life performance. By switching all machines over to QUAKERCOOL® 750, the customer achieved the following results:

- » **40% Tool life increase**
- » **3% Coolant cost savings per year**
- » **Eliminated microbiological issues**
- » Decreased yearly filter use

"By switching our coolant provider to Quaker, we have been able to achieve increased tool life at a lower chemical cost thanks to QUAKERCOOL® 750, and the level of service provided by Quaker" stated the Environmental Health & Safety manager responsible for the project. "We are quite happy working with Quaker and have converted every system and use a Quaker product in every area we can. Chose a vender that will provide a service after the sell. Quaker Chemical comes in once a week to monitor and test coolant for detrition at no extra cost and was the low cost provider."

#### PROCESS AND EQUIPMENT

Part	Precision pins, planet shafts and sleeves
Material	1040 Carbon and alloy steel
Machine	Lathes, grinders, machine centers and saws
System Size	Ranges from 30-300 gallons
Pump Pressure	up to 1200 psi with chip blaster
Operations	Grinding, milling, turning, drilling, ID grinding, surface grinding, OD grinding

#### THE PRODUCT

The QUAKERCOOL® 750 high-performance, mineral oil free microemulsion is a proven performer in demanding ferrous machining and grinding operations. This metalworking fluid is recommended for medium duty milling, drilling, grinding, turning, reaming, and tapping/threading operations. QUAKERCOOL® 750 contains no chlorinated compounds, formaldehyde release agents, Boron, MEA, or secondary amines.

#### THE EXPERTISE

Metalworking lubricants represent a very minor part of the costs in a metalworking process, typically less than 1%. This case illustrates the importance of correct fluid selection. The impact of the fluid can be a multiple of its costs, making the price of a metalworking fluid insignificant. That is why Quaker focuses on developing fluids with the highest performance without compromise, fluids that sharpen your competitive edge.