

Challenges

A major automotive manufacturer was experiencing issues with mycobacteria. The plant had 20 reported cases of worker's compensation related to hypersensitivity pneumonitis over the past two years. The manufacturer approached Quaker for help with eliminating the mycobacteria in a 50,000-gallon central system.

Providing Solutions

Quaker Chemical Management Servicessm (QCMSsm) introduced QUAKERAL® 377, resulting in a 61% usage reduction and a projected yearly cost savings of over \$150,000. In addition, the manufacturer received the following benefits:

- **Elimination of mycobacteria – the system has repeatedly tested negative and there have been no reports of health issues**
- **Coolant usage has been reduced from an average of 2,200 gals/month to just 870 gallons/month**
- **Elimination of the need for biocide that was being used at nearly \$2,000/month**
- **All required machining tolerances have been met consistently**

Customers

- Bosch
- Chrysler
- Consolidated Diesel
- General Motors

Product Description

QUAKERAL® 377 is a high-performance, emulsifiable metalworking fluid designed for heavy-duty machining and grinding operations requiring a high degree of lubricity, cleanliness, cooling and corrosion protection. It is recommended for more difficult machining and grinding operations on cast iron and steel alloys and for critical surface finish machining of cast aluminum alloys. This product is designed to control microbiological growth including mycobacteria.

Process & Equipment

Part:	Master Cylinders and Anchor Plates
Material:	Cast Iron
System Size:	50,000 gallons
Concentration:	7 - 9%
Specific Operation:	Rough & Finish Milling, Rough & Finish Boring, Step Drilling, Tapping, Gun Drilling

Product & Process 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.

