

### Challenges

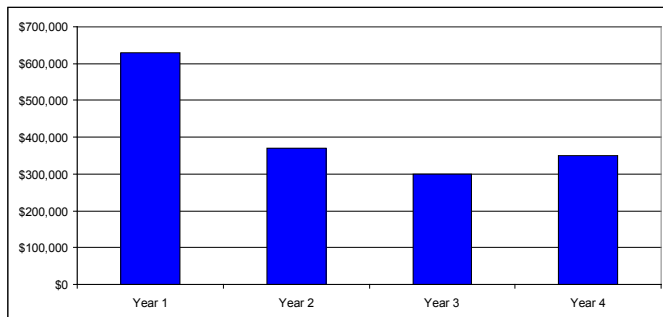
A major automotive brake parts manufacturer needed to implement a plan that would help them reduce waste-related costs. The plant processed over one million gallons of fluid per year, and knew that they had to do something. Areas that needed to be examined included:

- Recycling chemistry of the coolants & lubricants
- Chemical segregation of the fluids used in the plant
- Chemical and bacterial control
- Examination of the facility's current recycling system

### Providing Solutions

Quaker's management team implemented a waste reduction program that has saved the customer an estimated \$1,500,000 since its inception. The average annual volume of waste reduced is almost 900,000 gallons or 7.5 million pounds. The graph below illustrates the savings generated over the life of the project:

Manufacturer's Total Cost Savings



Over the life of this project, Quaker has worked with the customer to:

- Install a coolant centrifuge to remove solids from used coolant/washer fluid
- Install a pasteurizer to sterilize used coolant/washer fluid
- Recycle 100% of the coolant, thereby reducing the amount spent on metalworking fluids
- Install a thermal oxidizer
- Store and process all non-hazardous waste material in-house
- Keep the plant a "no-discharge" facility

### Customer Reference

- AK Steel
- Arcelor
- ArvinMeritor
- Bosch
- CSN
- Caterpillar
- Chrysler
- Corus
- Delphi
- Ford
- General Motors
- Honeywell
- Mittal Steel
- Nucor
- Renault
- SDI
- Snecma
- Toyota
- Volvo

### 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.

Quaker Chemical Management Services (QCMS<sup>sm</sup>) offers a full range of process expertise and support. Quaker programs are ISO 9001 certified and have received numerous supplier certifications and awards for excellence. QCMS<sup>sm</sup> provides a disciplined approach to controlling the acquisition, delivery, storage, application and disposal of process fluids.

Quaker Chemical Management Services provides:

- Inventory Management
- Process Monitoring
- Chemical Usage Reporting
- Chemical Sampling
- Knowledge Sharing
- Fluid Recycling
- Waste Management
- Technical Support
- Engineering Services