

## Metal Removal Fluids: 40% Reduction in Neat Oil Consumption

QUAKERCUT® 020 XP

### The Challenge

A world-leading automotive manufacturer was looking to replace the mineral oil based neat oil they were using for connector rod deep hole drilling. They were also looking to make the following efficiency improvements:

- Improved tool life
- Reduced consumption
- Improved working environment

### The Solution

Quaker Houghton reviewed the deep hole drilling operations at the customer and recommended QUAKERCUT® 020 XP, based on the following:

- Potential for cost reduction from a decrease in consumption
- Improved tool life due to the unique ester technology
- Reduced environmental impact and improved operator acceptance

### The Product

QUAKERCUT® 020 XP is a high performance neat cutting oil based on advanced ester technology from renewable raw materials. It is particularly suited for heavy-duty metalworking operations in ferrous and non ferrous materials. The high polarity gives optimal wetting and lubricating properties ensuring high surface finish quality and improved tool life. Part of the QUAKERCUT® XP series, QUAKERCUT® 020 XP has a proven track record of bringing operational, Health & Safety and environmental benefits to a broad range of customers in the automotive and mechanical industries.

### The Benefits

At the onset of the trial, one 1,500 liter system was converted to QUAKERCUT® 020 XP. After the conversion, the customer observed higher machine productivity and reduced consumption.

- 40% reduction in consumption
- 25% improvement in tool life
- Improved safety due to QUAKERCUT® 020 XP higher flash point
- Total annual savings approximately 11,500€

Not only did QUAKERCUT® 020 XP lead to a cost savings, but converting from a mineral oil based to a biodegradable neat oil also had a positive effect on the environmental impact of the company.

- Improved working environment - elimination of oil mist and skin irritation
- Reduction in chemical usage and discharge
- Reduction in cutting tools and energy used due to improved tool life

### Process and Equipment

PRODUCT TITLE	PRODUCT INFORMATION
Parts	Conrods
Material	High alloyed steel, C70
Machine	Mollart
Operation	Deep hole drilling
Filtration	Magnetic 40 µm Bollfilter