Tapping

QUAKERAL® 370 CASE STUDY

METALWORKING INDUSTRY

Challenges

A major global manufacturer of light, medium and heavy trucks located in Brazil, was having some performance issues with their current coolant. The main problem was that the producer could not perform the operation without the auxiliary use of neat cutting oil. This problem created the following issues:

- Operation downtime due to having to lubricate the drill hole and tool with neat cutting oil
- Contamination of the emulsion by frequent lubrication of neat oil
- Increase in operator's labor
- Dirty machines

Providing Solutions

Quaker addressed the situation by using their extensive experience in metal machining and introduced QUAKERAL® 370, which produced an immediate positive impact on the machining process and bottom-line cost.

The use of this product resulted in:

- Reduced downtime due to elimination of the need to lubricate the tool and drill hole
- Elimination of the use of neat cutting oil Reduction in operator's labor
- Improved operator working conditions due to cleaner machines

Customer Reference

- Chrysler
- KS Pistões
- Samot

Product Description

QUAKERAL® 370 is a heavy-duty, chlorine-free product based on solution synthetic technology. Environmentally up-to-date, this product uses Quaker's proprietary ester technology to replace harmful extreme pressure additives. It is suitable for machining titanium, aluminum, steel, alloy steels and cast iron.

QUAKERAL® 370 can be used on all general metalworking applications as well as operations that include:

- Broaching
- Gun drilling
- Mapal reaming
- Tapping
- Creep feed grinding
- Hobbing
- Turbine machining
- Neat oil replacement

Process & Equipment

CNC Heller BEA2

Parts:	Engine Block Cover
Part Alloy:	Aluminum
Tooling:	HD tap, TiN cover
Concentration:	10%
Specific Operation:	Roll Tapping

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.