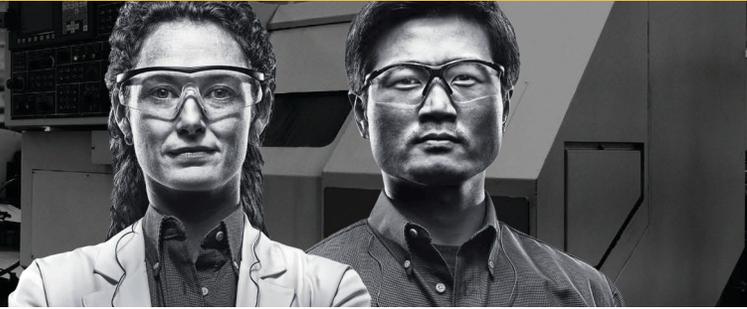


CASE STUDY



DEEP-HOLE DRILLING

QUAKERCUT® 010 XP

CHALLENGES

A leading supplier of connecting rods for truck engine and industrial engine manufacturers was aiming to reduce Total Cost of ownership (TCO) of the cutting fluids in use at its facility.

The customer wanted to improve the following parameters compared to using the previous product, which was a mineral oil-based cutting fluid:

- » Increase tool life in deep-hole drilling
- » Decrease oil consumption
- » Use a more operator friendly fluid

THE SOLUTION

Binol, a Quaker Chemical Company, analyzed the customer's challenges and introduced QUAKERCUT® 010 XP, an extra high performance neat cutting oil. After using QUAKERCUT® 010 XP, Binol was able to realize the following operational improvements:

- » **No skin or respiratory irritation**
- » **Cost saving of 10,000 €** per year and per Deep-Hole Drilling machine on tooling costs
- » **Oil consumption reduction** – top-up volume reduced by approximately 30%

PROCESS AND EQUIPMENT

Material	Forged steel C70
Machine	4 Mollart machines
Filter	Transor, 5µm stacked filter, back flush system
Tank Volume	800 liter
Pump Pressure	100 bar
Running Time	24/7
Type of tool	DHD tools Iscar
Operation	Deep-hole drilling
Adjustments	No adjustments

THE PRODUCT

QUAKERCUT® 010 XP is an extra high performance neat cutting oil based on advanced ester technology from renewable raw materials with a viscosity of approximately 11mm²/s at 40°C. High polar additives gives optimal wetting and lubricating properties ensuring high surface finish quality and improved tool life. The product should be used neat and the main application is heavy-duty metalworking operations.

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.



Image of the customer's connecting rod for a large engine positioned with fixtures on a deep hole drilling machine.