

Project Overview

Using extremely hard water for its bevelling process of automotive glass, the customer was experiencing a high lubricant consumption and consequently a high cost price. FUCHS recommended the use of VITROLIS HF BF SP in order to reduce lubricant consumption whilst maintaining a high performance, high quality, efficient process.

The Customer

The customer is a large global organisation serving the Original Equipment (OE) and local automotive glass replacement (AGR) aftermarket sector. They have wholesaling networks throughout Europe, Japan and NAFTA with smaller aftermarket operations in South America and Asia. Flexible processes allows them to specialise in short run manufacture for models no longer current. This case study focuses on their Spanish branch.

The Problem

The customer was using ACECOOL 6498 lubricant (BASF/Chemetall) but was experiencing high consumption levels and therefore high production costs. A cheaper alternative was to be sourced without sacrificing performance.

Problem

- High product consumption
- High production costs

Solution

VITROLIS HF BF SP

Low foaming water-soluble cooling lubricant for glass drilling, grinding and bevelling.

Results

- Reduced consumption: 2.7% to 1.5%
- Cost savings of approx. 20%

The Solution

VITROLIS HF BF SP is a low-foaming water-soluble cooling lubricant free of mineral oil for universal application in glass drilling, grinding & bevelling. VITROLIS HF BF provides highly stable fully transparent glass working solutions and guarantees maximum durability: Free from chlorine, FAD biocides, phenol, nitrites, silicone, PCB/PCT & PTBB, substances with occupational exposure limits. Developed accordingly to the latest H&S formulation regulations. VITROLIS HF BF sets new standards for drilling, grinding & bevelling techniques, ergonomics and environmental friendliness.

- Avoid secondary amines due to EU legislation
- Using de-mineralised water to not increase the salts in the dilution on service
- Avoid solid acids to reduce the solid residues
- Introduce a fungicide to avoid fungi growth and solid residues

The FUCHS Service Team would also be on site to support during the trial, helping the customer to identify and correct any problems that could appear. The team were able to further assist with emulsion quality control, stock management & DQO analysis to support the customer to fulfil the legislation.

Results

Through an optimised process thanks to the technical knowledge of the FUCHS Service Team and the product change to VITROLIS HF BF, the customer was able to reduce fluid consumption from 2.7% to 1.5%. This resulted in significant cost savings of approx. 20%.

Conclusion

The use of the VITROLIS HF BF SP allowed the customer to reduce their consumption due to the product requiring a lower concentration. Global partner with a local support - Thanks to this successful trial, the customer is looking to use more FUCHS products across more of their applications.

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