

Mabanol Cut 263 BF increases productivity in toolmaking and enhances health protection.



Toolmaking company | Georgsmarienhütte

Initial Situation

In the toolmaking industry, the processes of turning, milling, drilling and thread cutting of cast and unalloyed steels are performed at various machining and grinding machines.

Previously, a water-miscible cooling lubricant based on boric acid, amines and formaldehyde depot substances with an increased oil content of 45% was used. Marked with "corrosive" and the signal word "danger", the product caused skin irritations among some employees. Further to the above, the product caused dimensional inaccuracies during grinding, deposits in the form of lime soaps, a premature drop in pH value and occasionally severe oil mist.

A major objective that was pursued was to determine ways to improve occupational safety and reduce the number of additives used.

Recommendation

The use of the bactericide-free Mabanol Cut 263 BF based on the modern DCHA emulsifier technology is recommended.

By virtue of the resistance of this technology to bacterial growth and the existing skin protection assessments, the use of

Mabanol Cut 263 BF promises longer lifecycle of the emulsion without additional additives and an improvement in employee health protection.

Furthermore, Mabanol Cut 263 BF is stable in use with hard water of up to 60° dH and does not lead to the precipitation of lime soaps or oil. A lower oil content of 30% helps reduce oil mist and additional drag-out, thereby increasing machine cleanliness.

Advantage

By using Mabanol Cut 263 BF, the harmful health effects on employees can be eliminated, and the company's internal occupational safety guidelines can be adhered to due to more lenient labelling requirements.

Mabanol Cut 263 BF also improves grinding results by preventing dimensional inaccuracies caused by clogged grinding wheels. Machine cleanliness is further enhanced by significantly reduced oil mist and the absence of lime soaps and other drag-out.

Moreover, the use of Mabanol Cut 263 BF requires no additional additives while significantly extending the lifecycle of the emulsion.