

Mabanol Cut 265 BF increases the lifecycle of the emulsion by more than 100% and optimises coolant handling.*



Special machine construction | Lohne

Initial Situation

Various processes such as turning, milling, drilling, and thread cutting of plastics, aluminium, steels, and stainless steels are performed at numerous machining centres.

Two water-miscible cooling lubricants based on phenoxyethanol and -propanol were used prior to Mabanol's involvement. Due to bacterial and fungal growth, there are short lifecycles of only six months and strong odour formation, requiring the addition of additives such as bactericides and fungicides. The emulsions are also affected by lime soaps in the machine spaces and separated oil.

The ultimate goal is to prevent the precipitation of lime soaps, avoid additives and increase machine cleanliness. Additionally, a vital objective is to reduce the number of products that are applied to a universal, long-term stable coolant for machining the entire material mix.

Recommendation

The use of Mabanol Cut 265 BF based on the modern DCHA emulsifier technology is recommended. The resistance of this technology to bacterial growth promises a longer lifecycle of the emulsion without additional additives.

Furthermore, Mabanol Cut 265 BF is stable in use with hard water of up to 150° dH and does not lead to the precipitation of lime soaps or oil. The low oil content helps reduce emulsion drag-out and increases machine cleanliness.

Mabanol Cut 265 BF has excellent lubrication properties for machining aluminium and stainless steels while also being suitable for plastics.

Advantage

By switching to Mabanol Cut 265 BF, the lifecycles of the emulsion have already more than doubled up to the present time while eliminating any additives. This not only conserves resources and reduces material costs but also increases health protection. In the further course of the field trial, a lifecycle of at least 2 years is aimed for.

The improved flushing behaviour leads to significantly cleaner machines. When using Mabanol Cut 265 BF, neither precipitation of lime soaps nor deposits in the machine spaces are observed. All machining processes can be performed with a single coolant. The surface qualities remain very good, and there is no discolouration on aluminium or swelling during plastic machining. Thus, the reduction to the universal high-performance coolant Mabanol Cut 265 BF contributes to optimising the entire manufacturing process.

> **2-fold**

*extended emulsion lifecycles**

*This performance proof is based on the experiences of a single customer. The actual results achieved can depend on the type of machine used and its maintenance, operating and environmental conditions, as well as the previously used lubricant.