

Case Study

Naturally.



CS Cut20_gc1/06-1

Binol Cut 20

Below follows a summary of the results noted in a field study with focus on gear cutting based on a straight metalworking fluid.

The study was performed after a mineral oil was replaced by Binol Cut 20, an environmentally acceptable vegetable oil-based cutting oil without EP additives and with a viscosity of app. 20 mm²/s at 40°C.

The results are an example of the positive effects achieved.

Facts

Application:	Gear Cutting
Machine:	Pfauter
Material:	Steel, SIS 2541-3 (chromium-molybdenum-nickel)
Cutting Depth:	26 mm
Module:	12 - 16
Tank Volyme:	180 litre
Cycle Time:	15 hours (module 12) Ø 600 mm x 200 mm
Running Time:	8 h/day
Adjustments:	Non

Results

Oil Consumption:	Decrease by 30 percent
Tool Wear:	Increase by 15 percent
Details:	Cooler and cleaner details
Chips:	Not overheated
Machines:	Cleaner machines
Working Environment:	Improved
Oil Mist:	No mist
Total Cost Saving:	4 000 SEK/year/machine = 430 EUR/year/machine