

Case Study

Naturally.



CS Cut10_gc1/06-1

Binol Cut 10

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

The study was performed after a mineral oil was replaced by Binol Cut 10, an environmentally acceptable vegetable oil-based cutting oil without EP additives and with a viscosity of app. 11 mm²/s at 40°C.

The results are an example of the positive effects achieved.

Facts

Application:	Gear Cutting
Machine:	Pfauter
Material:	SIS 2511 and 2541
Cutting Depths:	2,5-68 mm
Cutting Depth:	18 mm/rev (module 8) and 22,5 mm/rev (module 10)
Module:	1-30
Tank Volyme:	150 litre
Cycle Time:	30-35 minutes (module 8) with Cut 10
Cycle Time:	40-45 minutes (module 8) with previous oil
Running Time:	9 h/day
Adjustments:	Non

Results

Oil Consumption:	Decrease by 30 percent
Tool Wear:	Increase by 40 percent
Production:	Increase by 30 percent
Finish:	Better finish on produced details
Working Environment:	Improved
Oil Mist:	No mist
Total Cost Saving:	5000 SEK/year/machine = 540 EUR/year/machine