

Functional surfaces: HDG/EG - Corrosion protection

prelube2 - THE SUSTAINABLE FORMING OIL WITH OPTIMIZED TRIBOLOGY AND EXCELLENT OIL DISTRIBUTION

Do you want a corrosion protection oil that can increase tool cleaning intervals, make your production run cleaner, features improved tribology and is compatible with your downstream processes? That's prelube2.

voestalpine provides the best support by using the next generation of prelube2. The optimized tribology of the corrosion protection oil makes it possible to reduce the amount required while maintaining the same level of forming efficiency. This in turn reduces oil leakage and prevents oil from being

redistributed during storage of coated and uncoated steel strip.

prelube2 has the potential of reducing the friction coefficient and zinc abrasion during the forming process, thus increasing tool cleaning intervals. This means that more pressed parts can be produced in a single run.

TYPICAL APPLICATIONS

- » Automotive industry
- » Products with the most stringent forming demands



Clean processes and processing compatibility pursuant to VDA230-213



Increased tool cleaning intervals



Optimized tribology



Sustainability based on minimized oil deposits



Reduced zinc abrasion for optimum process flow



Best formability

prelube

FSSENTIAL ADVANTAGES WHEN COMPARED TO STANDARD OILS

prelube2 (approved pursuant to VDA 230-213) reduces zinc abrasion in the forming tool for formed parts. The following figures show the test results from the strip drawing test under the same conditions.

PROCESSING BENEFITS

The excellent tribological properties reduce the amount of lubrication required while providing the same level of friction reduction, thus enabling clean production processes (less oil leakage during storage and transport). This improves work safety and reduces the risk of slippage.

SUSTAINABILITY AND **ENVIRONMENTAL PROTECTION**

- » The use of prelube2 reduces the oil coating layer thickness and protects the environment.
- » The lower oil volume conserves resources and leads to clean processes with less chemical consumption in downstream processes.
- » With the same oil layer thickness, prelube2 reduces friction during forming.



Typical zinc residues in the tool (galling) when lubricating with standard oil on hot-dip galvanized surfaces



Zinc abrasion on the friction jaw was significantly reduced by using prelube2.



Optimized lubrication ...

Perfect oil distribution Reduced oil



Improved levels of work safety (risk of slippage)

Increase in 1.A ... output

Optimized tribology



Reduced ... Increased tool cleaning ... Reduced zinc

intervals



Reduction of lubricant in the ... coating process

Reduction of lubricant in

MULTIPLE CERTIFICATIONS

Certifications are naturally a minimum requirement at voestalpine in our effort to provide additional highperformance treatments such as prelube2.

















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voestalpine Steel Division

voestalpine-Straße 3 4020 Linz, Austria productmanagement@voestalpine.com www.voestalpine.com/steel

