

rhenus GTL-TECHNOLOGY

improve performance and reduce costs





Explore new possibilities with GTL-technology from Rhenus Lub

rhenus gas-to-liquid (GTL) oils effectively combine perfomance, innovation and safety

Take your manufacturing process to new levels and stay there with the rhenus EHM 12 and rhenus EU 12 grinding oils, based on innovative GTL technology. Suitable for demanding grinding tasks involving hard metals, gearing components and tools, the unique composition of these oils will help to optimise process costs and improve process reliability. Free from aromatic compounds, heavy metals and any zinc or chlorine compounds, the oils are a high-performance alternative to conventional oils when it comes to protecting skin and health.

GTL oils in comparison to hydrocracked and PAO-based products

Thanks to their excellent process stability, high lubrication performance and optimised foaming behaviour, the new GTL oils from Rhenus Lub offer an ideal alternative to traditional products based on mineral oils, hydrocracked oils and polyalphaolefins (PAOs). Choosing rhenus EHM 12 and rhenus EU 12 means you receive a powerful complete package thanks to the perfect symbiosis of future-proof GTL technology

and rhenus' intelligent combination of additives. rhenus GTL oils set themselves apart by offering equivalent or better properties when compared with PAO products, while also featuring an attractive price/performance ratio.

Benefits at a glance:

Low consumption

Low evaporation levels lead to reduced consumption, thus actively saving on costs.

Greater cooling effect

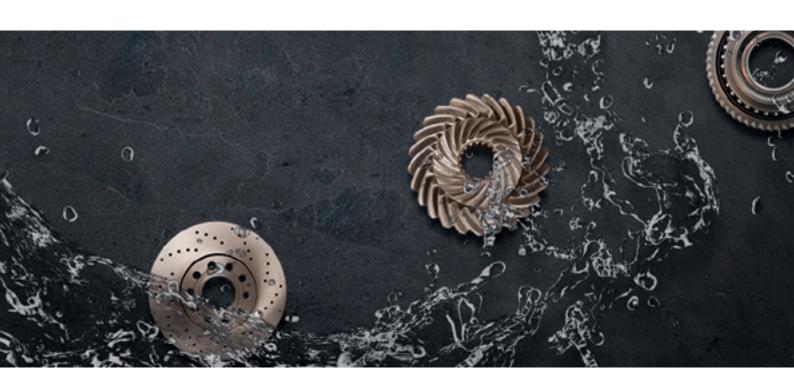
Rapid air separation ensures greater, more effective cooling of the workpiece, meaning higher quantities can be produced.

Long tool service life

Excellent foaming behaviour reduces tool wear and helps to significantly extend service life, while excellent rinsing behaviour ensures that the processing machines remain clean.

Improved occupational health and safety

The extremely high flash point of up to 200°C and low oil misting enable better fire safety and occupational health conditions in the workplace.



rhenus GTL oils – in a nutshell

Are neat oils with a GTL base preferable to other products with a hydrocracked or PAO base?

Yes, if the GTL product can also withstand demanding tasks. GTL oils optimally combine the benefits of hydrocracked products (a favourable price) and PAOs (particularly high-end properties). In reality, companies may be using oils for which the new and powerful professional GTL oils would be a much preferable alternative.

In principle, are all GTL oils ideal for use in machining applications?

No, the important thing to consider here is the formulation. As a rule, it is not enough to use solely a GTL oil as a base, as this will mean that certain performance parameters will not "automatically" be achieved. Intelligent additives have an important role to play here. We have managed to bring rhenus products to a level where they are among the best in terms of their price/performance ratio.

Are there any risks involved when switching to GTL products from Rhenus Lub?

Rhenus Lub guarantees a fully comprehensive service for a completely smooth transition. We work closely alongside customers during their switchover to our modern GTL products, thereby ensuring that there are no risks to our customers' production process throughout. The key to this is a coordinated approach that is implemented gradually. As a result, no additional disposal costs arise and the cost remains the as low as possible.

Your personal conclusion: Using GTL technology from Rhenus Lub will help your company to achieve continued success in the future!

During the GTL process, natural gas is converted into a synthetic and therefore particularly pure base oil. GTL oils evaporate less than hydrocracked or PAO products and form the base for the innovative rhenus GTL oils, whose intelligent composition results in a particularly high level of performance. As rhenus GTL grinding oils do not contain any mineral oil, they are particularly future proof. So choose GTL oils from Rhenus Lub now to achieve long-term improvements in the performance and reliability of your manufacturing processes.

Comparison between HC oil/PAO oil/GTL oil

| Product | Appearance/ odour | V40 [mm²/s] | VI | FP (COC) [°C] | PP [°C] | Foam level | | Noack |
|---------|----------------------|----------------|-----|---------------------|------------|---------------------|---------------------|-----------------|
| | | | | | | 5,46 l/h | 11,28 l/h | (250 °C) [%] |
| HC oil | Clear/ neutral | 9-10 | 109 | 170 | <-27 | 20 ml, 0 n. 10 s | 80 ml, 0 n. 30 s | 64 |
| PAO 20 | Clear/ neutral | 10 | 110 | 183 | <-27 | 0 ml | 20 ml, 0 n. 7 s | 56 |
| GTL oil | Clear/ neutral | 9-10 | 113 | 193 | <-27 | 0 ml | 0 ml | 49 |

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Rhenus Lub GmbH & Co KG Hamburgring 45 41179 Mönchengladbach

Telephone +49 2161 5869-0 Fax +49 2161 5869-93

vertrieb@rhenusweb.de www.rhenuslub.com



