

## ROTHEN FETT HST

**Fully synthetic lithium complex grease for high and low temperatures, with PTFE**

### DESCRIPTION:

**ROTHEN FETT HST** is a lithium complex soap based grease and 100% synthetic fluid (high viscosity for version 174, medium-low viscosity for version 166), strongly fortified by antioxidants, anti-rust and EP agent, and a high percentage of ultrafine-grained PTFE (Teflon). Due to its composition, this grease can be defined as a high performance product designed to respond adequately to severe operating conditions: the complex soap provides a high dropping point and, consequently, an increased structural stability at high temperatures. Additionally, the synthetic fluid also provides a good protection against wear and a moderate volatility, especially when compared to other mineral oils of equal viscosity.

**ROTHEN FETT HST** performs well against water, even in case of significant leakage, and has excellent resistance to oxidation. The further additive with PTFE, together with the synthetic base, significantly enhances the anti-seizure (significantly increasing the welding load and reducing the imprint diameter) and anti-friction (low friction) properties, even at low temperatures, facilitating, for example, the cold cue.

### APPLICATIONS:

**ROTHEN FETT HST** can be used with all types of bearings operating at medium-low speed, even under severe operating conditions, and offers remarkable technical and economic advantages, allowing to dramatically space out the re-lubrication intervals and the bearings' maintenance, therefore avoiding frequent production downtime. Typical applications are represented from rolling bearings used in rolling and paper mills, where the resistance to temperature and washouts is a definitive key factor.

**ROTHEN FETT HST** can also be used in the automotive sector (wheel-disc brakes' hub bearings) and generally in place of other complex mineral-based greases when superior performance in terms of protection against high loads, high temperatures and water is needed. This grease is easily pumpable with automatic centralized systems.

**ROTHEN FETT HST** is better suited for high-speed operating bearings, or in cases of extremely low temperatures.

### TYPICAL PHYSICAL-CHEMICAL CHARACTERISTICS: (\*)

FEATURE	UNIT OF MEASURE	TEST METHOD	TYPICAL VALUES	
NLGI CLASSIFICATION		ASTM D217	1-2	
COLOR			White-gray	
ASPECT			Smooth and homogenous	
DRIPPING POINT	°C	ASTM D566	260	
Manipulated Penetration 60 c. at 25°C	1/10 mm	ASTM D217	300	
Manipulated Penetration a 10.000 c. a 25°C	1/10 mm	ASTM D217	Δ +/-25	
Anti Corrosion Test		ASTM D1743	PASS	
OXIDATION STABILITY (loss of pression)	PSI	ASTM D942	After 100 h. < 1	After 400 h. < 3
4 SPHERES Test (EP) Welding Load	N (Kg)	ASTM D2596	> 3500 (ca. 360)	

4 SPHERE Test (WEAR PREVENTIV CHARACTER.) Imprint's Diameter	mm	ASTM D2266	< 0,60
WATER WASHOUT TEST (1 H. - 80°C)	%	ASTM D1264	< 4
BASE OIL'S VISCOSITY AT 40°C (ISO)	Stc	ASTM D445	32

	Min.	Max.
SUGGESTED TEMPERATURES FOR BEST PERFORMANCE	-55 °C	+ 180 °C (short +220°C)

(\*)The values are based on typical production, and may consequently vary.