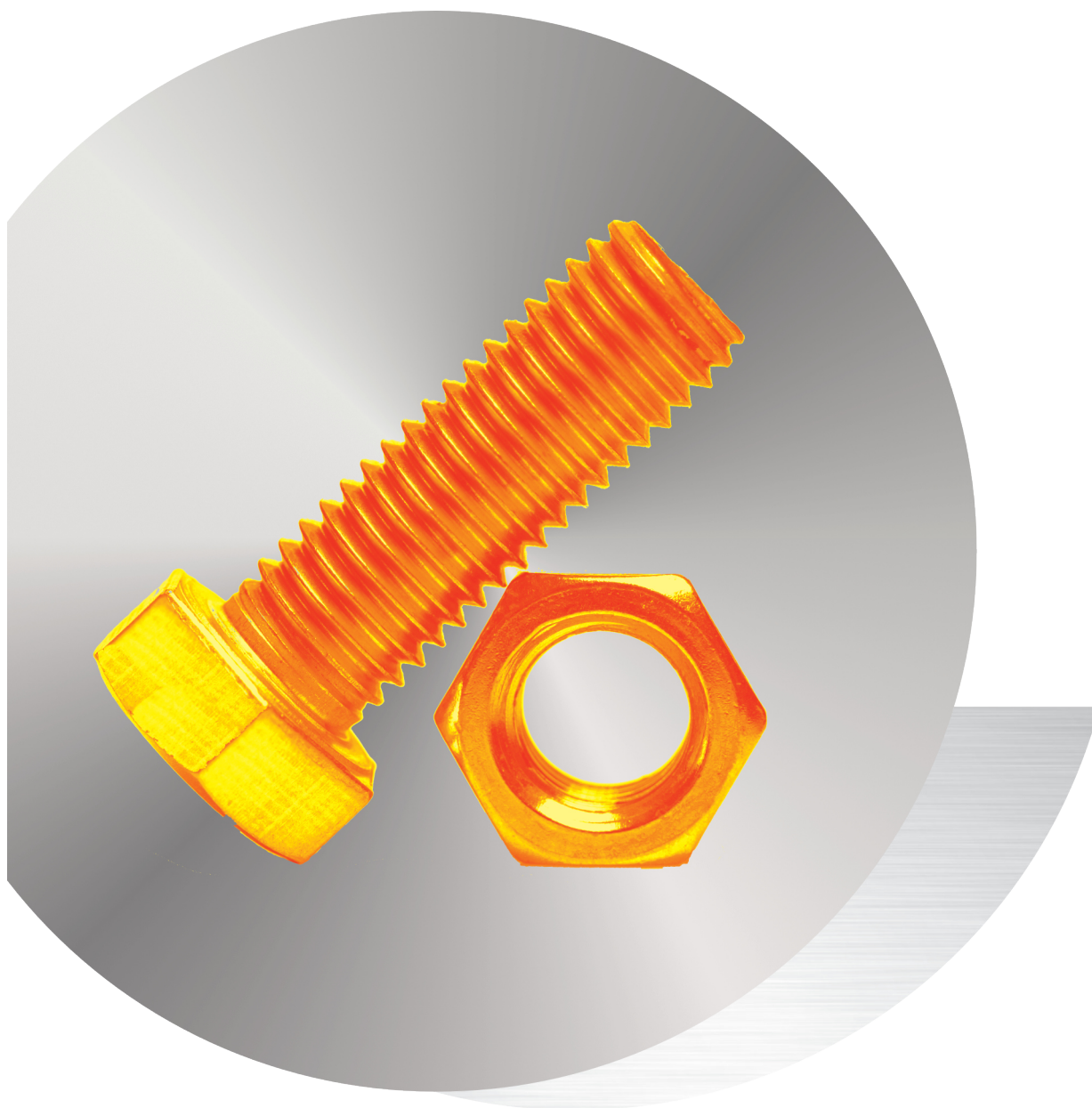


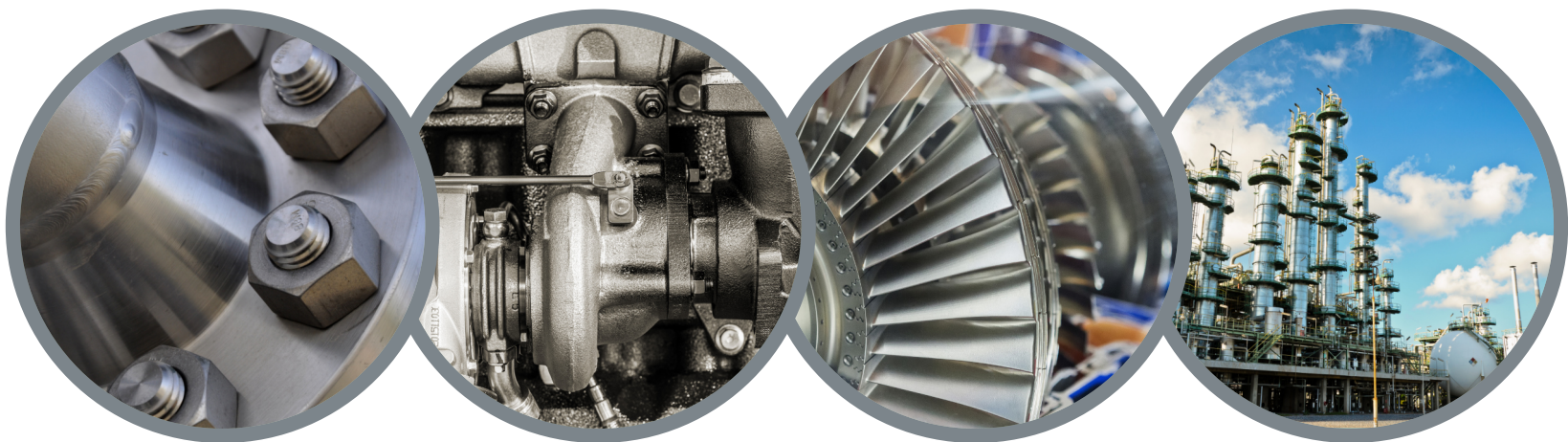
smartGLEIT® LP 475  
THE SCREW PASTE!



[www.smartgleit.com](http://www.smartgleit.com)

 **smartGLEIT®**  
FRICTION MEETS ENGINEERING

# METALLURGICALLY COMPATIBLE SCREW PASTE



## High Performance and Reliability

Any screw connection needs proper lubrication in order to achieve the expected preload forces reliably.

Especially for automatic or mechanically supported bolting it is important that the friction values from bolt to bolt are showing low variability.

The principle applies:

- **No Screw Connection Without Lubrication!**

With regard to suitable lubricants, in our days there is a broad selection regarding type and application form, so that the application-specific, best performing product can be selected..

Products for screw lubrication:

- Dry film lubricants on polymer base
- Sealants with integrated lubricants
- Anti-Friction-Coatings
- Screw pastes with solid lubricants

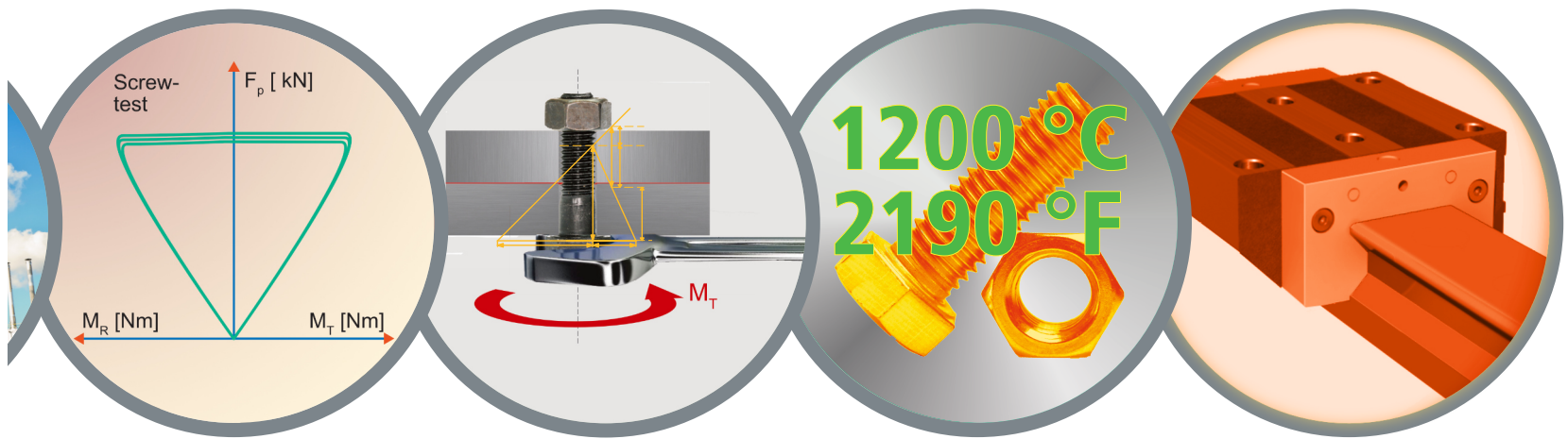
The selection of the optimal product is based on the tribological boundary conditions and the process environment. Best lubricant and optimal application technology result in highest performance.

Specialized products are necessary for screw connections operating in the high-temperature area. Apart from questions concerning the coefficient of friction during assembly, it is particularly important that the connection can be released again after a long period of operation and no negative influences of the lubricant on the metallurgy of the screw material occur.

smartGLEIT® LP 475 was developed especially as hot screw paste - long standing expertise and modern formulation yield in an exceptionally high performing product

- At elevated temperatures the base oil is evaporating very slowly, almost free of residues and on top it is biologically degradable.
- The solid lubricants are selected and matched to each other ensuring temperature resistance up to 1200 °C / 2190 °F .
- The ingredients of LP 475 are metallurgically compatible, especially at high temperatures.
- The lubrication performance of LP 475 is very good – as well in cold as in hot conditions.

# FOR TEMPERATURES UP TO 1200 °C



## The Benchmark for Screw Pastes

### Features of LP 475

- LP 475 is the leading benchmark for high temperature screw pastes
- Metallurgically compatible – protects the surface from scale build-up
- Constant, reproducible friction values, very low variability
- Prevents seizure and scuffing of friction partners – maintenance friendly release torque
- Generally user-friendly

### Application of LP 475

- Manual application with brushes or lint-free rags
- Spray application with aerosol can (LP 475 S)
- Dip-coating with solvent diluted paste (mainly for bulk goods)
- Automatic application with suitable dosing equipment

### Areas of Application

Generally suited for screws, nuts, washers and bolts used in high temperature applications securing the detachability after operation loads.

Examples:

- High temperature screws in
  - power plants (turbine bolts, flange connections,...)
  - in chemical plants, refineries or heating systems
  - automotive industries (exhaust systems, spark plugs, lambda sensors, wheel bolts, ...)
- Universal screw and bolt lubrication at "normal" temperatures - also for any stainless steel screws
- Lubrication of bolts, sliding guides or mechanics which are operated at elevated temperatures and low sliding speeds

# TECHNICAL DATA

CHARACTERISTIC	STANDARD/ PARAMETER	UNIT	LP 475
Appearance	visual	---	blue-grey
Base Oil	---	---	synthetic oil – biologically degradable
Density	DIN 51757	g/cm <sup>3</sup>	~1,2
Drop Point	DIN ISO 2176	°C	none
Penetration	DIN 51804, Bl. 1	mm/10	265–295
NLGI Class	DIN 51818	---	2
Operating Temperatures	---	°C / °F	-40 to +1200 / -40 to 2190
Brugger Value	DIN 51347	MPa	~130
Screw Test – Friction Value $\mu$ (DIN ISO EN 16047)	M12-8.8* M12-A2* (*or other materials of similar classification)	---	0,09 – 0,11 0,12 – 0,15
Water Resistance	DIN 51807	---	0–90
Shelf Life, Closed Original Container		months	36
Shelf Life of Spray Can, From Date of Delivery		months	12
Safety Instructions	---	---	please refer to the MSDS
Available Packages	---	Plastic Can Aerosol Can Can Pail Open-Head Drum	250 g - 12 per box 400 ml – 12 per box 1 kg – 6 per box 25 kg 200 kg

The information given and the recommendations made herein reflects our current knowledge and can only provide a first overview in this brochure. The given values are not eligible for creating specifications. We reserve the right to make changes based on technical developments or changes in legislation. Due to the wide range of possible applications and operating conditions, the product information can only be indicative of possible applications. Therefore, no binding liability and warranty claims can be derived. In any case we strongly recommend to carry out tests before use and thus determine if the product is meeting all requirements and expectations.

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