

# smartGLEIT<sup>®</sup> 700-Series

....AND FRETTING CORROSION IS HISTORY

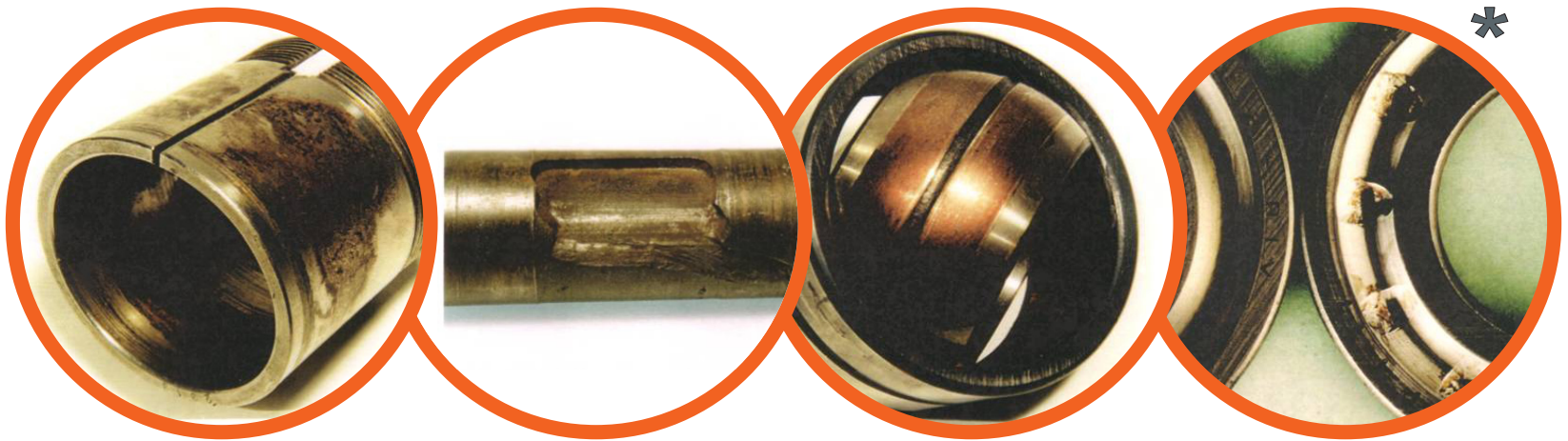


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 **smartGLEIT<sup>®</sup>**  
FRICTION MEETS ENGINEERING



# Fretting Corrosion – A Friction- and Wear-Phenomenon



## Description

Fretting corrosion, an extremely efficient wear mechanism, is induced by oscillating movements with low amplitudes.

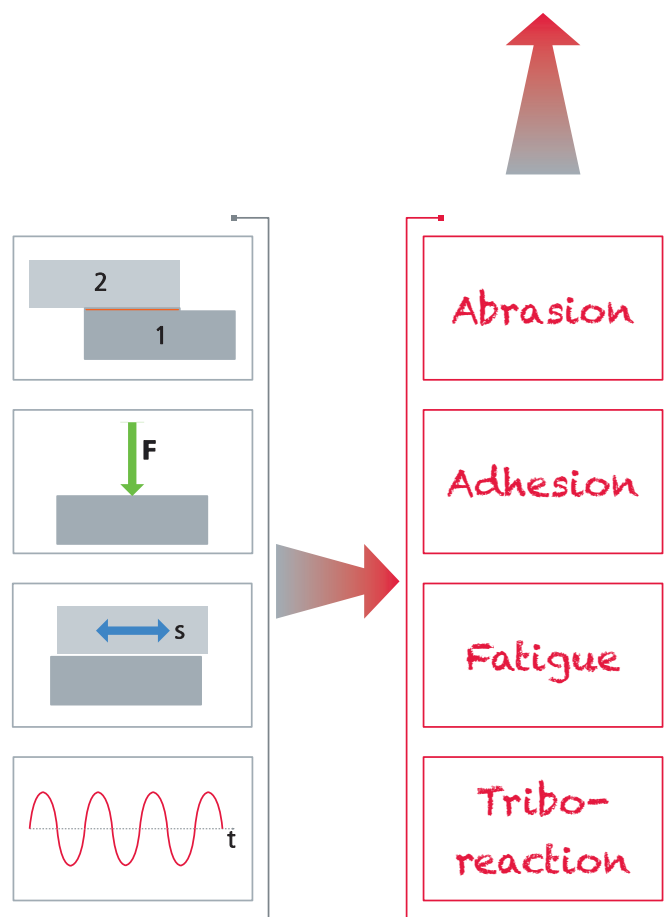
A characteristic of fretting corrosion is the combination of all main wear mechanisms as abrasion, adhesion, fatigue and tribooxidation are part of the overall damage. Depending on the individual tribological conditions their level of contribution to the overall damage may vary.

In relation with fretting corrosion different terms are used in practice:

„vibrational wear, false brinelling, corrosive wear, tribooxidation, chafing corrosion, ripple damage, etc.“

Typically, the mechanical stress - not to be confused with 'normal' corrosion in the presence of water - creates corrosion products at the friction contact point, different variants of iron oxide e.g. wüstite, hematite, maghemite, etc.

Anyway, the occurrence of fretting corrosion will lead inevitably to rapid failure of the mechanical system.



# smartGLEIT® 700-Series

The New Benchmark Against Fretting Corrosion



## Pastes and Greases with Added Value

- The smartGLEIT® 700 Series - new, innovative lubrication-pastes\*, grease-pastes\*\* and greases for all applications lubricated with greases or pastes
- Based on the new generation of white solid lubricants a complete product family was created – for each application the right lubricant for assembly, running in or lifetime lubrication:

|                    |              |
|--------------------|--------------|
| Lubrication-Pastes | PSV - Series |
| Grease-Pastes      | FSV - Series |
| Greases            | GSV - Series |

- Common lubricant standards are met – therefore the products can be applied similar to 'normal' greases or lubrication pastes.

+ Ultimate protection against fretting corrosion

+ Extreme load-carrying capacity

+ Very good wear protection



### Application Examples:

Armatures – Sliding-Guides and -Bearings – Shrink Fits – Joints – Keyed Connections – Adjusting Wedges – Spindles – Disk Cam Mechanisms – Chucks – Machine Bearings – Ejectors – Small Gears – Hinges – Rack and Pinion Gears – Cup-, Leaf-, Annular-, Buffer-Springs – Roller Bearings (at slow speeds) – In General: For lubrication of mixed friction contacts – etc.

\* Lubrication-paste with high solids content = PSV

\*\* Grease-paste with medium solids content = FSV

# Product Overview

|                  | Paste | Grease-paste | Grease | Mineral-oil | Synthetic-oil | Li-Soap | Li-Complex Soap | Ca-Sulfonate Complex |
|------------------|-------|--------------|--------|-------------|---------------|---------|-----------------|----------------------|
| <b>PSV 710</b>   | ○     |              |        | ○           |               | ○       |                 |                      |
| <b>PSV 715</b>   | ○     |              |        |             | ○             |         | ○               |                      |
| <b>PSV 730</b>   | ○     |              |        | ○           |               |         |                 | ○                    |
| <b>FSV 760</b>   |       | ○            |        | ○           |               | ○       |                 |                      |
| <b>FSV 760 E</b> |       | ○            |        | ○           |               | ○       |                 |                      |
| <b>FSV 765</b>   |       | ○            |        |             | ○             |         | ○               |                      |
| <b>FSV 780</b>   |       | ○            |        | ○           |               |         |                 | ○                    |
| <b>FSV 786</b>   |       | ○            |        |             | ○             |         |                 | ○                    |
| <b>GSV 790</b>   |       |              | ○      | ○           |               | ○       |                 |                      |
| <b>GSV 791</b>   |       |              | ○      |             | ○             |         | ○               |                      |

The information given and recommendations made herein reflects our current knowledge, of which this brochure can only give a brief overview. Given values are not suitable for the creation specifications. We reserve the right to make changes based on technical developments or legislative changes. Due to the wide range of possible applications and operating conditions, the product information is necessarily only of an indicative nature. Therefore, no binding liability or warranty claims can be based on these contents. In all cases, we strongly performing tests prior to use in order to determine whether the product meets all requirements and expectations.

## smartgleit GmbH

Blütenstrasse 62 - 64

86558 Hohenwart / OT Koppenbach

Germany

Phone: +49 (0) 8443 91757 0

www.smartGLEIT.com