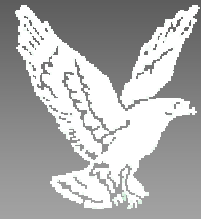
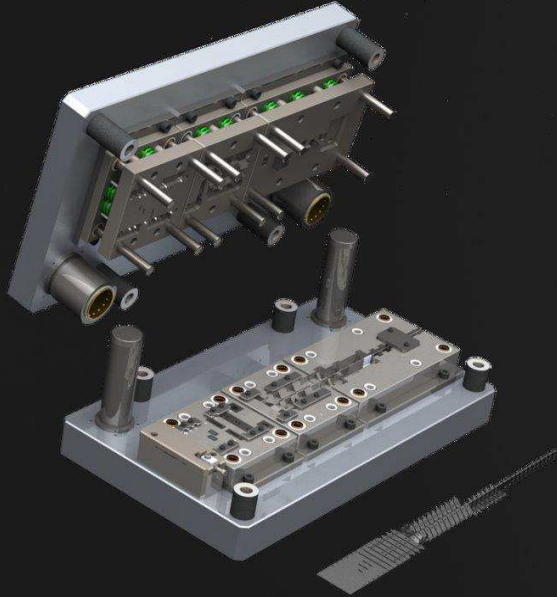
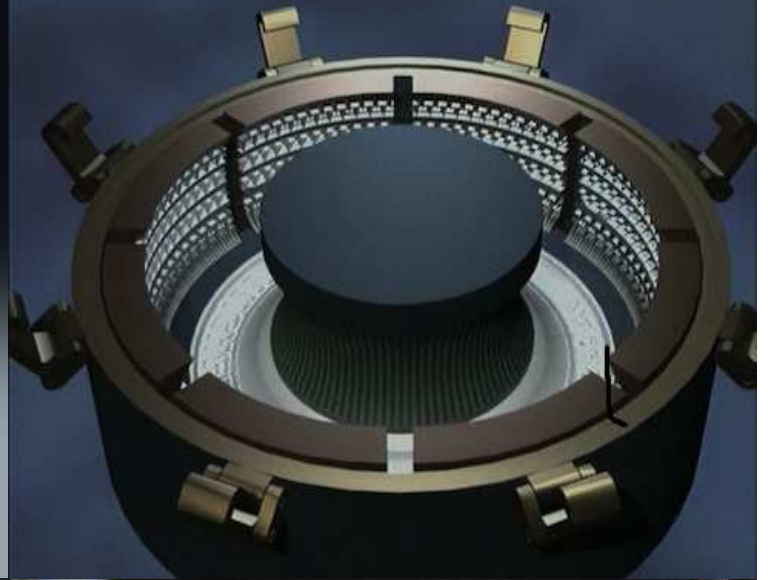


# Brugarolas



Industrial Lubricants



## ASSEMBLY PASTES



## COPPER PASTES

Product	NLGI	Thick.	Base oil	SL	Color	Temp. (°C) [dry film]	Application
<b>G. BESLUX ANTI-SEIZE PASTE-1</b>	1	Inorg.	Mineral	Cu, C(g)	Dark coppery	-15 to 140 [up to 1100]	Anti-seize protection for screws, screw threads, bolts or pins exposed to high temperatures
<b>G. BESLUX ANTI-SEIZE PASTE-2</b>	2	Inorg.	Mineral	Cu, C(g)	Dark coppery	-15 to 140 [up to 1100]	Anti-seize protection for screws, screw threads, bolts or pins exposed to high temperatures
<b>G.A. 238</b>	2	Inorg.	Semi - synthetic	Cu	Coppery	-10 to 1100	Anti-seize protection for screws, screw threads, bolts or pins exposed to high temperatures



## ALUMINIUM PASTES

Product	NLGI	Thick.	Base oil	SL	Color	Temp. (°C) [dry film]	Application
<b>G. BESLUX PASTE AL/S</b>	1/2	Inorg.	Synthetic	Al	Silver	-50 to 150 [up to 500]	High temperature screw, bolt, and screwed joint protection with excellent electric conductor properties
<b>G. BESLUX GRAFOL AL PASTE</b>	2/3	Inorg.	Mineral	Al, C(g)	Metal gray	-15 to 1180	Screw, bolt, and screwed joint protection with excellent electric conductor properties
<b>G. BESLUX GRAFOL AL FLUID</b> [BIODEGRADABLE]	000	Inorg.	Synthetic	Al, C(g)	Metal gray	-30 to 100 [up to 450]	Flank wheel and critical profile mechanism contact lubrication
<b>G. BESLUX ANTINOISE RAIL</b> [BIODEGRADABLE]	0	Inorg.	Synthetic	Al, Cu	Metal gray	-30 to 100 [up to 400]	Flank wheel antinoise lubrication



## PASTES WITH MOLYBDENUM BISULFATE

Product	NLGI	Thick.	Base oil	SL	Color	Temp. (°C) [dry film]	Application
<b>G.A. BESMOLY U-5000</b>	1/2	Lithium	Mineral	MoS <sub>2</sub>	Grey-black	-20 to 450	Long-life lubrication for mechanisms while assembling them at high pressures
<b>G.A. BESMOLY U-6000</b>	1	Lithium	Mineral	MoS <sub>2</sub>	Grey-black	-20 to 450	Long-life lubrication for mechanisms while assembling at high pressures
<b>G. BESLUX ANTI SCUFF PASTE</b>	3/4	Petroleum jelly	Mineral	MoS <sub>2</sub>	Black	-10 to 400	Surface and hot application mold lubrication (vulcanized molds)




## GRAPHITE PASTES

Product	NLGI	Thick.	Base oil	SL	Color	Temp. (°C) [dry film]	Application
<b>G. BESLUX GRAFOL HT</b>	Fluid	Inorg.	Semi-synthetic	C(g)	Gray	-10 to 200 [up to 450]	Part lubrication and assembling that are exposed to high temperatures and loads
<b>G. BESLUX GRAFOL HT PASTE</b>	1/2	Inorg.	Semi-sintético	C(g)	Gray	-10 to 200 [up to 450]	Part lubrication and assembling that are exposed to high temperatures and loads
<b>G. BESLUX CONEX DRILL 135 PLUS</b>	1/2	Lithium	Mineral	C(g)	Metal gray	-25 to 140 [up to 1100]	For assembling and disassembling threaded connections exposed to harsh working condition



## OTHER ASSEMBLY / LUBRICATING PASTES

Product	NLGI	Thick.	Base oil	SL	Color	Temp. (°C) [dry film]	Application
<b>G. BESLUX KOM- PLEX PASTE L-2/S</b>	2	Polyurea	Synthetic	ZnO	Yellow	-40 to 200 [up to 400]	Excellent tribocorrosion protection striated kind and ball joint kind mechanisms
<b>G. BESLUX TRIBOPASTE L-2/3-S</b>	2/3	Lithium	Synthetic	ZnO, CaCO <sub>3</sub>	White	-40 to 150 [up to 400]	Long-life lubrication and excellent tribocorrosion mechanism protection (striated type joints, mechanisms, axis, bolts)
<b>G. BESLUX WHITE LUBRICANT PASTE</b>	3	Petroleum jelly	Mineral	TiO <sub>2</sub> , CaCO <sub>3</sub>	White	-10 to 80 [up to 300]	Tribocorrosion mechanism lubrication and protection that require a stainless white paste
<b>G. BESLUX TOP PASTE</b>	1/2	Inorg.	Synthetic	TiO <sub>2</sub> , BN	White	-50 to 1150	All kind of vehicle pipe assembling and disassembling
<b>G. BESLUX ATOX ASP-2 [FOOD GRADE]</b> 	2	Aluminium complex	Medicinal white	TiO <sub>2</sub> , LB, Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	White	-20 to 150	Mechanism lubrication that require a food grade paste
<b>G.A. 5A3</b>	1	Lithium	Mineral	C(g), PTFE	Black	-10 to 110 [up to 450]	Threaded connection protection of perforation tubes of Oil industry; fulfills API BULL 5A3

**Solid lubricants (SL)**

- Al: aluminium
- CaCO<sub>3</sub>: calcium carbonate
- WL: white lubricants
- TiO<sub>2</sub>: titanium dioxide
- BN: boron nitride
- Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>: tricalcium phosphate
- MoB<sub>2</sub>: molydebnium bisulfate
- ZnO: zinc oxide
- C(g): graphite
- Cu: copper
- PTFE

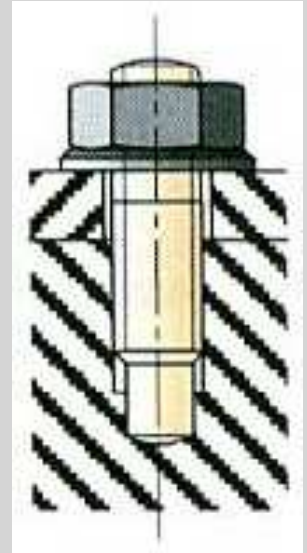


**PROBLEM AREA**

The lubrication of 2 surfaces that are in tight contact with relative speed of zero or close to zero, will require a very stable and durable in time film.

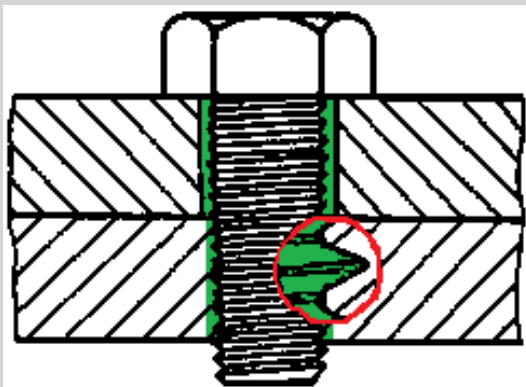
The introduced lubricant film will have to resist the working conditions it will be exposed to: high temperature, vibrations, loads, electrical current, water presence, steam or chemical agents.

The non-existence of this lubricant film will lead to a blocked and stucked metal surface area, making very difficult or nearly impossible to disassemble this structure. This can cause total or partial damage.



**SOLUTION**

**Brugarolas** researches for this special use, a group of lubricant pastes that thanks to the use of their thickener and special additives, high lubricant oil properties with very low level of rust formation, and combining with a variety of solid lubricants, join as a top-end design stable lubricant film able to resist the most harsh working conditions.



**Advantages of the lubricating film**

- High anticorrosive properties
- High lubricant properties
- Heavy load resistant
- Anti-seize properties
- Anti-rust properties
- Sealing properties

