

Skin-friendly headrest guide lubrication, no extra costs, no stains, suitable for skin contact

Sector: Manufacturer of automotive components

Application: Lubrication of headrest rails

Solution: [RENOLIT G 2000](#)

Challenge

A TIER 1 company, the global leader in seat manufacturing, used an expensive, commercially available silicone-based grease to lubricate the head restraint slides of a new commercial vehicle platform, produced in Spain under different brand names, for a multinational OEM group.

The engineering staff perceived that the high cost of this grease was excessive for the application and they were not confident that it was the most effective solution for the application. There were problems with staining during the application process due to the sticky and impregnating nature of the silicone when it came into contact with other parts around the application point, particularly those made of fabric. This caused a large number of quality rejections.

Other requirements for the lubricant:

- Lubrication of the vehicle for life and minimal potential noise, vibration and hardness (NVH) are required.
- Suitable for skin contact, as it is used inside the passenger cabin in a direct contact area,
- Compatible with different polymers used in interior applications such as PP (polypropylene) or ABS (acrylonitrile butadiene styrene), as well as with the chrome coating of the sliders.
- PFAS-free

Advantages

Avoids over-engineering, adjusts cost to needs, direct savings of €25M/year

Suitable NVH properties, improves customer's product quality

Reduced rejects: no staining. Savings of more than €15M per year

Solution

[RENOLIT G 2000](#), a more efficient grease based on inorganic thickeners that meets technical lubrication requirements at a lower cost.

Main features:

- It especially improves the *Stick-Slip* effect which is a critical requirement for the application.
- It is completely transparent and, unlike silicone, can be cleaned or removed in the event of accidental contact with surrounding parts.
- Compatible with all substrates and suitable for car interiors, it is formulated to be completely skin friendly and, most importantly, odourless.
- Dosing and handling is easier and, due to its rheological properties, requires less pressure from the dispensing circuit than silicone, reducing the number of stained parts.

Main advantages:

- Reduction of the coefficient of friction
- Lifetime lubrication in plastic-plastic contact
- Moisture and temperature resistance
- PFAS-free

Results

The test results show:

- Better lubrication and NVH performance than the lubricant previously in use.
- Compliance with life cycle assessments
- A direct saving of € 25,000 on this floor alone, thanks to our commercial offer and the base price.
- 80% fewer rejected parts
- Almost all the stained parts can be recovered by simple and inexpensive cleaning. This saves a further €6,000 per year.

The product is currently being used at the Vigo plant, the first to implement it, and in the UK. There will also be global standardisation for this application, which has been confirmed by the customer's global purchasing department.

**Need more information?
Contact our expert team!**

 **+34 93 547 58 59**

 **info.es@fuchs.com**