



ELKALUB makes Festo axes “fit for food”

Festo, a company renowned worldwide, offers pneumatic as well as electromechanical drives, among other things. Customers can choose between different linear drives and sleds to find the suitable product for their application. Until now, however, Festo had been unable to offer appropriate products for the food processing industry, as no suitable materials or lubricants were available. Due to an increasing demand for FDA-compliant linear axes, the colleagues at Festo decided to add those to their portfolio. They took the successful linear axis ELGA-TB-RF, applied some structural changes and used H1-lubricants by ELKALUB to make it “fit for food”.

Vöhringen / Esslingen: Specific requirements apply to technical components used in the food processing industry. The component must possess a design featuring as few grooves or dead spaces as possible to allow easy cleaning. In addition, it should not feature any exposed components or guides, i.e. it should possess a protected design. The metallic materials and plastics used must be FDA-approved and the lubricants must be H1-approved by NSF for occasional unavoidable contact with food. Of course, the service life of the component should be the same as that of an axis used in conventional industries.

Although the linear axis ELGA-TB-RF by Festo did not match these criteria, it provided the best starting point for the development of a “food axis” thanks to its internal, covered guide. The changes applied by Festo included replacing all plastic parts with FDA-listed materials and the use of a new profile barrel to avoid any dirt-collecting edges.



It was equally important, however, to replace all lubricants with H1-certified lubricants by ELKALUB. The extensive product range of the specialist company based in Vöhringen, Germany, offered three H1-lubricants perfectly suited for the respective lubrication points. The recommended products were the greases ELKALUB GLS 382/N2 for the ball bearings, ELKALUB VP 874 for the bearings of the rollers, and the oil ELKALUB VP 916 for the lubrication of the roller tracks. The latter oil is also used to saturate the lubrication felts and is provided to Festo customers for relubrication in a special relubrication unit.

In the context of service life testing at Festo, the newly created food axis was subjected to various types of stress. Compliance with the required operational performances was achieved during testing. For this reason, Festo is going to switch from conventional industrial lubricants to H1-lubricants for the lubrication of all ELGA-TB-RF axes.

With ELGA-TB-RF, Festo has consequently created a new linear axis for the application in food processing. By switching all linear axes to H1-lubricants by ELKALUB, Festo can significantly reduce the variation of parts in the production process, achieving logistics and process-related benefits while maintaining the performance level of its final products.

Find out more about the products:

[ELKALUB GLS 382/N2 in the online product finder](#)

[ELKALUB VP 874 in the online product finder](#)