

Entirely new fields of application for robots – ELKALUB develops H1-lubricants for robot gears

LFC 92100 and LFC 921000 are two new high-performance oils for the lubrication of robot gears. Remarkably, these oils are even H1-certified!

So far, there were mostly only conventional lubricants available for robots. For this reason, their use in the pharmaceutical and food processing industries was not allowed. With these two newly developed oils, however, mechanical and plant engineers have entirely new application opportunities at their disposal.

ELKALUB presents two new lubricating oils with H1-certification. With this, the company specialized in high-performance lubricants is among the first manufacturers offering lubricants which may be used for robots in the pharmaceutical and food processing industries. The new oils LFC 92100 and LFC 921000 are used to lubricate shaft- and worm gears. For over one year already, both oils have been used in robots of an internationally renowned manufacturer without any problems and therefore have shown their practical suitability in convincing manner.

A lot of manual labour is still required in the pharmaceutical and food processing industries. Consequently, the automation potential, particularly concerning flexible automation by robots, is high. HACCP-certification of manufacturing processes is mandatory in these industries. This almost always requires the use of H1-lubricants. The new oils LFC 92100 and LFC 921000 therefore allow automation of a much larger part of processes. ELKALUB estimates that the new application opportunities in the pharmaceutical and food processing industries will lead to an increase in demand for H1-certified oils. For this reason, the company also plans to add more viscosity classes to its product portfolio.



The requirements for lubricants in robot gears are strict – small tolerances combine with high speeds, accelerations and forces. At the same time, robots need to work with high precision. Only conventional lubricants could meet these requirements – until now. By combining high-quality synthetic oils with well-balanced additives, ELKALUB is now able to offer oils matching the capabilities of conventional lubricants.

Find out more about the products:

ELKALUB LFC 92100 in the online product finder ELKALUB LFC 921000 in the online product finder