

High-tech lubricants mobilize ideas

Vision statement

For many of a vehicle's components, the lubricant plays a vital role as a design element. Because wherever there is relative motion between machine components in contact, specialty lubricants reduce wear and tear, alleviate friction, and enhance the functioning of the component concerned. Klüber Lubrication accordingly prioritizes close cooperation between the component and lubricant producers whenever new development work is involved.

With tribological solutions individually tailored to its customers' needs, Klüber Lubrication helps them to optimize their products, to create or enhance an innovative lead over their competitors, to upgrade their productivity levels and not least to cut their costs.

Concept capability

You will find Klüber's lubricants in almost every part of an automobile, doing an excellent job the whole world over, a claim corroborated by a multiplicity of approvals from almost all automakers and their component suppliers.

If the existing range of approximately 2,500 Klüber products happens not to include the precise lubricant that's currently needed, then Klüber Lubrication joins forces with the customer to develop a new solution precisely tailored to the specific requirements concerned. On more than 100 test stations, Klüber's lubricants are tested to their limits—and beyond. The test results serve as the basic data for selecting the optimum lubricant, a choice that the customer can verify by observing individual component trials in Klüber's own test laboratory.

Current concepts/technologies

Being faster than others when it comes to research, development and testing—that means answering tomorrow's questions today. Klüber Lubrication is accordingly committed to early cooperation with vehicle and component manufacturers, and is continually expanding its comprehensive range of products. Specialty lubricants from Klüber have proved their capabilities in series production for brakes, steering systems, axles, c.v. joints, motors, gear shifts, clutches, electrics, passenger compartments, locks, window lifters, sliding roofs, seats, safety belts, profile seals, etc.

Klüber's specialty lubricants for vehicle components are designed for lifetime lubrication at high and low temperatures, to be compatible with plastics and elastomers,

odor-neutral and fogging-tested, resistant to media like petrol, brake fluid, blow-by gases, and much, much more.

In many applications, conventional types of lubricant (greases, oils or pastes) are able to meet the requirements involved to optimum effect. In cars, however, dry lubricants such as bonded coatings are an increasingly preferred alternative to "wet" lubricants. In car passenger compartments, particularly, there is a growing trend towards replacing greases and oils by different lubricating solutions, so as to prevent any possible contact between the vehicle's occupants and these lubricants, as well as countering odor problems. Dry lubricants do not emit any odors, and are thus neutral in respect to the interior climate. Yet another plus is that their properties change hardly at all over time.

Klüber's solutions for topical lubricant issues include

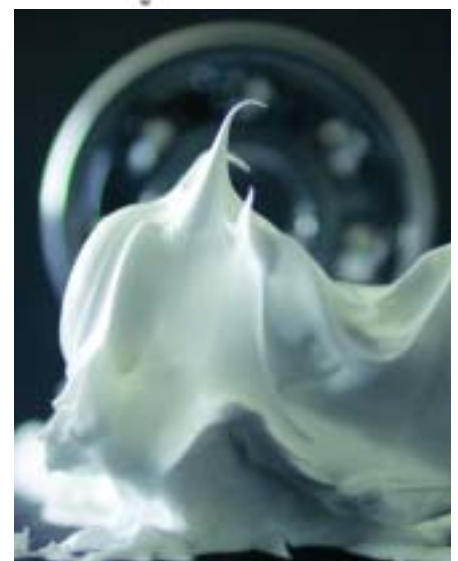
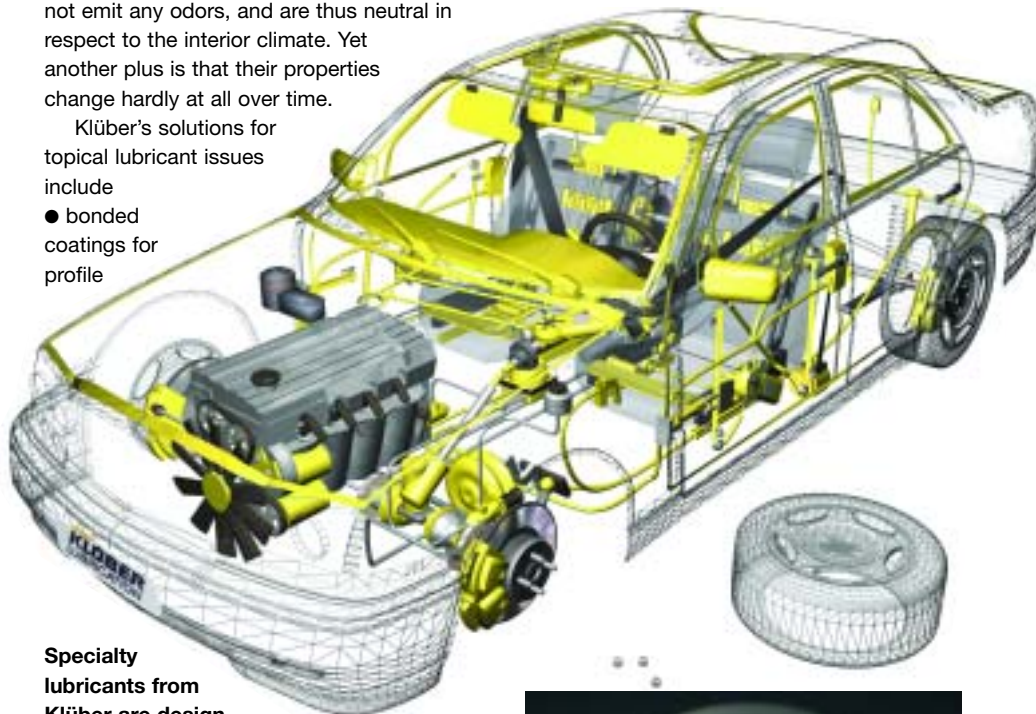
- bonded coatings for profile

Specialty lubricants from Klüber are design elements that meet the ever-tougher performance requirements being posed for the entire gamut of automotive components ...

seals, ensuring a soft-feel effect and contributing to improved function,

- specialty lubricants for new steering systems like EPS, helping to enhance the efficiency of the system as a whole,
- specialty lubricating greases for small-size gear units, ensuring that window lifters and windscreen wiper motors function dependably even at temperatures well below zero or in highly corrosive environments,
- specialty lubricating greases, contributing towards optimum sound absorption and mechanical damping in the passenger compartment.

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... such as bearings, gears, sealings, switches, etc.