# **ELEVATORS**

perma lubrication systems in operation







# **Challenges**

Cable guide pulleys and guide rails for passenger cabs and counterweights must be permanently lubricated to prevent friction and wear. Automatic lubrication with perma lubrication systems guarantees adequate lubrication and reduces maintenance and cleaning work in passenger cabs and shafts while minimising vibrations and noise and reducing unscheduled maintenance. Anyone looking for safe, effective and long-term economical lubrication of elevators takes advantage of perma lubrication systems.

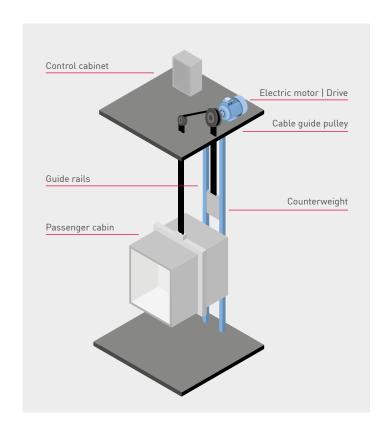
- → Contamination of guide rails
- → Costly cleaning
- $\rightarrow$  Oil spills on passenger cabs
- $\rightarrow$  "Stick-slip effect"
- → Strong vibrations and noise make passengers feel uneasy
- → Costly repairs
- → Risk of injury on sharp edges
- ightarrow High occupational safety risk during maintenance work in the shaft





# **Lubrication points**

#### **ELEVATORS**



# $\, ightarrow\,$ Cable guide pulley

Regular lubrication of the cable guide pulley of an elevator is important to reduce friction and wear, extend the service life, and ensure smooth operation.

#### ightarrow Guide rails of the passenger cabin

Constant lubrication of the guide rails reduces friction, resulting in smooth and quiet operation of the elevator. Properly lubricated guide rails also help minimise wear and extend equipment service life.

#### $\, ightarrow \,$ Guide rails of the counterweight

The guide rails of the counterweight serve to guide and securely position the counterweight along the shaft. Recurring lubrication of counterweight guide rails reduces friction, resulting in smooth and efficient lubrication of the elevator.



Lubrication of guide rails on counterweights



Lubrication of guide rails on passenger cabs



Lubrication of cable guide pulleys

#### **Solutions**

The selection of the ideal lubrication solution requires the consideration of various factors, including the specific type of application, operating speed and load of the machine, and the ambient temperature. Below is one proposed solution:

#### Direct mounting | e.g. with perma FLEX

- → Easy, quick mounting
- → For lubrication points with little vibration | shocks
- ightarrow For easy-to-reach and safe lubrication points



#### perma SERVICES

You have questions about our products or need assistance with the survey, system installation and maintenance of your equipment? The perma Services team has answers and is happy to assist!



Visit the perma website for an overview of our offerings.



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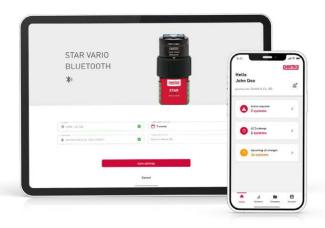
- → Current overview of all lubrication points
- → Coordination of upcoming maintenance work
- ightarrow Reminders for pending exchanges
- > Central management of lubrication points in the web application
- → Recording of all on site maintenance and exchange tasks via the app

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