## POWER GENERATION

perma lubrication systems in operation







The Expert in Lubrication Solutions

## Challenges

Flexible, needs-oriented energy supply poses new challenges to power generation operators, especially for maintenance departments. Frequent load changes and longer downtimes require reliable lubrication of equipment and machine elements.

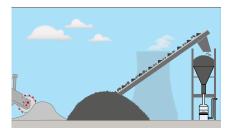
- $\rightarrow$ Frequent load changes
- Longer shutdowns  $\rightarrow$
- $\rightarrow$ High maintenance costs
- → Insufficient staff
- ightarrow Spread out equipment with many different lubrication points
- ightarrow Increased risk of workplace accidents at hard-to-reach lubrication points and due to high temperatures





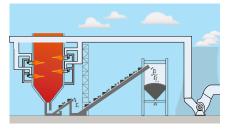
## Lubrication points

1 MATERIAL TRANSPORT



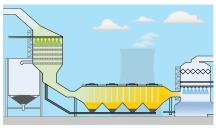
- Transporting  $\rightarrow$ Portal scraper & conveyors
- $\rightarrow$ Loading Ship unloader & crane





- Crushing  $\rightarrow$ Impact hammer & coal mill
- $\rightarrow$ Dust removal Blowers / fans & electric motors
- Transporting  $\rightarrow$ Conveyors





**Dust extracting**  $\rightarrow$ Flue gas scrubbing, blowers / fans & electric motors



Lubrication of a gravity take-up



Lubrication of electric motor



Lubrication of electric motor



Lubrication of a gravity take-up



Lubrication of electric motor



Lubrication of a blower bearing

## Solutions

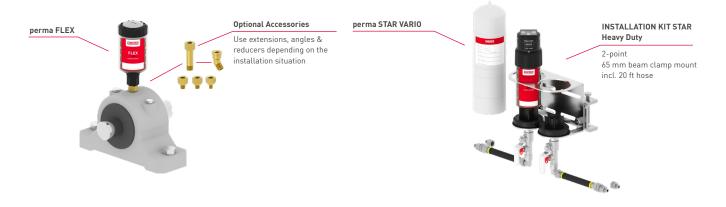
The selection of the ideal lubrication solution requires the consideration of various factors, including the specific type of application, operating speed and load of the machine, and the ambient temperature. Below are some proposed solutions:

Direct mounting | e.g. with perma FLEX

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

#### Remote mounting | e.g. with perma STAR VARIO

- → For lubrication points with strong vibration | shocks (isolation of lubrication system)
- ightarrow When workers' safety is at risk: Mounting in safe areas
- $\rightarrow$  For hard-to-reach 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.



# EASY. SMART. CONNECTED.

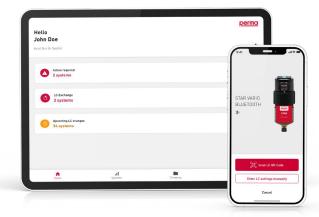
#### Create your own network

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

#### Get perma CONNECT now!

Download the app to your smartphone or open the web application at https://perma-connect.com





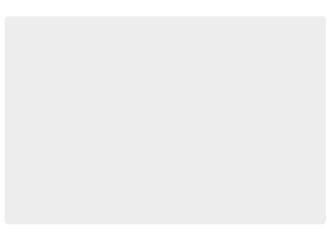


Find a variety of videos on the perma YouTube channel to get a deeper understanding of the perma CONNECT app.



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