

WASTEWATER TREATMENT

perma lubrication systems in operation



Challenges

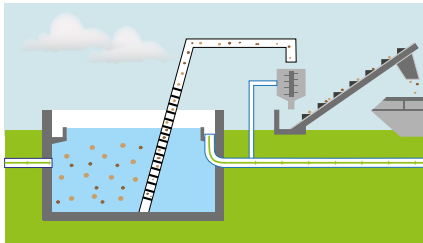
Trouble-free plant operation during the entire cleaning process is imperative for treatment of waste water. Important machine elements such as chains, spindles, roller and sliding bearings are directly exposed to dirt, water, phosphates and other chemicals. Continuous relubrication is necessary to prevent premature wear.

- Dirt, chemicals & water
- High energy costs
- Hard-to-reach and dangerous lubrication points
- High maintenance costs, lack of staff, spread out equipment & lubrication points



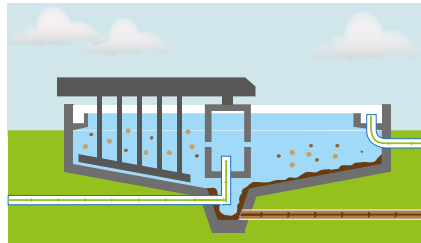
Lubrication points

1 | PHYSICAL TREATMENT



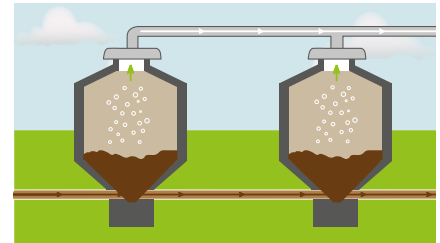
- **Screening**
Chain guide roller
- **Grit & grease removal**
Scraper
- **Sedimentation tank**
Impeller wheel

2 | BIOLOGICAL TREATMENT



- **Aerated tank**
Surface aerator
- **Clarification tank**
Wheel bearing & pivot bearing

3 | SLUDGE TREATMENT



- **Sludge thickening**
Sludge belt conveyor
- **Sludge dewatering**
Screw press



Lubrication of chain guide rollers



Bearing lubrication at the fan of the aerated tank



Bearing lubrication at excess sludge densifier



Lubrication of the slewing bearing



Lubrication of screen gears



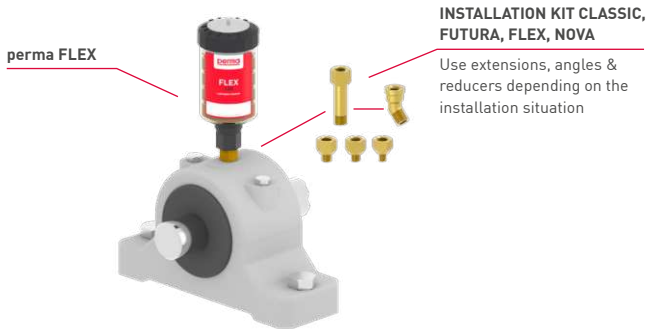
Wheel bearing lubrication at circular scraper

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

- Easy, quick mounting
- For lubrication points with little vibration | shocks
- 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)
- When workers' safety is at risk: Mounting in safe areas
- 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.



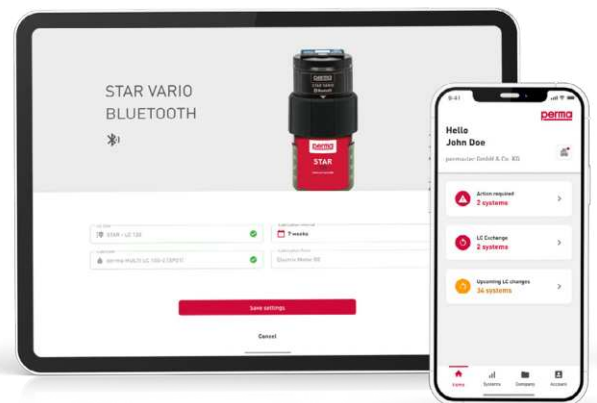
EASY. SMART. CONNECTED.

Create your own network

- Current overview of all lubrication points
- Coordination of upcoming maintenance work
- 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

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.





perma-tec GmbH & Co. KG
Hammelburger Str. 21
97717 Euerdorf
GERMANY

Tel.: +49 9704 609 - 0
info@perma-tec.com
www.perma-tec.com

