

# RECYCLING

perma lubrication systems in operation



## Challenges

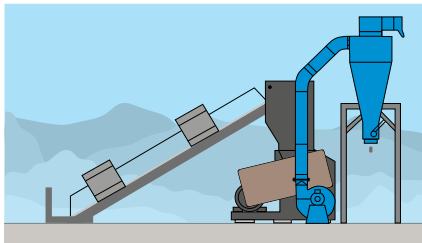
Recycling companies are constantly under pressure. Large price fluctuations, significantly changing market demands and short contract periods with buyers of recycling materials are some of the enormous challenges faced by operators. In order to run their business at a profit, operators require efficient technologies. This makes maintenance and lubrication particularly important for these industries.

- Dust, dirt & vibrations
- Changing temperatures
- High energy costs
- Hard-to-reach and dangerous lubrication points
- Lack of staff and spread out, complex shredder-, separator- & conveyor systems



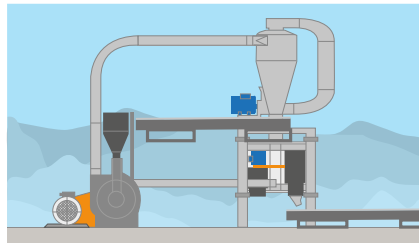
## Lubrication points

### 1 | PREPARATION



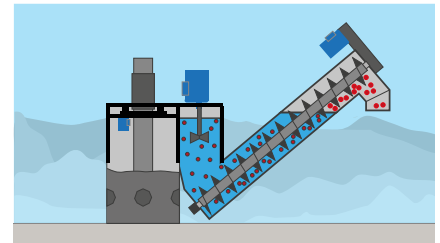
- **Crushing**  
Hammer & impact mills
- **Grinding**  
Granulators

### 2 | PROCESSING

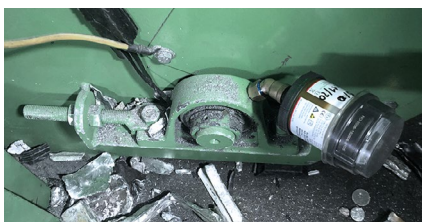


- **Screening**  
Vibrating screen
- **Separating**  
Air separator
- **Dust removal**  
Electric motors

### 3 | FINAL PROCESSING



- **Cleaning**  
Scrubbers
- **Drying**  
Blowers & fans
- **Transporting**  
Conveyors



Bearing lubrication on a conveyor belt



Bearing lubrication on a conveyor belt



Lubrication of flange bearing on a conveyor



Lubrication of flange bearing on a conveyor



Lubrication of an electric motor on the dryer



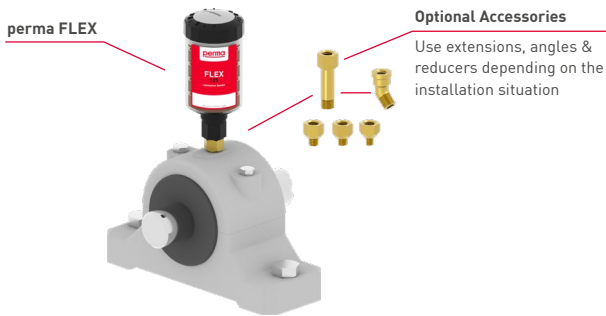
Lubrication of a blower during cleaning

## 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.



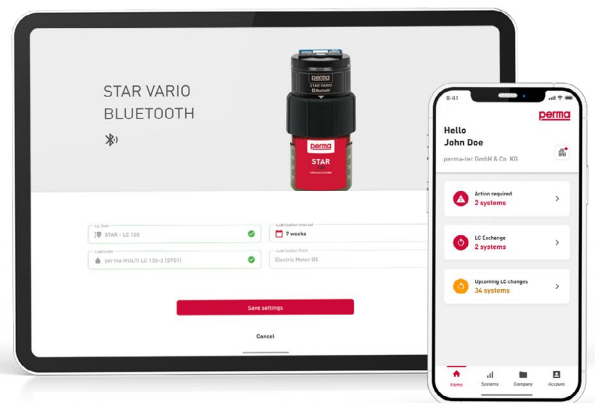
# EASY. SMART. CONNECTED.

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.





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