

perma lubrication systems for

## Recycling

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The Expert in Lubrication Solutions

**perma**

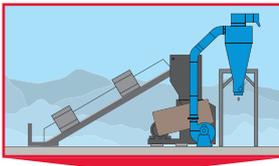


perma lubrication systems for  
**Recycling**

Recycling companies are faced with many challenges today: Huge price fluctuations, changing market demands and short contract periods with buyers of recycling products. In order to still operate profitably, it is important to rule out equipment failures which can cause unscheduled downtimes. This makes equipment maintenance and lubrication even more important.

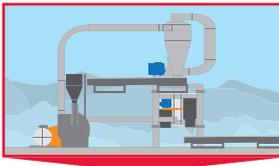
## Lubrication points

❶ Roller bearings    ❷ Sliding bearings / Sliding guides



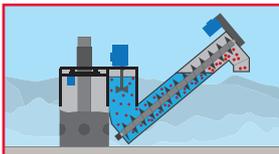
**Preparation**

→ <b>Milling</b>	Hammer / impact mills	✓	✓
→ <b>Grinding</b>	Granulators	✓	



**Processing**

→ <b>Screening</b>	Vibrating screen	✓	
→ <b>Screening</b>	Air separator	✓	
→ <b>Dust extracting</b>	Electric motors	✓	



**Final processing**

→ <b>Cleaning</b>	Washers	✓	
→ <b>Drying</b>	Fans	✓	
→ <b>Transport</b>	Conveyors	✓	

## Challenges



→ Harsh ambient conditions  
(dust, dirt and vibrations)



→ Hard-to-reach and dangerous  
lubrication points



→ Lack of staff and spread out, complex  
shredder-, separator and- conveyor  
systems

## Advantages of automatic lubrication

- ✔ **Permanent lubrication** over several months while machines are running.
- ✔ **Individual lubrication** which meets the specific operational needs of each equipment (lubricant, lubricant amount, lubrication interval).
- ✔ **Simple installation** and exchange of lubrication systems outside of dangerous areas **increases workplace safety**.

### perma SELECT APP

FREE



## Solutions

### Direct mounting on lubrication point: e.g. perma CLASSIC / FUTURA / FLEX / NOVA

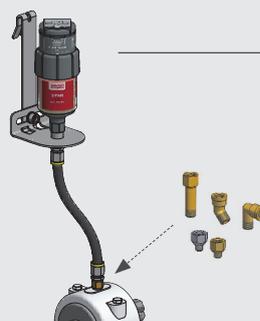
- Easy, quick mounting
- For lube-points with little vibration / shocks
- For easy-to-access and safe lubrication points



**Direct Mounting Solution**  
Use extensions, angles & reducers depending on the installation situation

### Remote mounting to lubrication point: e.g. perma STAR VARIO

- For lube-points with strong vibration / shocks (isolation of lubrication system)
- When workers' safety is at risk: Mounting in safe areas
- For hard-to-access lubrication points



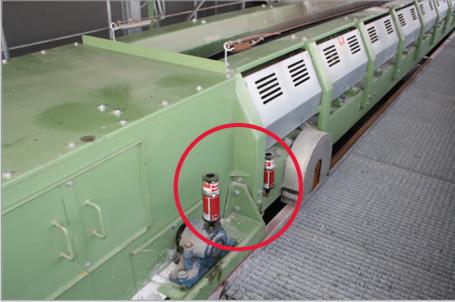
**perma STAR VARIO  
with LC 120**

**Remote Mounting Solution**  
Use extensions, angles & reducers depending on the installation situation

### Would you like more information on perma products?

- Detailed product information in our **perma catalog**
- Visit our website **www.permausa.com**

## Applications



Lubrication of pillow block bearing on a conveyor



Lubrication of drive shaft on a pump



Lubrication of pillow block bearing on a conveyor



Lubrication of flange bearing on a conveyor



Lubrication of pillow block bearing on a conveyor



Lubrication of flange bearing on a conveyor



Lubrication of pump motor



Lubrication of flange bearing on a conveyor



Lubrication of flange bearing

## Individual solutions

### perma Product portfolio



Solutions for all types of applications

### perma Lubricants



Large selection of high quality lubricants to meet the requirements of your equipment

### perma Accessories



Extensive range of accessories and connecting parts for your equipment

### perma SERVICE



Project planning, installation and maintenance

### perma SOFTWARE



Calculation of lubricant amount: • perma SELECT  
Maintenance Lubrication Program: • perma MLP