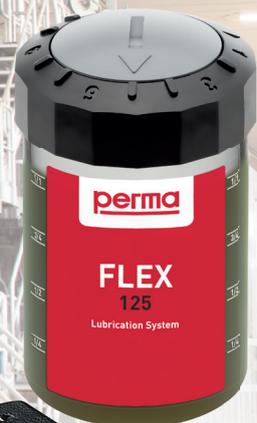


perma Lubrication Systems for

## Pulp and Paper Industries

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The Expert in Lubrication Solutions

**perma**

perma Lubrication Systems for

# Pulp and Paper Industries

The pulp & paper industry is facing many new challenges: Increasing global competition, decreasing demand for certain types of paper due to digital media, rising energy costs, stricter health, safety and environmental policies. To meet these challenges, pulp & paper manufacturers must increase plant productivity and profitability by cutting operating costs. perma lubrication systems can help with some of these challenges.

## Lubrication points

1 Roller bearings    2 Shaft seals    3 Chains



			1	2	3
	<b>Pulp production</b>				
	→ <b>Chipping, storing</b>	Belt conveyors, tumblers	✓		✓
	→ <b>Cooking, washing</b>	Pumps, wash presses	✓	✓	
	→ <b>Bleaching, drying</b>	Electric motors, dryers	✓		
	<b>Pulp treatment</b>				
	→ <b>Defibration</b>	Pulpers, electric motors	✓		
	→ <b>Grinding</b>	Refiners, electric motors	✓		
	→ <b>Transportation, Thickening</b>	Pumps, electric motors	✓		
	<b>Paper production</b>				
	→ <b>Water removal / screening</b>	Vacuum systems	✓		
	→ <b>Pressing, drying</b>	Pulpers, dryers	✓		
	→ <b>Spreading</b>	Dryers, roll conveying systems	✓		✓
	<b>Finishing / refining</b>				
	→ <b>Transportation</b>	Chain conveyors			✓
	→ <b>Cutting</b>	Length and cross cutters	✓		

## Challenges



- Dust, dirt, moisture
- High speeds



- High maintenance costs, spread-out equipment with different lube-points



- Hard-to-reach lubrication points
- Rotating machine parts
- High temperatures

## Advantages of automatic lubrication

- ✔ **Continuous relubrication** at short intervals **reduces wear and seals** lubrication points to **prevent contamination** from dust, dirt and moisture.
- ✔ **Individual and optimized lubrication** of pulp & paper process equipment (lubricant, lubricant amount, lubrication interval).
- ✔ **Simple installation and exchange of lubrication systems outside of dangerous areas** increases workplace safety.)
- ✔ The use of automatic lubrication systems **reduces personnel- and material costs** and increases equipment service life.

Reference

**sappi**  
Inspired by life

## Solutions

### Direct mounting on lubrication point: e.g. perma FLEX

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

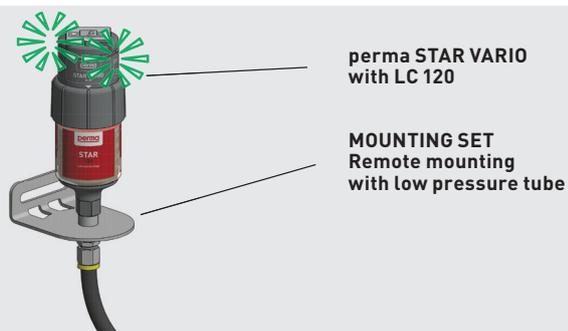


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### Remote mounting to lubrication point: e.g. perma STAR VARIO

- 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



Art. No. 101482



Do you also need individual information also about wastewater systems / sewage treatment plants?

→ Visit our website [www.perma-tec.com/industry-sectors/sewage-treatment-plants/](http://www.perma-tec.com/industry-sectors/sewage-treatment-plants/)

## Applications



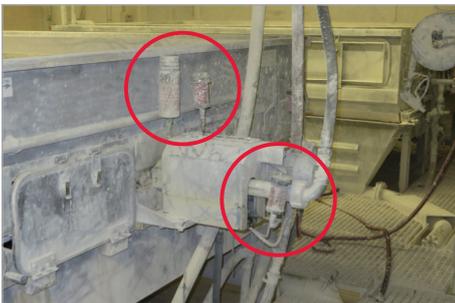
Bearing lubrication at tree sorting system



Bearing lubrication on a belt conveyor



Electric motor lubrication



Motor lubrication on a vibrating screen



Bearing lubrication on a pump



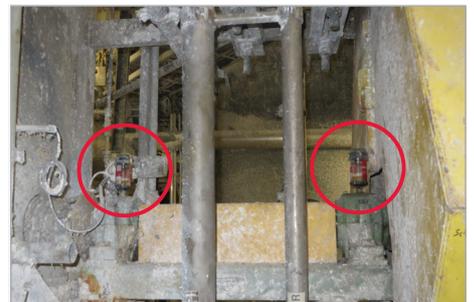
Lubrication of a pillow block bearing on a blower



Lubrication of bearing unit on a fan



Shaft lubrication on belt conveyor pulley



Lubrication of drive shaft on a mixer

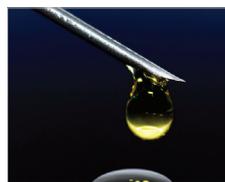
## Individual solutions

### 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