

perma Lubrication Systems for

Sewage Treatment Plants

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The Expert in Lubrication Solutions

perma

perma Lubrication Systems for Sewage Treatment Plants

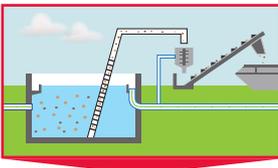
Sewage treatment plants are highly specialized and complex facilities. Safe and trouble-free operation is of utmost importance during the complete process. Important equipment parts like roller- and sliding bearings, chains and spindles are constantly exposed to dirt, water, phosphates and other chemicals. Continuous relubrication can prevent premature equipment wear and breakdowns.

Lubrication points

1 Roller bearings

2 Sliding bearings / Sliding guides

3 Chains



Physical treatment

→ **Screening**

Chain guide roller

✓

✓

→ **Grit / grease removal**

Scraper

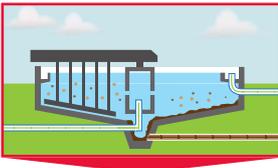
✓

→ **Sedimentation tank**

Impeller wheel

✓

✓



Biological treatment

→ **Aerated tank**

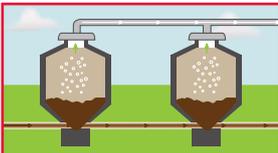
Surface aerator

✓

→ **Clarification tank**

Circular scraper

✓



Sludge treatment

→ **Sludge thickening**

Sludge belt conveyer

✓

→ **Sludge dewatering**

Screw press

✓

Challenges



- Dirt, chemicals, water
- High energy costs



- Hard-to-reach and dangerous lubrication points



- High maintenance costs, lack of staff, spread out equipment and lubrication points

Advantages of automatic lubrication

- ✔ perma lubrication systems **seal and protect** lubrication points **against contamination**.
- ✔ **Less maintenance runs** minimize the time that workers spend in dangerous areas and **increase workplace safety**.
- ✔ Different sizes and precise settings, based on manufacturer recommendations, **prevent lubricant starvation and save lubricant**.
- ✔ **Environmentally friendly, bio-degradable lubricants** in closed systems.

Reference



Solutions

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

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

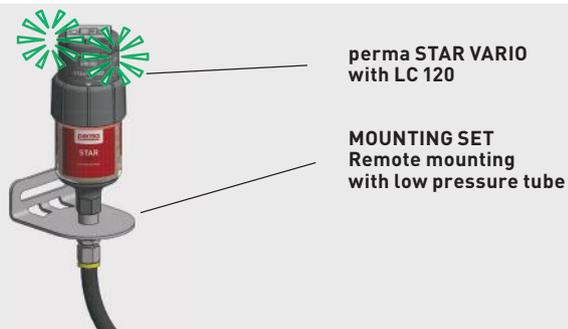


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Remote mounting to the lubrication point: e.g. perma STAR VARIO

- 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



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Would you like more information on perma products?

- Detailed product information in our **perma Catalogue**
- Visit our website **www.perma-tec.com**

Applications



Screening:
Lubrication of chain guide rollers



Grit and grease removal:
Lubrication of flanged housing units at the scraper



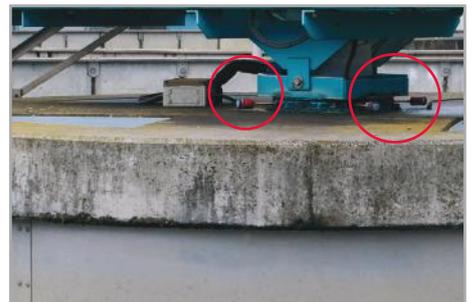
Primary sedimentation tank:
Lubrication of impeller wheel bearing



Aeration tank:
Lubrication of bearing at surface aerator



Clarifier tank:
Bearing lubrication at the wheel of the circular scraper



Clarifier tank:
Lubrication of pivot bearing at circular scraper



Sludge thickening process:
Bearing lubrication at excess sludge densifier



Sludge dewatering:
Lubrication of flanged bearing at sludge belt conveyor



Sludge thickening process:
Lubrication of bearing at screw press

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**