

perma Lubrication Systems for
Recycling Plants



The World of Automatic Lubrication

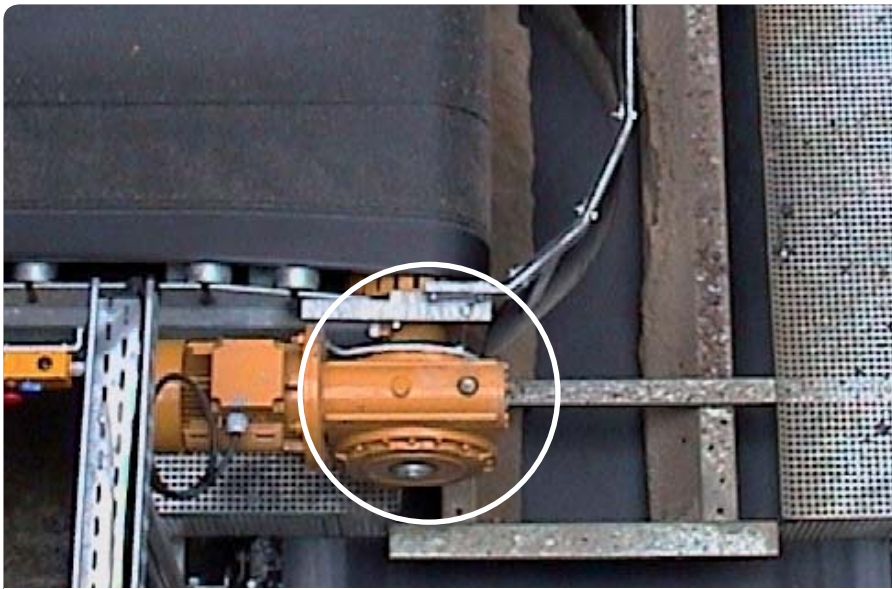


Trouble-free operation with perma lubrication systems

For the process of making new products, secondary raw material, or energy from waste material, recycling plant operators rely on trouble-free operation and maximum equipment availability.

Most equipment in recycling plants operate automatically to separate, sort and shred different kinds of waste. In addition to crushers, shredders and pneumatic separators, the most important equipment are extensive and complex conveyor systems. Unplanned conveyor downtime, caused by a damaged bearing or motor, affects all subsequent processes.

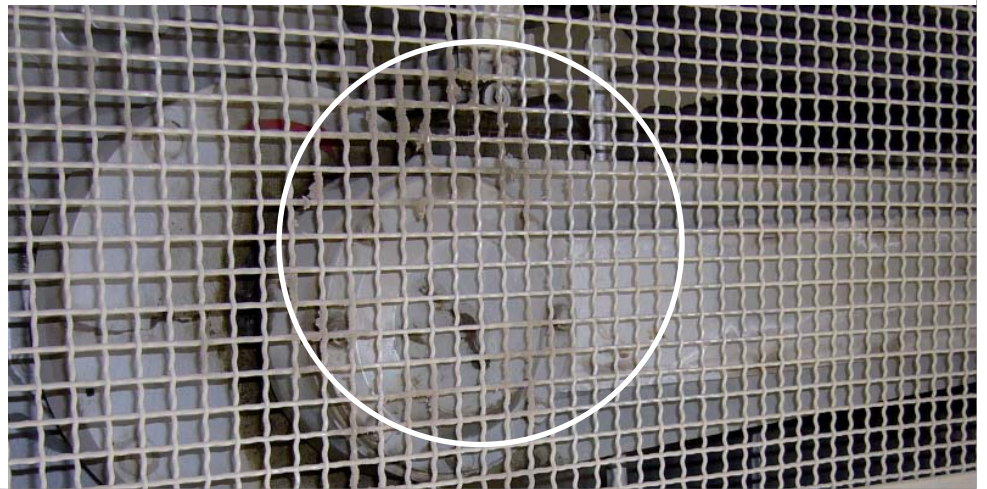
Prevent costly equipment downtime with automatic lubrication systems from perma-tec!



(top left)
Conveyor transfer station: Lubrication of these hard to reach bearings is only possible when the machines are shut down.

(bottom left)
Dirty lubrication points are easily overlooked by maintenance workers.

(bottom right)
Dangerous lubrication points are often protected by screens. To lubricate these points, machines must be shut down and screens must be removed. This is very time consuming and therefore these lubrication points are often neglected.



→ Challenges

Lubrication problems in recycling plants

Complex conveyor systems, often extending to different levels that can only be reached with scaffolds, ladders, or lifting platforms.

- **High risk of falling for maintenance personnel!**
- **Lubrication points are overlooked and neglected!**



Insufficient lubrication leads to equipment wear and failure resulting in reduced productivity and profitability.

- **Unexpected equipment downtime!**
- **Shorter equipment service life!**



Access to equipment for lubrication and cleaning is not always possible or desired.

- **Additional work and increased maintenance costs!**
- **Lubrication intervals cannot always be observed!**



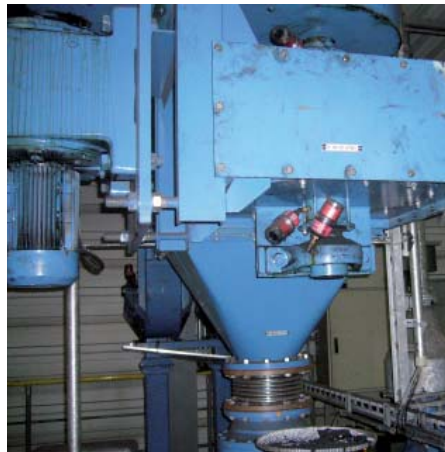
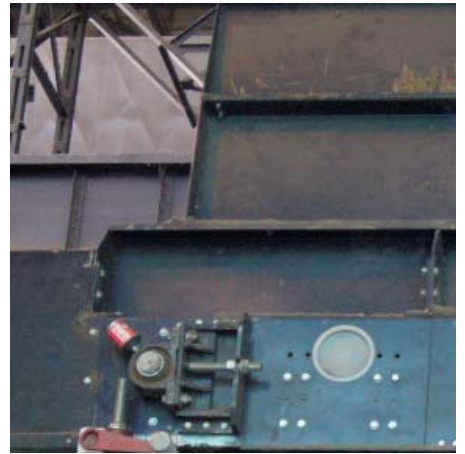
→ Solutions

perma lubrication systems for all types of applications

perma-tec offers the largest product selection of automatic single-point lubrication systems and the most extensive range of accessories and connection parts.

All types of industries rely on perma lubrication systems for safe, clean and efficient lubrication. perma-tec provides its service all over the world and offers solutions for all kinds of lubrication problems.

With over 50 years of experience and continuous research, perma-tec is a competent partner in the field of automatic lubrication.



→ Benefits

- Increases equipment availability and reduces machine failures
- Exchanges can be planned
- Extends lubrication maintenance intervals (1, 2, 3 ... up to 12 months)
- Actively contributes to environmental protection and workplace safety

Features	Advantages	Benefits
economical aspects		
Extended maintenance and lubrication intervals →	No more weekly or monthly lubrication runs	- Set lubrication periods (1, 2, 3 ... up to 12 months) and lubrication systems with different volumes will extend your maintenance and lubrication intervals
Reduces lubricant stock →	Order the most suitable system filled with the ideal lubricant shortly before the next exchange	- Reduces your lubricant storage cost
Simple and quick exchange →	perma lubrication systems can be exchanged by hand - no extra tools required	- Lubrication system exchanges are often quicker than manual cleaning and lubrication with a grease gun
Extensive range of accessories, connection parts and lubricants →	One stop for everything you need: lubrication systems, lubricants, accessories, connection parts	- One supplier for your lubrication needs reduces time and expenses
technical aspects		
Exact lubricant discharge during the programmed discharge period →	Reduces lubricant consumption	- No over- or insufficient lubrication - Active contribution to environmental protection - Ensures lubrication while machines and equipment are operating
Different lubricants →	You can select the best lubricant for every application	- No equipment failure caused by unsuitable lubricants
Machine control possible →	Simple connection to primary control systems (PLC)	- Fully automatic lubrication via machine control
safety aspects		
Minimizes lubrication maintenance runs →	Drastically reduces the time that employees must spend in dangerous areas	- Minimizes risk of workplace accidents for maintenance personnel
Remote mounting, outside of hard to reach or dangerous areas, is possible with tube extensions	Simple cartridge exchange at hard to reach lubrication points	- No additional equipment like scaffolds, ladders, or lifting platforms required

perma lubrication systems in recycling plants

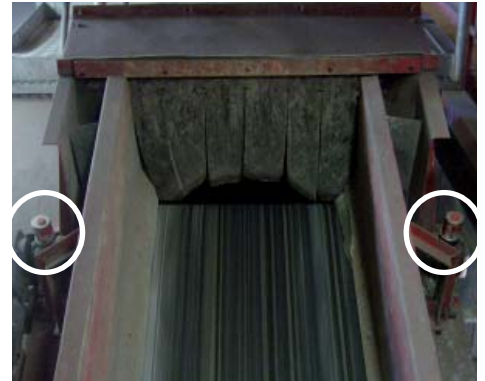
perma products have been used successfully in recycling plants worldwide for many decades. They guarantee reliable automatic re-lubrication for all types of applications.

perma automatic lubrication systems - we meet your needs:

- Simple installation
- 24/7 hands-free operation
- Easy tool-free changeouts
- Minimum space requirement
- Tough systems - battery operated or machine controlled
- On demand lubrication of fresh lubricant to lubrication points

perma is the most trusted partner worldwide for all industries:

- Global market leader for automatic single-point lubrication systems
- Largest product range in the market
- Many well-known satisfied customers
- Field-tested accessories for every perma lubrication system
- Product training, expert advice and consultation
(please contact your local supplier)



Do you have any questions about perma products for recycling plants?

Please visit our website or contact your local supplier. We will gladly send you our extensive catalog for more detailed information.



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