A large industrial pump with a blue motor and a red FLEX filter. The pump is mounted on a metal frame and has various pipes and hoses connected to it. The motor is a large, cylindrical unit with a blue finish and a ribbed texture. The filter is a small, cylindrical unit with a red body and a black top, mounted on a pipe. The background shows other industrial components and a metal structure.

perma Lubrication Systems for
Pumps

The Expert in Lubrication Solutions

perma



Trouble-free operation with perma automatic lubrication systems

Profitability and efficiency of pumps are directly related to equipment reliability. Correct lubrication is one of the main requirements for reliable operation and higher efficiency. Many pumps are not lubricated as often as required because they are located in hard-to-access or dangerous areas. But insufficient and incorrect lubrication of bearings and seals results in accelerated bearing wear and the development of impeller gland leaks.

All over the world, perma automatic lubrication systems are being used to extend the service life of pumps. They are economical, meet technical demands and tremendously improve workplace safety.

→ Challenges

Common pump lubrication problems

Direct contact of abrasive particles and moving parts inside the pump causes premature wear. Pumps are often operated under extreme conditions. A regular injection of fresh, clean grease provides extra protection against ingress of dirt and water and will extend the service life of your pumps.



- **Water / dirt entering bearing**
- **Impeller gland leaks**

Manufacturer recommended lubrication intervals for pumps are very labor intensive and often impractical. But if pumps are not sufficiently lubricated they will suffer from premature bearing wear due to entry of contaminants via under-lubricated seals.



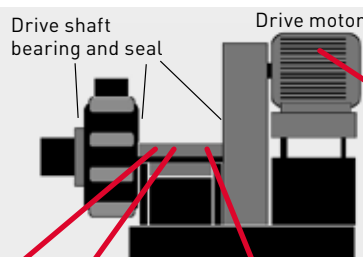
- **Costly pump repairs and equipment downtime**

Re-lubrication work carried out in dangerous or hard to access places exposes maintenance staff to high safety risks.



- **High risk of workplace accidents**

Lubrication points on pumps:



Gland lubrication
(1 point)



Labyrinth lubrication
(2 points)



Bearing lubrication
(2 points)



Electric motor lubrication
(please refer to flyer)

→ Solutions

perma FLEX

- Housing: Transparent plastics
- Electrochemical for grease and oil
- Operating temperature -20 °C to +60 °C
- Discharge period: 1, 2, 3,...12 months
- Pressure built-up: Max. 5 bar
- Lubricant volume: 60 cm³, 125 cm³



perma STAR VARIO

- Housing: Transparent plastics
- Electromechanical / grease and oil / temperature independent
- Operating temperature -10 °C to +60 °C
- Discharge period: 1, 2, 3, ... 12 months
- Pressure build-up: 6 bar
- Lubricant volume: 60 cm³, 120 cm³, 250 cm³



→ Benefits

- Reduced premature wear
- Less equipment downtime
- Improved workplace safety

Product characteristics	Advantages	Benefits
economical aspects		
Durable, reliable and easy to use single-point lubrication systems Discharge period: up to 12 months →	<ul style="list-style-type: none"> - Reliable bearing lubrication for normal ambient temperatures - Hands-free supply of fresh, clean lubricant - Works under water 	<ul style="list-style-type: none"> - Reduced maintenance costs - Higher equipment availability - Easy to install and use - Reliable, controlled lubrication
perma FLEX: Transparent, non-corrosive housing →	<ul style="list-style-type: none"> - Meets hygienic and environmental regulations 	<ul style="list-style-type: none"> - Can be used in areas which are hygienically sensitive
Electromechanical lubrication system perma STAR product range: Discharge period: 1, 2, 3, ...12 months → Systems consist of a drive unit and a lubricant cartridge (LC unit)	<ul style="list-style-type: none"> - Precise and customized discharge - Ideal for high grade lubricants - Drive units can be re-used 	<ul style="list-style-type: none"> - Less equipment downtime, lower maintenance costs - Optimized lubrication saves lubricant and reduces material costs - Short ROI due to reduced follow-up costs
technical aspects		
perma STAR range Battery operated or machine controlled / 3 different sizes / LED alert system →	<ul style="list-style-type: none"> - Fast, safe mounting at exposed places possible - Temperature independent - Monitoring of lubricator via LEDs 	<ul style="list-style-type: none"> - Reliable lubrication at hard to access lubrication points / Simple retro-fitting - Precise discharge at -10 °C to +50 °C - Reduces costly repairs
workplace safety aspects		
Ex-Proof certification →	<ul style="list-style-type: none"> - Can be used in areas where explosive atmospheres may occur 	<ul style="list-style-type: none"> - Safe and reliable lubrication in dangerous areas
perma STAR range Remote mounting possible →	<ul style="list-style-type: none"> - Lubrication systems can be installed away from dangerous or hard to access lubrication points 	<ul style="list-style-type: none"> - Tremendously reduces the risk of accidents - Increases workplace safety

perma lubrication systems for pumps

perma products are used on all types of pumps worldwide. They guarantee reliable, automatic re-lubrication of bearings and labyrinth or gland seals.

perma automatic lubrication systems - we meet your needs:

- 24-hour operation
- Simple installation
- Requires little mounting space
- Tough systems: battery operated or machine controlled
- Customized supply of fresh lubricants 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)

Applications for perma products

Bagging equipment

Electric motors

Transport systems

Sliding guides

Belt pretensioners

Chain drives

Paint finishing systems

Linear drive systems

Mills/crushers

Open gears

Presses

Escalators

Storage equipment

Silos

Blowers & Fans

Do you have any questions about perma products for pumps?

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



perma-tec GmbH & Co. KG
Hammelburger Str. 21
97717 EUERDORF
GERMANY

info@perma-tec.com
www.perma-tec.com