

ROLLER & SLIDING BEARINGS

perma lubrication systems in operation



Roller and sliding bearings are used in all areas of industry. Only regular and efficient lubrication ensures that these components function correctly. Bearing damage, resulting from insufficient lubrication or contamination in the bearing, can result in consequential damage.

Challenges

Service life and reliability of seals, roller and sliding bearings mainly depend on ambient conditions. Extreme operating conditions and contaminant ingress into the bearing system lead to increased wear and to a shorter service life.

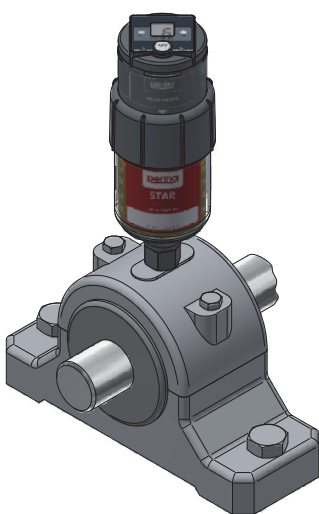
Ambient and influencing factors can be divided into three groups:

- Dust and liquids in the bearing
- Oscillations and vibrations
- High bearing temperatures

These factors have an impact on the service life and must be taken into account when calculating lubricant quantities. The greater the load or the influence of ambient conditions, the more lubricant is required to guarantee optimal lubrication.



Lubrication points



In roller bearings, loads and movements are transferred by means of rollers, arranged between an outer and inner race. If these metallic components make direct contact with one another, the contact causes undesirable friction, wear and damage, which may lead to bearing failure.

In sliding bearings, the moving parts are in direct, sliding, linear contact. They can accept greater forces than roller bearings, but are more heavily impacted by wear due to the greater friction.

Lubrication is provided through special supply bores on the bearing housing.



Industries



Quarrying industry



Recycling



Cement, Gypsum, Lime



Power generation



Food & Beverage



Mining & Minerals processing

Solutions

The development of perfect lubrication solutions requires the consideration of various factors, such as application type, speed and load of the machine as well as ambient temperature.

perma has risen to this challenge, focusing on the development and production of automatic lubrication systems for use across a variety of industries. These solutions have been created in close cooperation with maintenance professionals from various global sectors, addressing the unique demands of each application. In adherence to the highest quality standards, premium-grade raw materials and lubricants are used in the manufacturing process. This ensures that perma products consistently deliver reliable lubrication across all applications, thereby increasing the equipment service life while at the same time minimising costs and operational effort.

Direct mounting | e.g. with perma NOVA

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

Remote mounting | e.g. with perma STAR VARIO

- For lubrication 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

