

# BLOWERS & FANS

perma lubrication systems in operation



Blowers & fans are used in almost all industries. They provide adequate amounts of primary and secondary air. Flue gas fans remove air containing dust, gases and harmful substances. In primary air zones, induced draft fans are used in scrubbers, dust collectors, heat exchangers and desulfurisation plants.

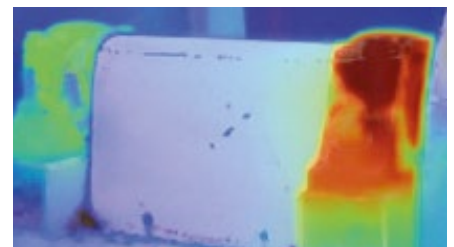
## Challenge

Blowers and fans are normally operated under extreme conditions. Contaminants such as dust or pumped media are raised and may infiltrate the bearing system. This causes increased wear in individual components and reduces service life.

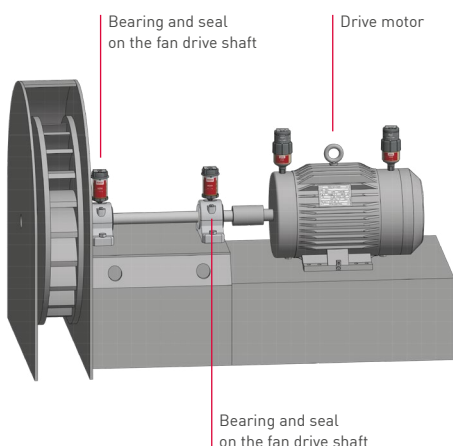
→ Contaminants (e.g. dust) raised in the air must not enter the lubrication points

Regular lubrication of bearings and seals is imperative. Lubrication points are often extremely dirty and hard to reach, which makes maintenance even more difficult. Specified lubrication intervals are neglected or not observed for this reason. The resulting lubrication starvation leads to increased wear and in extreme cases to failure of the blowers and fans.

- Excessive overheating of bearing points due to lubrication starvation
- Lubricants must be able to withstand demands, such as vibrations and high speeds
- Compliance with relubrication intervals, depending on bearing type, bearing size and ambient conditions

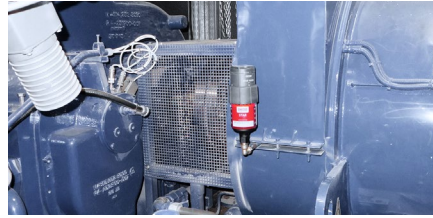


## Lubrication points



The lubrication points (roller bearings) are located at the drive shaft between drive motor and fan impeller.

Bearing and sealing of fan drive shaft is normally done by means of a pillow block housing or a bearing unit. These must be permanently supplied with the specified amount of the right lubricant.



## Industries



Chemical & Pharmaceutical



Timber industry



Refineries



Power generation



Food & Beverage



Pulp & Paper



Glass



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.

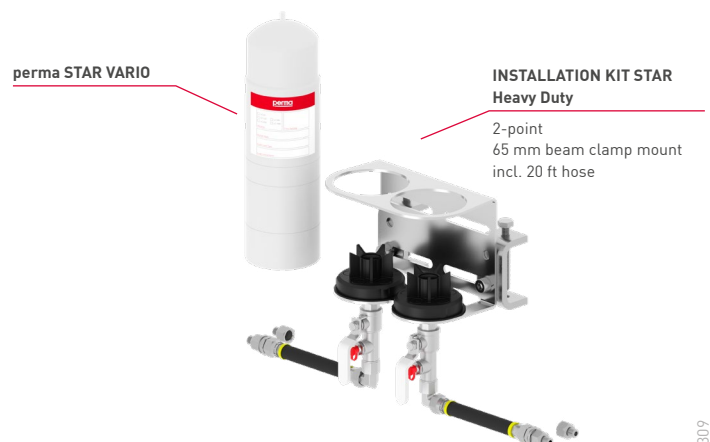
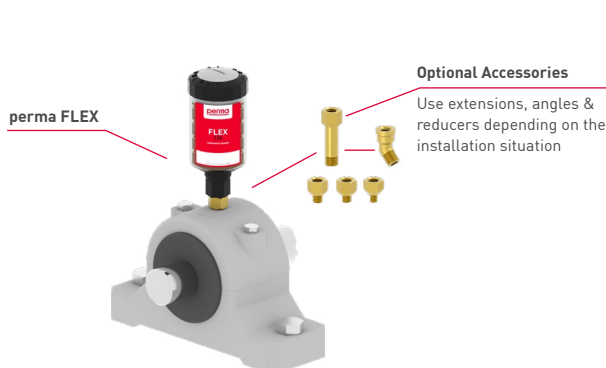
perma has risen to this challenge, focusing on the development and production of automatic lubrication systems for use across a variety of industries. These solutions have been created in close cooperation with maintenance professionals from various global sectors, addressing the unique demands of each 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 FLEX

- Easy, quick mounting
- For lubrication points with little vibration | shocks
- For easy-to-reach 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-reach lubrication points



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