

The Expert in Lubrication Solutions





The quarrying industry puts men and machines under enormous strain. Spread out equipment, insufficient staff, rough operating conditions and cost pressure continously challenge quarrying operators and employees. Automatic lubrication with perma lubrication systems can tremendously increase equipment availability and safety.

Lubrication points

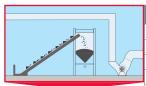
• Roller bearings • Sliding bearings / Sliding guides







Raw material processing			
ightarrow Crushing	Jaw-, cone-, roll crushers	✓	✓
ightarrow Transport	Conveyor systems	✓	



Endproduct processing				
→ Screening	Grit and sand screens	✓		
ightarrow Sorting and cleaning	Conveyor systems	✓		
→ Dust removal	Dedusting equipment, fans	✓		
→ Transport	Conveyor systems	✓		



Storage and packing				
→ Packing	Conveyor systems	✓		
→ Filling	Silo discharge	✓		

Challenges



→ Hard-to-reach and dangerous lubrication points



→ Extreme operating conditions (sludge, dust, dirt, temperature changes and vibrations)



→ High personnel costs from spread out and complex equipment

Advantages of automatic lubrication



Remote installations of lubrication systems **reduce the time that** workers have to spend in dangerous areas.



Continuous relubrication at short intervals **reduces wear** and **seals** lubrication points **against contamination**.



Scheduled exchanges on running equipment reduce personnel- and material costs and increase economic efficiency.

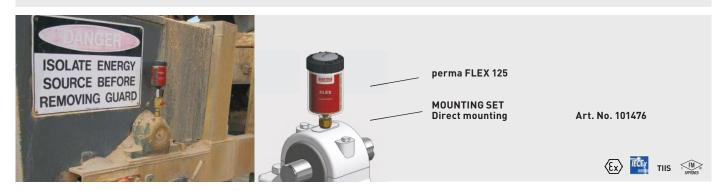
Reference



Solutions

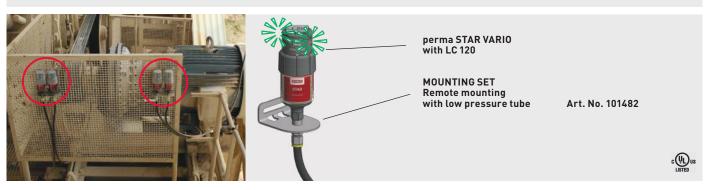
Direct mounting on lubrication point: e.g. perma FLEX

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



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

- \rightarrow 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



Would you like more information on perma products?

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

Applications



Lubrication of pillow block on a pressure pulley



Lubrication of pillow block on a drive pulley



Lubrication of pillow block on a tail pulley



Lubrication of pillow block on a conveyor



Lubrication of pillow block on a belt weigher



Lubrication of pillow block on a conveyor



Remote lubrication of an electric motor



Lubrication of pillow block on a conveyor



Lubrication of pillow block on a tail pulley

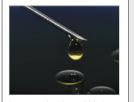
Individual solutions

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