## QUARRYING INDUSTRY

perma lubrication systems in operation







### **Challenges**

The quarrying industry is very demanding for both workers and machines. Spread out equipment, insufficient staff, tough ambient conditions and cost pressure continuously challenge quarry operators and employees. Automatic lubrication with perma lubrication systems increases workplace safety and equipment availability enormously.

- → 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





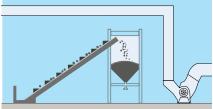
## **Lubrication points**

1 RAW MATERIAL PROCESSING



- → Crushing Jaw, cone & roll crushers
- Transporting Conveyors

2 | FINAL PROCESSING



- → Screening Grit & sand screens
- → Cleaning & sorting Conveyors
- → Dust removal Dedusting equipment, blowers & fans
- Transporting Conveyors

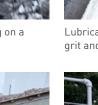
3 | STORAGE & PACKING



- Packing Conveyors
- → Filling Silo discharge



Lubrication of pillow block bearing on a conveyor



CVIIS

Lubrication of the bearing block on a drive disc



Lubrication of pillow block bearing on grit and sand screen



Lubrication of pillow block bearing onconveyer



Remote lubrication on a conveyor



Lubrication of bearing and seal of a blower / fan

#### **Solutions**

The selection of the ideal lubrication solution requires the consideration of various factors, including the specific type of application, operating speed and load of the machine, and the ambient temperature. Below are some proposed solutions:

#### Direct mounting | e.g. with perma FLEX

- Easy, quick mounting  $\rightarrow$
- $\rightarrow$ 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





#### perma SERVICES

You have questions about our products or need assistance with measurement, system installation and maintenance of your equipment? The perma Services team has answers and is happy to assist!



Visit the perma website for an overview of our offerings.



# EASY. SMART. CONNECTED.

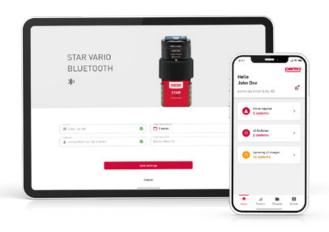
## Create your own network

- Current overview of all lubrication points  $\rightarrow$
- $\rightarrow$ Coordination of upcoming maintenance work
- → Reminders for pending exchanges
- Central management of lubrication points in the web application
- Recording of all on site maintenance and exchange tasks via the app

Get perma CONNECT now! Download the app to your smartphone or open the web application at https://perma-connect.com









Find a variety of videos on the perma YouTube channel to get a deeper understanding of the perma CONNECT app.



## perma-tec GmbH & Co. KG

Hammelburger Str. 21 97717 Euerdorf GERMANY

Tel.: +49 9704 609 - 0 info@perma-tec.com www.perma-tec.com