



BECHEM Complex CM 21  
Innovative long-term lubricating grease  
with outstanding water resistance

# New formula for better performance

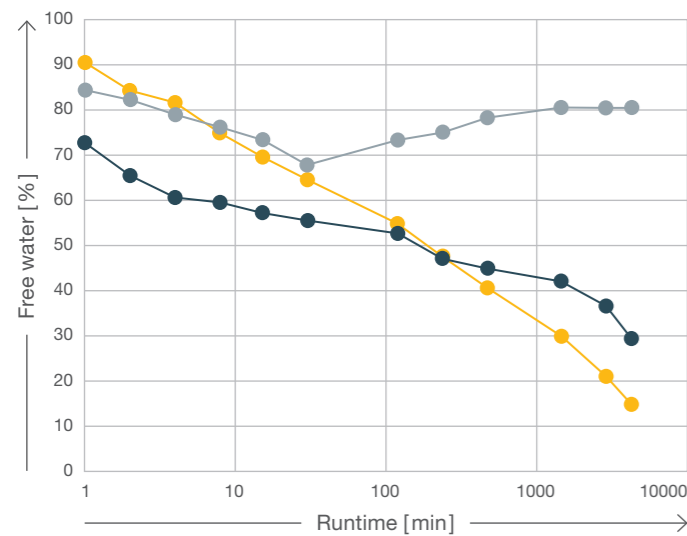
Contamination with water can significantly reduce the service life of a roller bearing. That's why we developed a new concept that departs from the established and customary lubricating greases for this application and offers significantly better interaction with water: BECHEM Complex CM 21 is an EP long-term lubricating grease with outstanding corrosion protection that was developed for use in roller and plain bearings subject to increased contact with water.

The diagram shows the unique performance of the EP long-term lubricating grease BECHEM Complex CM 21 in water. If the Shell Roller Test results in extensive mixing of water and lubricating grease, a standard lithium grease only absorbs a small amount of the water, which then largely separates again. Often it will lose important properties, e.g. it reduces its consistency or leads to corrosion.

By contrast, calcium sulfonate complex greases can absorb water without losing key properties. Conventional calcium sulfonate complex greases immediately absorb a high amount of water along with dirt, which has a negative impact on efficient performance.

The newly developed BECHEM Complex CM 21 initially repels water better than customary standard lithium greases. However, it really shines when higher performance is needed by continuously absorbing more water than other greases used for this application.

## Shell Roller Test with 100 g water



- BECHEM Complex CM 21
- Standard lithium grease
- Calcium sulfonate complex grease from a competitor

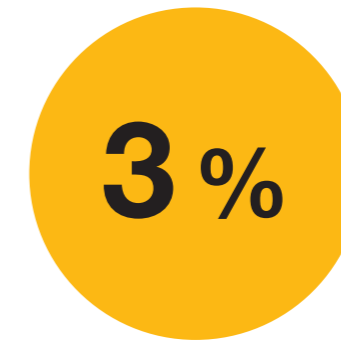
Bearings at hydraulic cylinders of a hydraulic excavator



**Excellent wear protection with high loads**



**No softening after 100,000 double strokes with 20% water**



**No corrosion in water with 3% NaCl**



**Excellent water absorbency**

## Applications

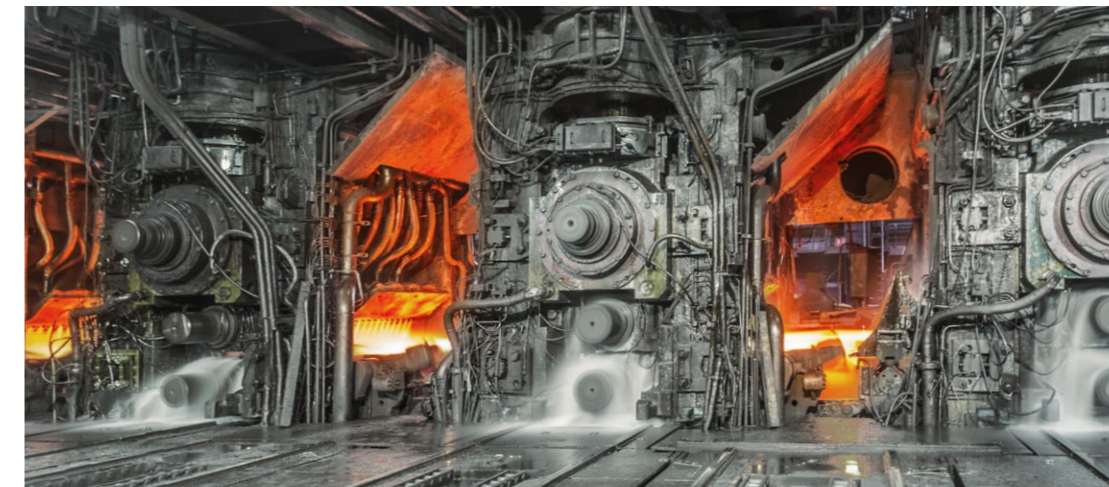
- Work roller bearings in hot and cold rolling mills
- Bearings for guide rollers in continuous casting plants
- Main bearings in crushers in the cement industry and in mining
- Central lubrication systems in mining
- Heavy machinery and large equipment in the construction industry and mining

## Properties

- Excellent corrosion protection even to salt or process water
- Outstanding anti-wear and extreme pressure properties
- Excellent adhesion to steel surfaces
- Excellent water resistance
- Outstanding shear stability



Limestone crusher in a cement plant



Roll stands in a hot strip tandem mill in the steel industry with work roller bearings subject to very high amounts of water

# We are lubricant experts

offering customized solutions  
for many industries



LUBRICATION SOLUTIONS FOR INDUSTRY

CARL BECHEM GMBH · Weststr. 120 · 58089 Hagen · Germany · Phone +49 2331 935-0 · [bechem@bechem.de](mailto:bechem@bechem.de) · [www.bechem.com](http://www.bechem.com)