

## CENTRAL LUBRICATION SYSTEMS FOR WIND CONVERTERS

Wind converters are subject to high mechanical loads. They have to work with absolute reliability. Breakdown due to a lack of lubrication is an avoidable failure.

A BEKAWIND cental lubrication system continuously supplies fresh lubricant to the connected lubrication points. The right quantity to the right time.

Especially for hardly accessible plants - like in offshore use - a steady and reliable lubricant supply can only be realized with an automatic lubrication system.

A BEKAWIND central lubrication is adapted individually to each wind converter and its operating conditions.

All important components like bearings, toothings and adjustment devices are supplied with precisely metered lubricant quantities at the right time. This guarantees an efficient reduction of wear and tear.

Depending on the application, different BEKAWIND lubrication systems are used:

#### **BEKAWIND SINGLE**

the tried-and-tested single-line system.

BEKAWIND

#### **BEKAWIND PRO**

the flexible progressive system.



#### **BEKAWIND FLOW**

the innovative spray system.



#### **BEKAWIND RETROFIT**

the retrofitting program.



Layout and design of the central lubrication system are decisive for economic efficiency, service life and operational reliability of the whole wind converter.

The BEKAWIND specialists will be pleased to support you in all questions around central lubrication!





## Custom-made central lubrication systems for wind converters

# SINGLE



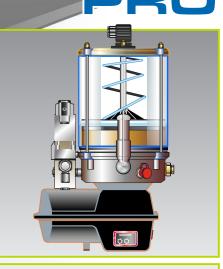
Rotor hub with lubrication system for blade bearing and blade drive



Electrical grease pump of the GIGA-series



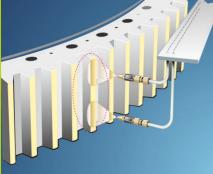
Distributor type UEN-2 and lubricant collector at a blade bearing



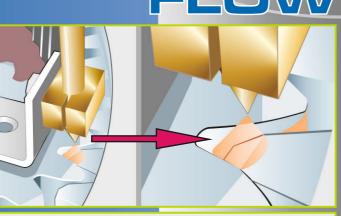
Electrical grease pump type FKGGM-EPR







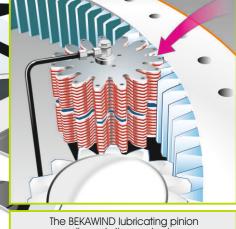
Spray lubrication system with two spray nozzles at an external toothing



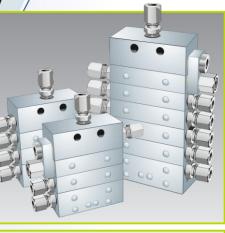
The lubricant is sprayed exactly between the highly loaded tooth flanks.



The worn-out lubricant is collected in grease collecting bottles



The BEKAWIND lubricating pinion supplies only the contact zone



Modular progressive distributors care for precise and reliable supply







- The lubrication system for multi-megawatt wind converters
- Ideal for offshore use
- High operational reliability at low ambient temperatures
- For all types of grease up to NLGI 2



## The progressive system

- The flexible lubrication system with monitoring
- For oil and grease up to NLGI 2
- Modular design for easy service
- High functional reliability with blocking control

## The solution with lubrication pinion

- The lubrication system for all kinds of toothings
- Lubrication only during intermeshing
- Suitable for lubricants with solids



## The Spray lubrication system

- Highly efficient and contact-free technology
- Supply even during standstill of the toothing to avoid tribocorrosion
- Very low lubricant consumption
- No more pollution by overlubrication and no need for cleaning



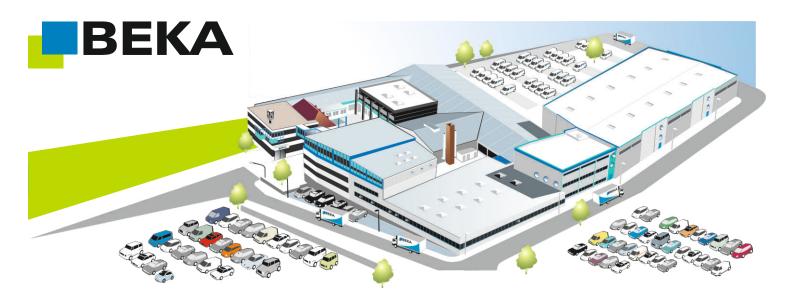
## Retrofitting solutions

- Tailor-made retrofitting solutions for wind converters
- From single nipple lubrication up to complete system.
- Easy retrofitting of elder wind converters

## The automatic single point lubricator

- The efficient solution for single lubrication points
- Electromechanic drive precise and reliable
- Up to 6 fillings with a total capacity of 720 ml

Our specialists will be pleased to inform you!



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