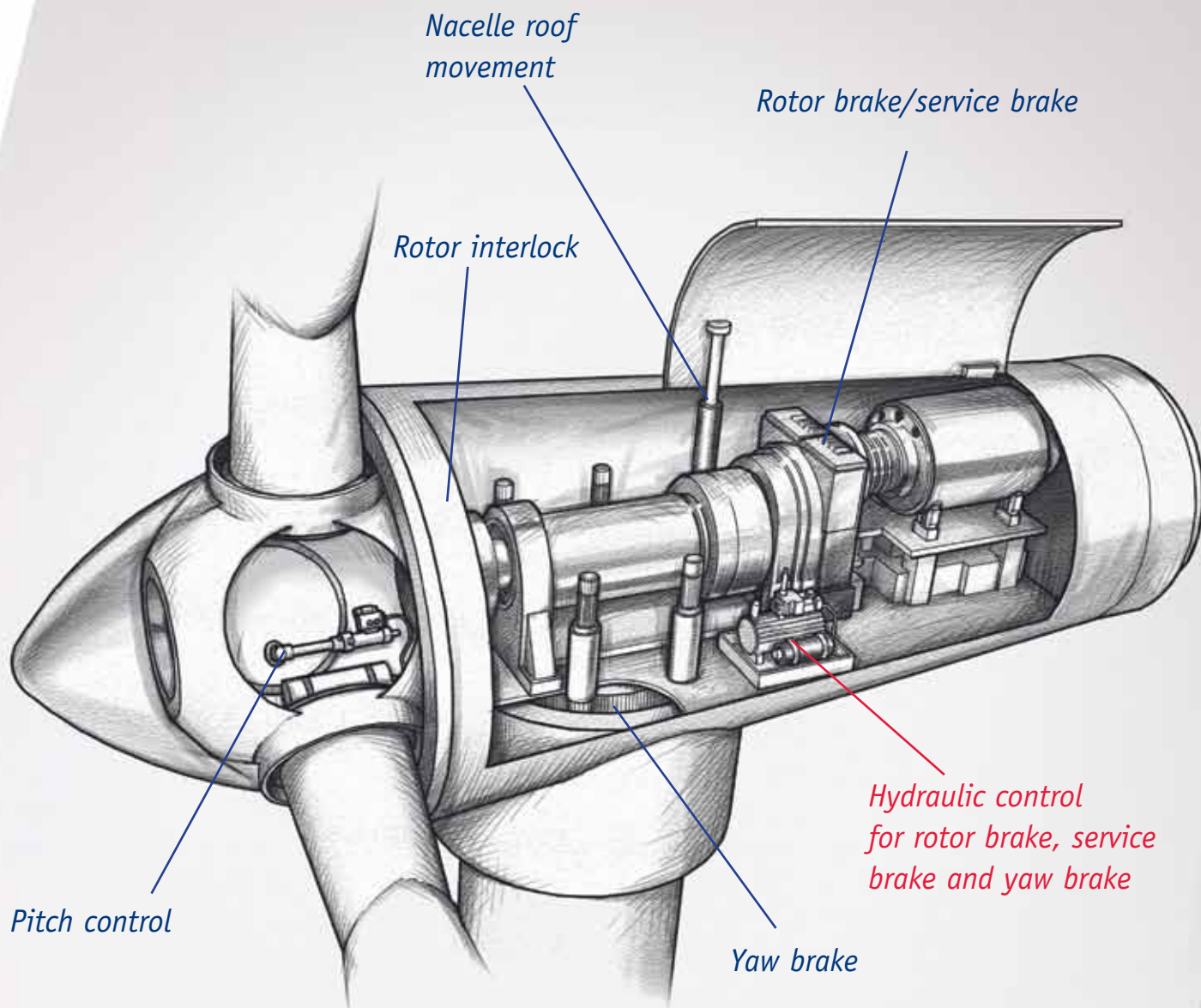




Please Contact us:  
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Tel.: 02-24501890  
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## Keep your business in perpetual motion.

Wind power is set to play a vital role in the future. And HAWE Hydraulik allows your business to harness the power of nature. We are a specialist supplier of efficient, durable state-of-the-art hydraulic solutions for all areas of the wind power industry.

Solutions for a World under Pressure **HAWE**  
HYDRAULIK

## HAWE Hydraulik: powering your success.

### Wind farms need to face more than just wind.



The wind power industry poses many different challenges. For a wind turbine to run seamlessly, it needs a self-contained hydraulic system that can easily be integrated into the complete assembly.

In addition, the plant must withstand adverse environmental and other factors:

- extreme temperature fluctuations
- salt air in off-shore operations
- high levels of humidity
- compliance with GL (Germanischer Lloyd) safety standards

### Come wind, rain or shine, HAWE hydraulics work.

You will be ready for anything with solutions from HAWE Hydraulik. All our products are made of steel and designed and built to the highest quality standards. They can be combined in different ways and are simple to maintain thanks to the intelligent modular design.

The hydraulic control consists of different modules, with each covering a different function. As a result, should one element need repairs or modification, it can be removed simply by undoing four screws.

We offer active and passive hydraulic control systems for both yaw and rotor brakes.

Also available: modules for

- pitch control
- service brake
- rotor interlock
- nacelle roof movement
- service crane controls

### The power of teamwork.

Extensive experience in wind power and an absolute commitment to the principles of sustainable business practice make HAWE Hydraulik your perfect partner. The sophistication and durability of our products will improve the reliability of your wind power installations, extend their life cycle and increase return on investment.



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## Everything revolves around cost-effectiveness and quality.

HAWE Hydraulik offers reliable, durable products with a state-of-the-art design. The sophisticated modular system enables you to combine the elements you need in the most cost-effective way.

A selection from our product range:



### Brake module – type NBMD:

For safety reasons, it is obviously essential that a wind turbine is fitted with brakes that are absolutely reliable. This is why HAWE Hydraulik uses zero-leakage directional seated valves. Compared to directional spool valves, they offer greater switching reliability and meet GL safety standards.

- Operating pressure ( $p_{max}$ ): 400 bar
- Flow rate ( $Q_{max}$ ): 20 lpm



### Hydraulic power pack – type KA:

Can be installed both horizontally and vertically. Takes up a minimum amount of space due to its compact design. Electrical components are connected directly via a terminal box. Optionally available as Cold Climate Version (CCV) with heating and silica gel filter.

- Operating pressure ( $p_{max}$ ): 700 bar
- Flow rate ( $Q_{max}$ ): 10 lpm



### Hydraulic power pack – type KA:

The control consists of different modules, each of which performs a separate function. To cater for different oil volume requirements, the length of the tank can be extended. The two-litre standard tank can be expanded to hold up to a maximum of ten litres if required.

- Operating pressure ( $p_{max}$ ): 700 bar
- Flow rate ( $Q_{max}$ ): 10 lpm



### Customized power packs:

Customized solutions for applications with higher oil flow rates (such as hydraulic pitch control), supplied ready for plug-and-play installation. Reliable components and a modular design give you the flexibility to combine the elements you need without sacrificing straightforward maintenance.

- Operating pressure ( $p_{max}$ ): 700 bar
- Flow rate ( $Q_{max}$ ): 25 lpm



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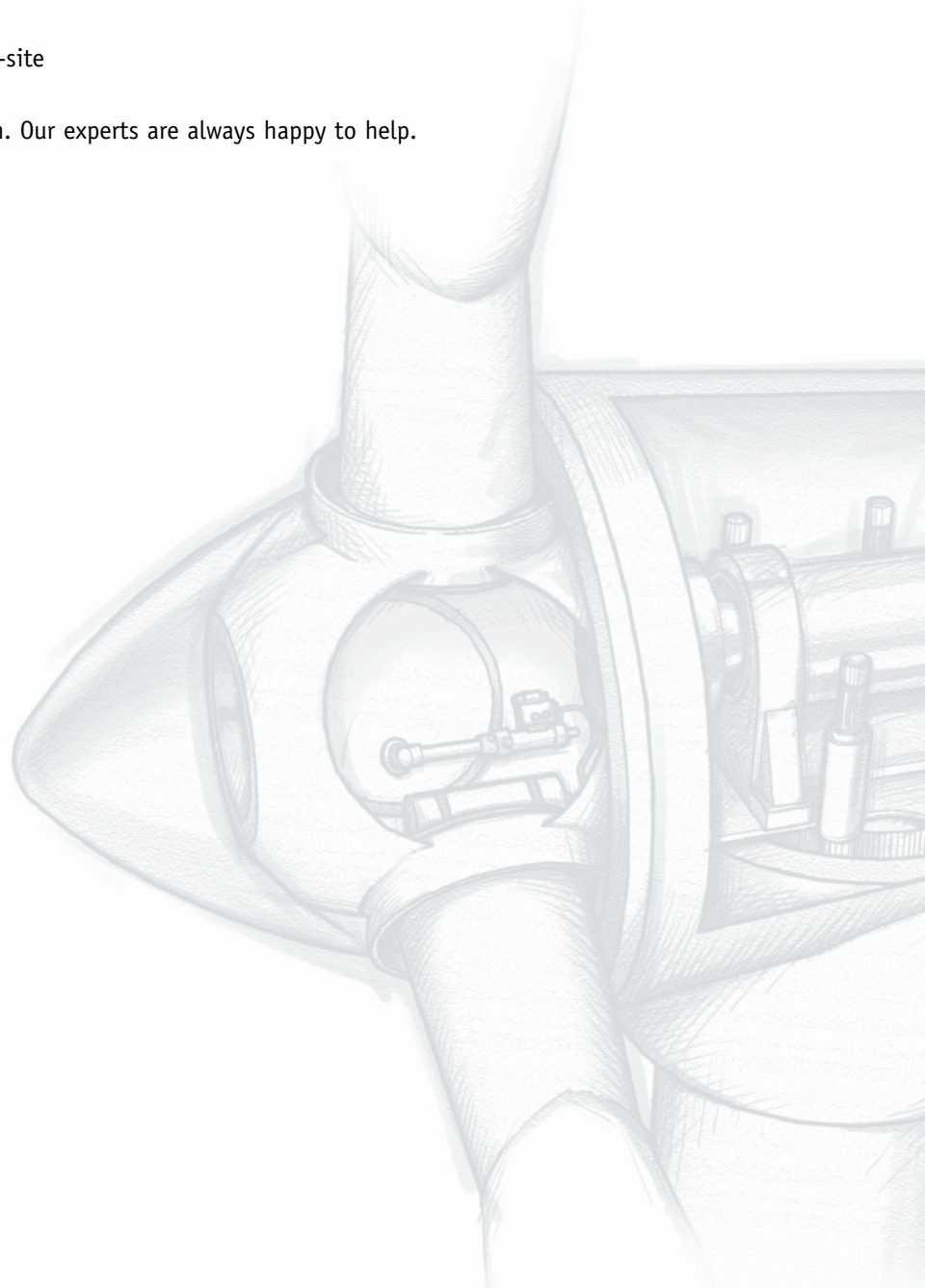
## End-to-end service.

With five sales offices in Germany, 14 subsidiaries worldwide and around 30 expert partner companies, HAWE Hydraulik is bound to have a presence in your area.

HAWE Hydraulik offers the following benefits:

- Comprehensive individual advice and assistance
- Customized solutions
- Products designed and manufactured using state-of-the-art technology
- Many years of experience and expertise in hydraulic products and their uses
- Tailored service and maintenance contracts
- Layout, set-up and maintenance/service on-site

If you have any questions, please get in touch. Our experts are always happy to help.



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