

## Reliability and precision are the keys to safety.

A good crane should be powerful, mobile, operator-friendly and, of course, completely safe. On top of that, it should lift, load, turn and move around with minimal energy consumption. HAWE Hydraulik provides reliable, efficient, state-of-the-art hydraulic solutions that enable you to meet all these requirements.

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

## HAWE Hydraulik: efficient, no matter what the size.

### Precise control for loads of all sizes.



Picture: Liebherr

Cranes need to lift and lower loads of all shapes and sizes and put them quickly into place, and its ability to perform movements in multiple planes simultaneously is crucial to achieving this. Crane manufacturers want the flexibility to add equipment, provide extra stabilization, and to modify designs on request. Every crane is built to meet the needs of the specific user, so that operators have a comfortable, functional and safe environment which meets all the requirements of the job at hand.

### HAWE Hydraulik: integrated solutions working together seamlessly.

When all the components of a hydraulic system are designed to work together seamlessly, the result is a safe and efficient control system for any crane. A wide range of pumps, directional control valves and electronic controls allow optimum vibration damping to be achieved, maximizing comfort for crane drivers. With HAWE Hydraulik, you can source all the components from a single manufacturer, so you can be sure they are all perfectly compatible with each other, which will benefit your cranes and your customers.

Because different crane functions have different hydraulic requirements, all HAWE products come in a wide choice of finely graded sizes.

We offer control hydraulics for:

- Outriggers
- Telescopic booms
- Slewing gear
- Steering
- Counterbalance
- Raising and lowering cabs
- Attachments
- Winches

### Profit from our experience.

HAWE Hydraulik has over 60 years of experience, making it the ideal partner in the manufacture of cranes of all sizes. We offer complete hydraulic systems, with a choice of mechanical, electric and electronic control systems. Reliable components guarantee maximum availability and minimal downtime.

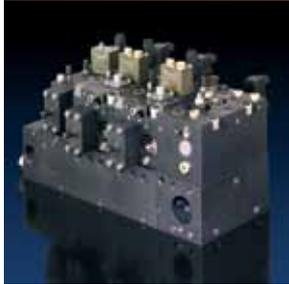


Picture: Liebherr

## Everything revolves around safety and efficiency.

HAWE Hydraulik offers sturdy, high-precision products with 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:



### Effective load sensing even where actuators are working in parallel:

The proportional directional spool valve type PSL is used to create load-sensing systems that give you precise control of the operation at all load pressures and flow rates. They can be controlled electrically, mechanically or with a combination of the two actuations. Available in four different sizes.

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



### Smart communications between components:

The PSL's on-board CAN technology minimizes the amount of wiring required and makes it easier to design smart systems, and as you would expect, it supports all common communication protocols.

- Operating pressure ( $p_{max}$ ): 420 bar
- Flow rate ( $Q_{max}$ ): 120 lpm



### Efficient hydraulic fluid supply:

The variable displacement axial piston pump type V60N or V30 ensures the right quantity of fluid is in the right place at the right time. A selection of pump controllers, mounting flanges and drive shaft options ensure you can find the perfect solution to any design requirement.

- Operating pressure ( $p_{max}$ ): 420 bar
- Geometric displacement ( $V_{max}$ ): 270 cm<sup>3</sup>/rev



### Safety and precision:

Load-holding valves types LHK/LHT/LHDV prevent uncontrolled movements of the crane boom, and because they are leak-free, there is no need of readjusting. The availability of different versions (pipe connection, manifold mounting, screw-in cartridge) ensures the valve can be installed close to the actuator, maximizing speed of response and safety.

- Operating pressure ( $p_{max}$ ): 450 bar
- Flow rate ( $Q_{max}$ ): 250 lpm



### Hydraulics and electronics in harmony:

The PLVC 8 is a small, portable IP 67 box. It is the perfect solution for controlling the proportional directional spool valve type PSL, and supports all common communication protocols, facilitating remote control, overload protection, and remote maintenance and diagnostics functions.



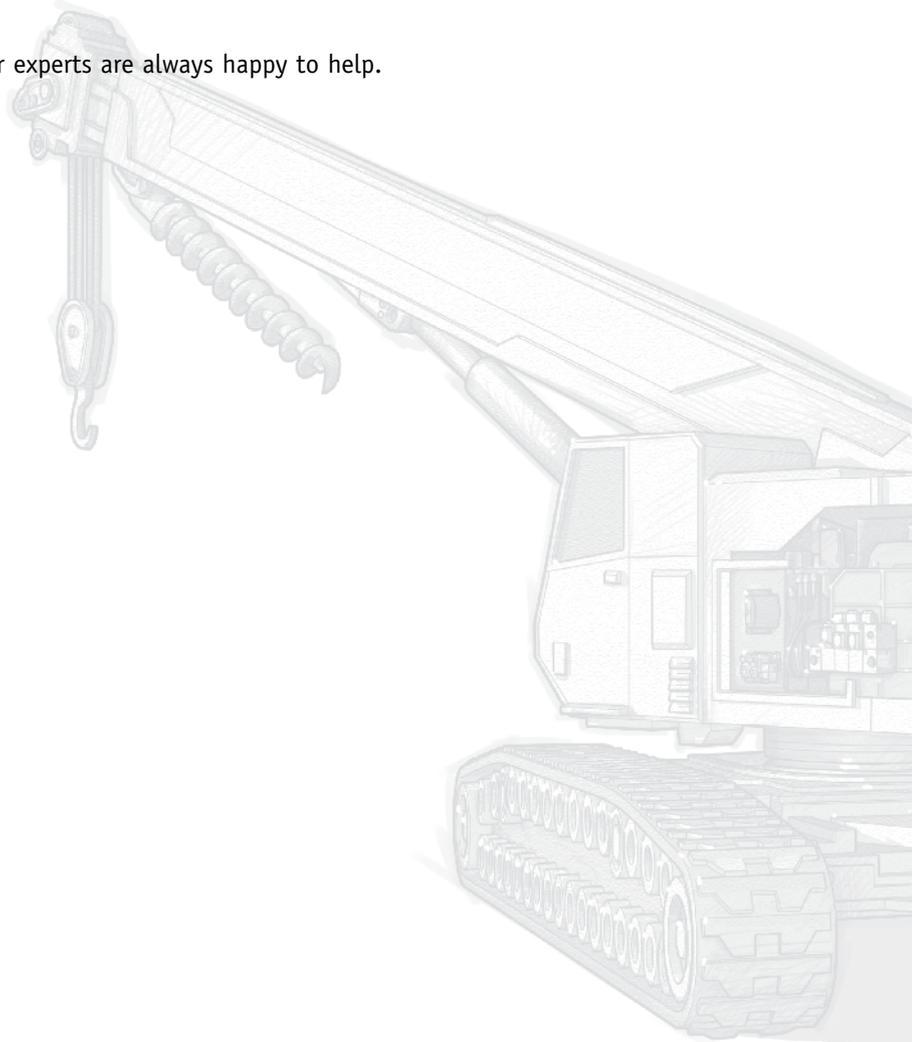
## End-to-end service.

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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