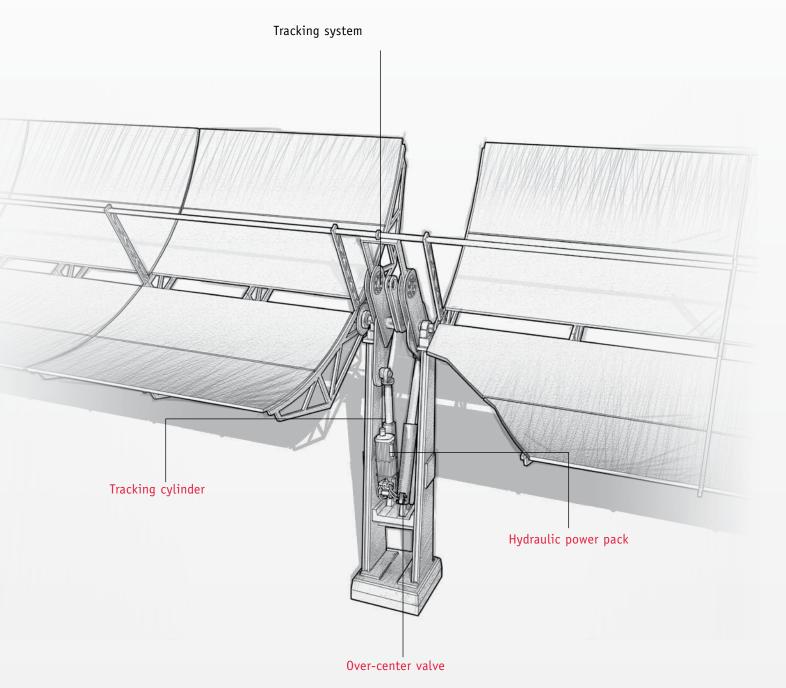
The ultimate in efficiency for solar power plants.





Using the sun's energy is a simple, sustainable solution for generating electricity and heat. HAWE Hydraulik enables you to implement your ideas with efficient, reliable and state-of-the-art hydraulic systems.



HAWE Hydraulik: the energy you need to succeed.

For pivot angles of -30° to +180°, we've got some head-turning technology.

Dish Stirling engines, CPV trackers, solar power towers and parabolic trough power stations all generate energy using concentrated solar power – a technology that does not harm the environment. To make best use of the sun's rays, a hydraulic system adapts the angle of the panels according to the position of the sun. Precise tracking and operational reliability in challenging environmental conditions are essential, as generating a good return on investment requires maximum energy yield and availability.



Foto: HAWE

HAWE Hydraulik: precision and reliability.

HAWE Hydraulik offers compact positioning systems consisting of a hydraulic power pack with a directly attached control system. This closed system with a submerged electric motor and pump is protected against rain, dew, condensation, dust and dirt. Modular products mean we can easily adapt movement speeds and power according to customers' requirements, as well as making for easier maintenance access. With various product sizes, low friction, and minimized stick/slip effect, tracking movements can be controlled reliably and

accurately. Damped over-center valves ensure smooth movements, protecting the whole structure. Over 15 years' experience in wind and solar systems, combined with extensive endurance and fatigue testing of all components, means our customers can look forward to many years of reliable operation.

Enjoy the benefits of experience.

HAWE Hydraulik is your perfect partner for solar systems. Our fully checked, pre-calibrated turnkey systems minimize the budget and time you need for development and installation, delivering reliability and efficiency from day one.

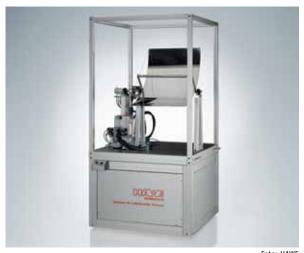


Foto: HAWE



Everything revolves around cost-effectiveness and quality.

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:

Compact hydraulic power supply:

Combining the radial piston pump and submerged electric motor in the same tank minimizes space requirements, while ensuring a reliable supply of hydraulic pressure. Can be installed in a vertical or horizontal position. The finned-tube design improves cooling performance. Optional tank extensions enable the amount of fluid in the system to be increased from two to more than 10 liters, to suit your needs. Zero-leakage directional seated valve bank can be attached directly.

• Operating pressure (p_{max}) : 250 bar ■ Flow rate (Q_{max}) : 10 lpm



Adapted to your needs:

Size 4 with increased volume. Cold climate version (CCV) also available for use in temperatures down to -40°C. Silica gel filter attached directly. Directional spool valve bank attached directly. Pressure-resistant steel components maximize lifespan. Corrosion and UV-resistant as standard.

■ Operating pressure (p_{max}): 315 bar ■ Flow rate (Q_{max}) :

Zero-leakage valves for tracking accuracy:

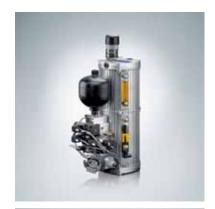
Zero-leakage seated valves with overload protection help ensure a high degree of tracking accuracy. Finely graduated valve sizes matching different flows and therefore give precise control. Low hysteresis and excellent damping protect the whole structure from vibrations. Available for manifold mounting and direct pipe connection.

• Operating pressure (p_{max}) : 450 bar ■ Flow rate (Q_{max}):

Customized hydraulic solutions:

Ready-to-install customized solutions that are fully checked, prefilled with oil and precalibrated. The compact power pack, valve controls are directly mounted at the cylinder. They are all designed to work seamlessly together, minimizing assembly costs. Power connection via central HARTING plug available with IP65 rating.

■ Operating pressure (p_{max}): 350 bar ■ Flow rate (Q_{max}):











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.