

Even under extreme conditions - safe and reliable.

When you are faced with the ultimate limits set by the machine-rock interaction your machinery should operate reliably and safely. A responsive and yet sturdy hydraulic control increases cutting efficiency, protects the environment and improves operators safety.

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

HAWE Hydraulik: custom-made systems for every operation.

Made for man-machine-rock interaction.



Foto: USMRA

During underground excavation work such as coal mining, mineral mining and underground construction projects, the ability to excavate the desired profile to the millimetre without causing harmful vibrations is highly valued for both environmental and safety reasons. Excavation with a roadheader, shearer or microtunneling are well-suited methods, and are much more responsive to the earth compared to a conventional drill and blast excavation period. High cutting force, reliable operation and good manoeuvrability guarantee an economical mining exploitation.

HAWE Hydraulik: powerful and reliable on your side.

With the usage of steel for all pressurized components, the HAWE Hydraulik products can withstand high loads. Because the operating pressure of our products exceeds the standard, our pumps and valves are tolerate pressure peaks that might occur from encountering heavy rocks unexpectedly. In addition, the proportional control, according the load-sensing principle, offers optimal utilization of the installed power. HAWE's modular design offers easy maintenance or replacement of single segments during service.

Our products are already performing with the following drilling tasks: :

- Civil construction
- Blast-hole drilling
- Tunnel drilling and expanding
- Ore mining

Profit from our experience.

HAWE Hydraulik's more than 60 years of experience make it the ideal partner for the drilling/boring and construction equipment industry. We offer an integrated service, covering design, manufacture and set-up. This allows you to use your own resources more productively, increases your flexibility and reduces your costs.



Everything revolves around reliability and flexibility.

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:



High-precision positioning and operation:

The compact PSL proportional directional spool valve saves space and is segmented for simplified servicing. Available in four sizes with options to add a variety of extra functions, it can easily be adapted to suit the control requirements of your machinery.

- Operating pressure (p_{\max}): 420 bar
- Flow rate (Q_{\max}): 240 lpm



Certified explosion proof:

The compact PSL proportional directional spool valve is also designated for use in areas with explosive gas, vapor, aerosol and air mixtures, and dusts. Certifications according to ATEX, IEC, MSHA and MA are available on request.

- Operating pressure (p_{\max}): 420 bar
- Flow rate (Q_{\max}): 240 l/min



Efficient hydraulic fluid supply:

The V30 variable displacement axial-piston pump ensures the right amount of fluid is in the right place at the right time. The low mass (and therefore low inertia) of the actuator gear allows it to make virtually instantaneous adjustments, and the large shaft bearing ensures a long service life.

- Operating pressure (p_{\max}): 420 bar
- Displacement vol. (V_g): 260 cm³/rev



Safety and precision:

Counterbalance LHT and LHDV valves reliably maintain load-holding functions, and because they are zero leak, they never need readjusting. The availability of in-line, panel-mounted, and screw-in cartridge versions ensure installation close to the actuator, maximizing the speed of response and safety.

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



Fast and precise control of movement:

Check valves RH and DRH when installed between the directional spool valve (which has design related leakage) and the hydraulic cylinder hold the cylinder in a positive position. These check valves are true zero-leak devices that provide fixed positioning of the load and guarantee safe operation.

- Operating pressure (p_{\max}): 700 bar
- Flow rate (Q_{\max}): 160 l/min



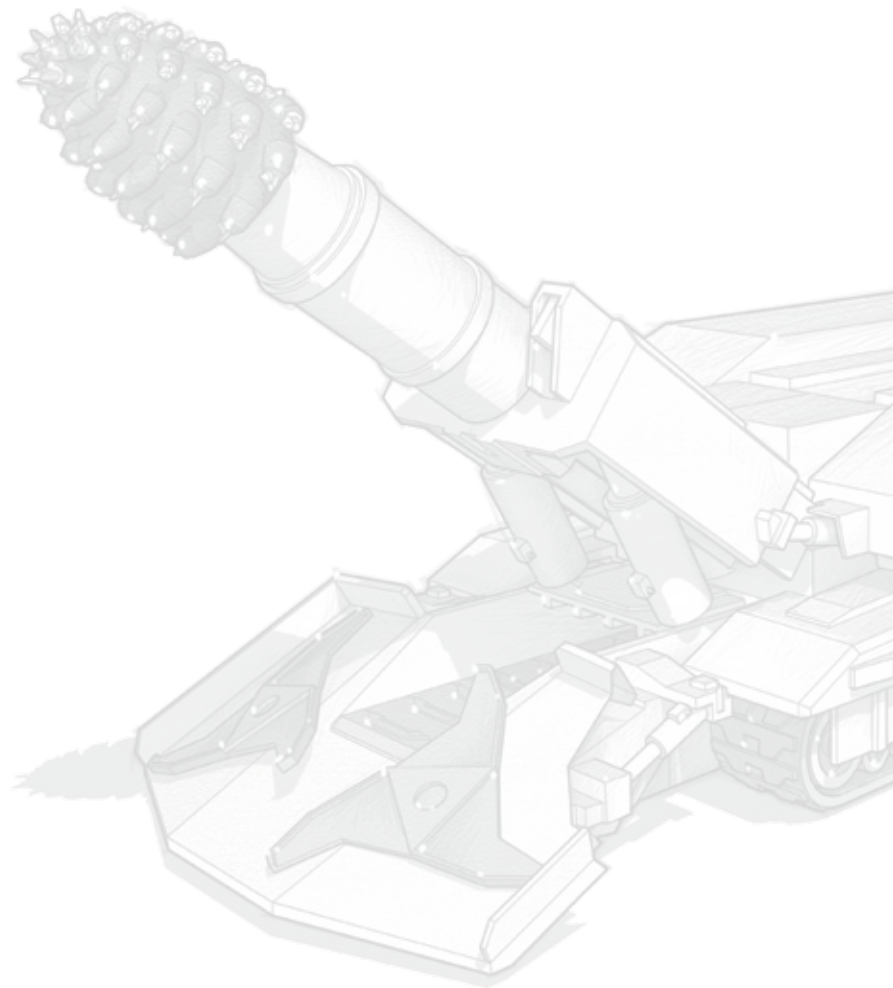
End-to-end service.

With five sales offices in Germany, 14 subsidiaries worldwide and around 30 expert partner companies, HAWE Hydraulik is always ready to help.

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, maintenance/service on-site

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



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