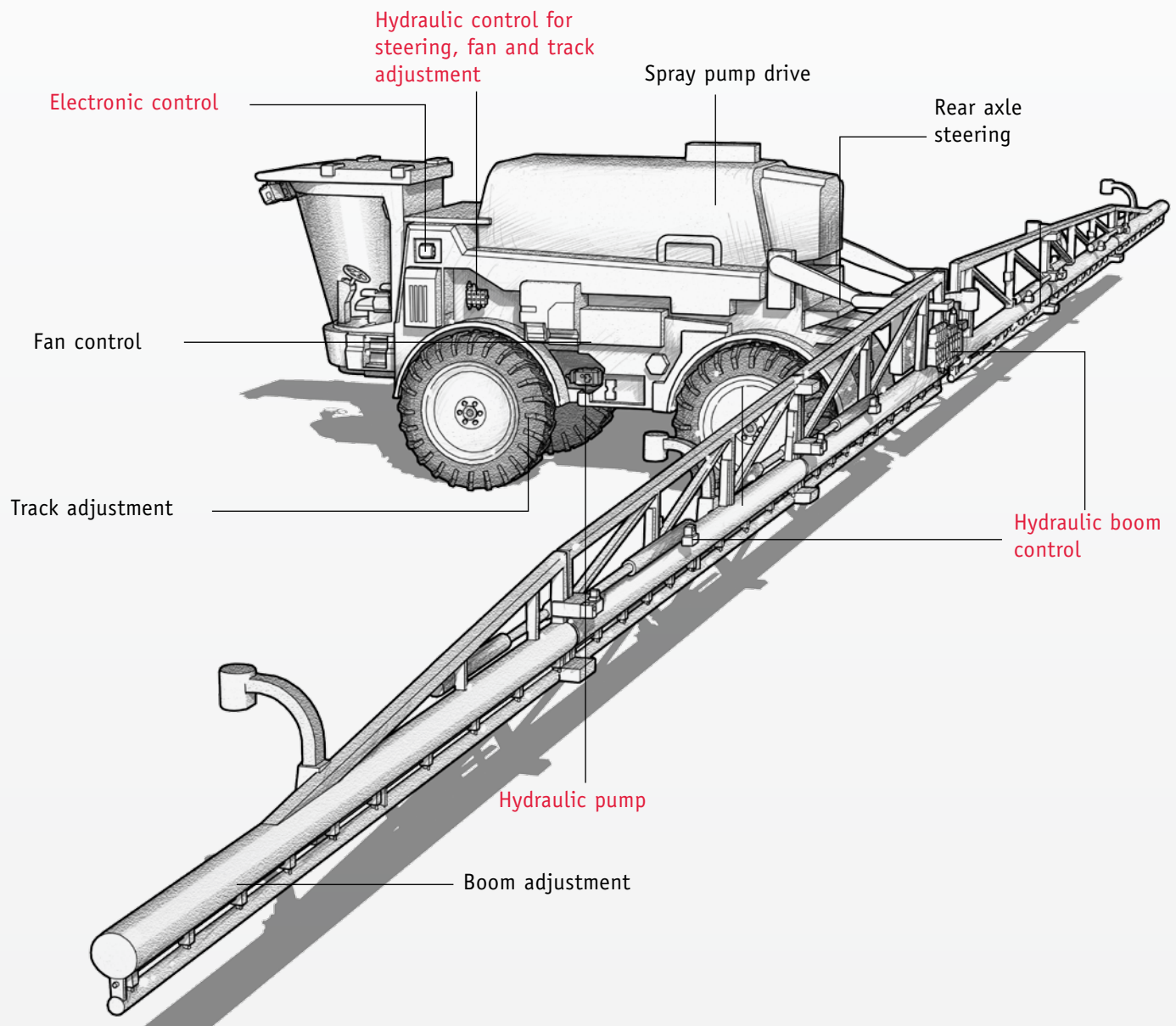


Crop protection and productivity that go hand in hand.



Every crop, growth phase and field configuration poses different challenges when it comes to the use of crop protection equipment. A gauge adapted to these requirements helps to keep the most heavily trafficked and therefore least fertile zones of the field as small as possible. A boom that is as wide as possible and which precisely follows the contours of the ground, ensures high acreage performance and minimizes pesticide use. Thanks to their high power density, hydraulic controls not only deliver precise results but are also extremely user friendly.

SOLUTIONS FOR A WORLD UNDER PRESSURE.

HAWE
HYDRAULIK

HAWE Hydraulik: Absolute precision in crop protection.

A key requirement.

Whether attached or self-propelled, during transport, field sprayers need to be as compact as possible, but once on the field, they need to offer the width required to apply pesticides or liquid fertilizer. In order to achieve this flexibility, the boom folds in on itself, and thanks to hydraulic controls, it can be extended outwards or retracted inwards quickly and easily. The height and angle adjustment of the boom sprayer is particularly important to ensure a precise and carefully metered application – continuous adaptation to the contour of the ground reduces pesticide use and protects the plants. Different row crops and tramline systems require different gauges, and these can be adjusted either manually or, for even greater convenience, hydraulically.



Picture: Dusan Kostic - Fotolia.com

HAWE Hydraulik: Precise controls tailored to your needs.

Whatever your requirements when it comes to hydraulic functions, our valve bank has the perfect solution – from accurate, proportional control of the gauge adjustment mechanism, which is easily operated from the cab, to precise slope adjustment, which is constantly monitored by ultrasound sensors and corrected automatically. HAWE Hydraulik also offers a seated valve solution for retracting and extending the boom and raising it for travel on roads – this holds the boom

in position with zero leakage and without additional check valves. The direct combination of all functions in a single valve bank provides a compact, high-performance control system. For a seamless hydraulic solution look no further than HAWE Hydraulik's efficient piston pumps and electronic controls.

The power of teamwork.

HAWE Hydraulik is the perfect partner for agricultural and forestry machinery. We offer fully integrated solutions at every stage from designs and manufacture through to the start of operations, drawing on over 60 years' experience. As such, you can enjoy high efficiency combined with excellent flexibility.



Picture: Tyler Olsen - Fotolia.com

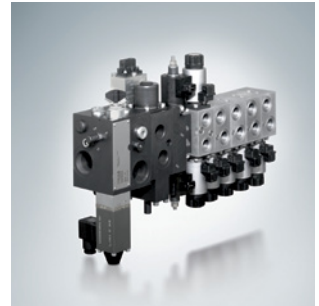
Innovations for field sprayer design.

HAWE Hydraulik offers reliable, durable products with state-of-the-art design. The sophisticated modular system enables you to combine the elements you need in the most effective, cost-efficient way for minimum overall weight. A selection from our product range:

Spool valve and seated valve technology combined:

Flexible combination of proportional or on/off directional valve sections coupled with zero-leakage seated valve sections in one valve bank. The right valve type for each function is selected from the modular system and easily flange-mounted.

- Operating pressure (p_{\max}): 250 bar
- Flow rate (Q_{\max}): 120 resp. 20 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



Zero-leakage positioning:

The 2/2- and 3/2-way directional seated valves type BVE as a cartridge valve can be combined with the proportionnl directional spool valve type PSL or directly installed at the cylinder as a decentralized control. The zero-leakage design ensures keeping the position safely. All ports are equally pressure resistant due to the internal pressure compensation.

- Operating pressure (p_{\max}): 400 bar
- Flow rate (Q_{\max}): 70 lpm



Efficient hydraulic fluid supply:

The energy-efficient axial piston pump type V40M generates the necessary pressure and flow rate, continually adapting these to the current requirements. Various nominal sizes, controls and drive options offer maximum flexibility while minimizing space requirements.

- Operating pressure(p_{\max}): 250 bar
- Geometric displacement (V_g): 46 cm³/rev.



Decentralized electronic control unit:

The flexible CAN node type CAN-IO 14 is a very compact and competitive controller for hydraulic applications. It can be used as CAN-Bus-Slave in combination with a PLVC or CAN-PSL or stand-alone with a user programmed C-program. Since the unit has protection class IP 67 and is designed for a temperature range from -40°C to 85°C, users of mobile machines can rely on it functioning perfectly even in harsh outdoor environments.



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.

