

HORSCH and North America

A STORY OF INNOVATION, GROWTH AND PARTNERSHIP

With deep roots in farming, the Horsch family has been ahead of its time. In the 1960s, the family pioneered farming without a plow, an approach that was groundbreaking in Europe at the time. This forward-thinking mindset created one of the most innovative agricultural equipment manufacturers in the world.



HORSCH LLC plant – Mapleton, ND. (2024)

A Dream That Took Root in America

From a young age, Michael Horsch, the eldest son of a German farming family, dreamed of exploring North American agriculture. In the late 1970s, he turned that dream into reality, working on farms across the United States. It was here that he discovered his passion for no-till farming and high-performance machinery – an experience that would shape both his career and the future of HORSCH.

Upon returning to Germany, Michael, who was inspired by American agriculture and supported by his family, created his first air seeder with a large central seed tank. This development was followed by the creation of a self-propelled seeder called the Terra-Trac, an innovative three-wheel tractor. These groundbreaking projects led to the founding of HORSCH Maschinen in 1984.

Michael's siblings shared his passion for innovation and agriculture. His brother, Philipp, after three years practical farming experience in Germany, worked one year in the late 1980s in the USA as well, volunteering at Mennonite Central Committee in Pennsylvania. During this time he also was able to follow his agricultural farming interests and was deeply impressed by the professionalism and advanced technology in American agriculture. Inspired by what he saw, he joined Michael at HORSCH Maschinen in 1990.



The self-propelled seeder, Terra-Trac. (1984)



Photo of Michael Horsch's USA visa application. (late 1970s)

From Europe to the World

The 1980s and 1990s were transformative decades for both HORSCH and the European agricultural industry. Drawing inspiration from North America, the company focused on developing large-scale, high-performance equipment – a bold move that challenged European norms. When the Iron Curtain fell in 1989, vast Eastern European farms needed precisely the kind of high-capacity equipment HORSCH had been developing. As one of the few manufacturers prepared for this shift, HORSCH quickly gained the trust of large-scale farmers, establishing its reputation as a leader in agricultural technology.

With this success, the company expanded its reach, bringing innovative solutions to farmers across five continents in more than 45 countries. Today, HORSCH operates in all major cereal and row crop growing regions, providing specialized equipment for seeding and planting, soil preparation, and plant protection.

A New Chapter in North America

Over 25 years ago, HORSCH's journey in the United States began. Then in 2013 the company took a major step by building a production facility in North Dakota. This marked the beginning of a new era – one that would bring HORSCH closer to North American farmers and enable the company to develop solutions tailored to their unique conditions.

In 2023, Lucas Horsch, the eldest son of Michael and Cornelia Horsch, moved to North Dakota with his family to lead HORSCH LLC. Lucas, a farmer for nearly a decade, had previously managed the HORSCH research and development farm in the Czech Republic, alongside his brother, Constantin Horsch. Before relocating to the USA, he managed planter research and development – an area of strategic importance for the company.

Now at the helm of HORSCH LLC, Lucas is focused on strengthening relationships with North American farmers and dealers. Through open dialogue and collaboration, he is driving the expansion of HORSCH's product portfolio and dealer network, reinforcing the company's role as a major player in agricultural technology. As part of these efforts, HORSCH invested in a new facility dedicated to training and marketing, called AgTec, located in Cottage Grove, Minnesota. This new investment aims to further enhance connections with partners and farmers by providing increased resources and support.



HORSCH CA warehouse –



Joker RX – high speed disc exclusively developed for the North American market.



Horsch sons with their father. (early 1990's)



Lucas Horsch at a field day in Mulberry, IN. (2024)



HORSCH AgTec – Cottage Grove, MN. (2025)

A Commitment to Farmers, Innovation, and the Future

Wherever HORSCH operates, its equipment is recognized for productivity, reliability, and simplicity – values that stem from the Horsch family's deep passion for agriculture and its commitment to learning from farmers around the world. By staying close to the people who work the land, HORSCH continues to develop advanced solutions that anticipate the needs of modern agriculture.

With a strong foundation in North America, an unwavering focus on innovation, and a vision for the future, HORSCH is not only growing its presence – it's creating the next generation of agricultural technology.

As a global leader in agricultural technology, HORSCH continues to expand its impact through innovation and deep connections with farmers. With annual revenue exceeding \$1 billion, the company operates six production facilities worldwide, manufacturing and developing equipment tailored to the needs of each region. HORSCH's diverse product portfolio spans multiple categories, ensuring that farmers have access to solutions designed specifically for their local conditions. By working closely with farmers and integrating their feedback into product development, HORSCH remains committed to delivering cutting-edge, high-performance machinery that drives efficiency and productivity in modern agriculture.

Leeb VL

Variable track width and height adjustment



With the HORSCH Leeb VL we respond to the requirements for more clearance and flexible track widths. Depending on the crop and season the machine can flexibly adapt to the operational conditions and the challenges to guarantee our customers and their crops utmost efficiency. The Leeb VL has especially been developed for crops that require a very high clearance. Especially in corn and sunflowers the clearance of up to 80" helps to protect the crops and to allow for a on-time plant protection. To be able to react to different row widths, the track can be adjusted continuously from 118" to 161".

Depending on the conditions of use and the farm structure, the farmer can choose between tank with 2140 gal capacity made of polyethylene or stainless steel. A stainless steel tank is recommended especially when a high quantity of liquid fertilizer or aggressive mixtures are used. The result is an optimum cleaning result in combination with the continuous inside cleaning.

Due to the option to adapt the control terminal in the cab to the requirements of the operator – depending on the requirement and preferences, easy operation is possible. The joystick, developed especially for a self-propelled crop care sprayer, shows all necessary functions clearly and also allows the driver to freely assign the buttons to be able to adapt the machine even more individually. All these solutions help to provide the driver with a comfortable working environment thus increasing efficiency and performance. The well-known components that make a HORSCH Leeb sprayer unique remain the same. The powerful rotary pump with 265 gal/min ensures highest suction rates and short filling times. Due to the active BoomControl control system, the liquid is then placed without drift and precisely on the target.

- Optimum boom position even at high operational speeds due to individual wheel suspension and parallel suspension of the boom
- Practical control terminals and an ergonomic joystick for an intuitive operation, perfectly adapted to the application requirements
- Highest clearance of up to 80" in field mode
- Continuous inside cleaning CCS Pro with electrical valves and external control terminal, spraying and cleaning functions can be controlled in the cab



Comfort cabin for optimal working conditions



Highest clearance and a crop-protecting underbody

Basic

Water system Basic

The equipment line Basic the HORSCH Leeb VN and VL are equipped with a 265gal/min rotary pump (filling connection 3" through 5-way valve, 2" lines on the suction side). Suction and pressure side are operated via manual multi-way valves. The

spraying pressure is monitored with a pressure sensor and a pressure controller adapts the flow rate. The tank is equipped with an electronic level indicator. A digital level indicator is available as an option in the terminal.

- Rotary pump with a capacity of 265 gal/min
- Filling connection 3" through 5-way valve, 2" lines at the suction side
- Pressure sensor for monitoring the spraying pressure and pressure controller to adapt the flow
- Suction and pressure side can be operated manually
- Electronic level indicator at the mixture tank



Water system Basic

CCS

ContinuousCleaningSystem

The CCS water system guarantees a continuous inside cleaning of tank, lines and boom. The additional CCS piston diaphragm pump for cleaning pumps clean water into the spray lines, the spraying pump removes the residual mixture from nozzles and the spray lines instead of diluting it. This allows the system to be cleaned quickly, thoroughly and with an optimized water

- Safe and quick cleaning by displacing the mixture from the lines
- Quick cleaning process of the sprayer without having to get off
- Complete control of the cleaning process in the cab
- Electronic level indicator at the mixture tank with automatic switch-off
- Quick and thorough cleaning with optimized water use

consumption – without having to get off the machine directly from the cabin – and the sprayer is completely cleaned when leaving the field. To fill the machine, a powerful rotary pump with Load Sensing is used with manual operation for the suction and pressure side.



Water system CCS

CCS Pro

ContinuousCleaningSystem Pro



ContinuousCleaningSystem Pro (CCS Pro)

In addition to the characteristics of the CCS system, for the CCS Proversion several cleaning programs can be started easily and comfortably at the push of a button in the cab:

- Complete cleaning: flushes injector line via the filter to the boom – completely with fresh water and then continues with the continuous inside cleaning (CCS) for mixture tank and boom.
- 2. Dilution: dilute the spraying mixture in the desired ratio without
- 3. Intensive washing program: recommended for an extra thorough cleaning, e.g. in case of changing between different
- 4. Boom cleaning: automatic rinsing of the boom, e. g. if working has been interrupted for several hours
- Background cleaning: intelligent, continuous inside cleaning that cleans the inside wall of the barrel with fresh water while spraying. This prevents deposits on the tank wall.

The pressure control in the system is carried out via the pump speed. The pump only conveys the amount of liquid that is required for spraying plus the defined quantity for the agitator and thus used especially energy-saving. Fresh water as well as mixture tank are equipped with an electric level indicator for automatic washing programs and an automatic switchoff.

- Continuous inside cleaning with several cleaning and rinsing programs, can be operated comfortable in the cab
- Pressure sensors for pump, agitator, inside cleaning and boom, suction and pressure side electrically controlled
- Operation with a large external terminal with all important induction functions
- Quick cleaning process of the sprayer without having to get off
- Relaxed filling process due to the standard automatic two filling limits
- Automatic filling level dependent agitator performance and switch-off



External control terminal CCS Pro

Water system – Basic – Leeb VL

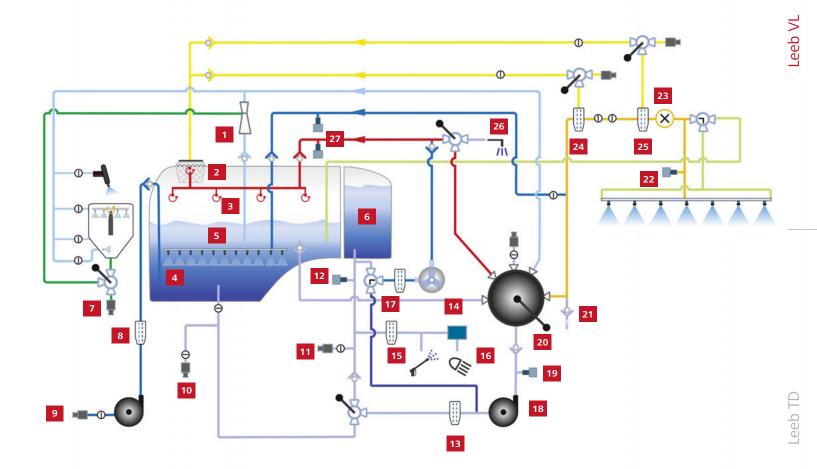
22 23 24 25 27 3 11 12 13 14 15 16 16 17

- 1 Injector
- 2 Dome sieve
- 3 Spraying mixture tank
- 4 Inside cleaning
- 5 Agitato
- 6 Fresh water tank
- **7** Filling sluice
- 8 Filter
- 9 Direct filling

- 10 External filling
- 11 Filling fresh water
- 12 Pressure sensor
- 13 Fresh water filter
- 14 Electric pump
- 15 High-pressure cleaner
- 16 NightLight cleaning
- **17** Filter
- 18 Rotary pump

- **19** Pressure sensor
 - 20 Manual 5-way valve
 - 21 Exhaust function
 - 22 Pressure sensor
 - 23 Flow meter
 - 24 1. pressure filter
 - 2. pressure filter
 - Outside cleaning
 - 27 Pressure sensors

Water system – CCS – Leeb VL



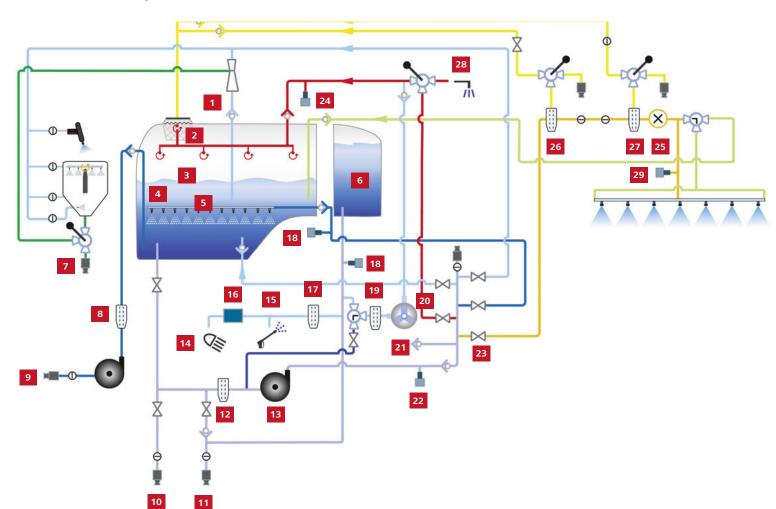
- 1 Injector
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- 3 Inside cleaning
- 4 Spraying mixture tank
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- 6 Fresh water tank
- **7** Filling sluice
- 8 Filter
- 9 Direct filling

- External filling
- 11 Filling fresh water
- 12 Pressure sensor
- 13 Filter
- 14 Electric pump
- 15 High-pressure cleaner
- 16 NightLight cleaning
- 17 Filt
- 18 Rotary pump

- **19** Pressure sensor
- 20 Manual 5-way valve
- 21 Exhaust function
- 22 Pressure sensor
- 23 Flow meter
- 24 1. pressure filter
- 25 2. pressure filter
- Outside cleaning
- Pressure sensors

General equipment

Water system – CCS Pro – Leeb VL



- 1 Injector
- 2 Dome sieve
- 3 Inside cleaning
- 4 Spraying mixture tank
- 5 Agitato
- 6 Fresh water tank
- **7** Filling sluice
- 8 Filter
- 9 Direct filling
- 10 Suction filling

- 11 Filling fresh water
- 12 Suction filter
- 13 Rotary pump
- 14 NightLight cleaning
- 15 High-pressure cleaner
- 16 Electric pump
- 17 Fresh water filter
- 18 Pressure sensors
- 19 Filte
- 20 Piston diaphragm pump

- **21** Exhaust function
- 22 Pressure sensor
- 23 Electric switch unit
- 24 Pressure sensor
- 25 Flow meter
- 26 1. pressure filter
- 27 2. pressure filter
- 28 Outside cleaning
- 29 Pressure sensor

CONDITIONS OF USE



- Variable clearance: The clearance of the Leeb VL is 61" in standard mode. Due to the hydraulic or mechanical height adjustment, the VL can be adjusted comfortably in the cabin to a clearance of up to 80".
- Variable track: The track width can also be adjusted comfortably in the cab from 118" to 161".
- The pneumatic chassis in combination with the comfortable cabin guarantees a driving experience comparable to a car.
- Efficiency: Due to the active boom control system
 BoomControl, operational speeds up to 20 mph can be
 achieved with an optimum wetting and drift reduction.
 In combination with the 10" nozzle spacing the result is
 a powerful self-propelled sprayer.
- Innovations like the pulse width modulation system
 PrecisionSpray for more possibilities in the plant protection sector.



Theodor Leeb

Highest clearance and flexible track widths, unrivaled with regard to driving comfort and stability – these were the parameters for the development of the Leeb VL. Due to the modular design of the chassis, the farmer can decide which equipment's suit his requirements best. The result is a self-propelled sprayer that can be adapted individually to the requirements of the farm.

Ergonomic operating concept

Innovative operation with the highest demands on the workplace

The cabin of the HORSCH self-propelled machine offers numerous comfort features as well as an innovative and wellthought-out control concept.

Machine, driving, and spraying data can be displayed and individually configured via the bright and high-resolution 12" A-pillar display. Camera views and joystick programming are also shown here. The display is operated using buttons on the armrest for a comfortable seating position. The self-developed control lever features 30 freely assignable buttons on different levels and an ergonomic cork handle. With the new "Sprayer Ready" softkey, circulation, agitator, all-wheel steering, and BoomControl are activated with just one press of a button.

The ergonomic step automatically folds in as soon as the vehicle moves and guickly folds out again when the operator stops the vehicle. This ensures that the ladder is always retracted during spraying operations, preventing crop damage.

The large glass cabin offers excellent all-around visibility and plenty of space for long workdays. A comfortable footrest helps maintain a relaxed position behind the wheel at all times. The integrated DAB radio with Bluetooth function and hands-free system is conveniently operated via the armrest. For mobile phones, there is an integrated holder with wireless charging functionality. Numerous storage compartments, an actively cooled 8 gal cooler, and automatic climate control provide comfort during long workdays. For user protection, Category IV cabin filtration is preequipped and fully integrated into the cabin. The air conditioning and control of up to 18 LED work lights for monitoring work quality are integrated into the roof console.

Optionally, a pneumatic 4-point cabin suspension and a protective bar for the bumper are available.

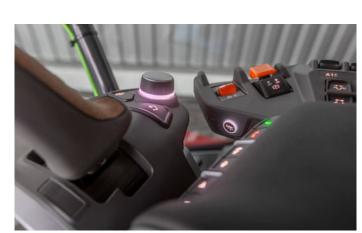
- Automatic air conditioning/heating, operation of air conditioning function and lighting integrated in roof rail
- Control lever with multiple assignable buttons integrated in ergonomic control armrest
- 12" display in A-pillar with customizable main page, machine, driving and spraying data
- Armrest with new machine functions, e.g. "Sprayer Ready" pump start + BoomControl
- Pre-fitting for automatic Cat. IV cab filtering (automatic control, fully integrated into the cab roof and roof rail)



Comfortable operation of the functions compactly integrated into the armrest



Ergonomic control lever with multiply assignable buttons



Safe operation of the A-column display: rotary/push functions



Standard 12" A-column display with freely assignable display







Cabin with large glass surfaces for optimum circumferential visibility

Cabin Basic

Front cab with optimum overview and excellent visibility

The new cab comes with numerous standard features, including a mobile phone holder with induction charging, a footrest, storage compartments, and a cooling compartment. For long days, there's automatic air-conditioning with heating, and the air-conditioning and lighting controls are in the roof strip. The new control lever has configurable keys and an ergonomic cork handle. The cab roof also includes pre-fitting for the automatic Cat. IV cabin filter system.

The Basic option comes with a fabric seat with adjustable options, a passenger fabric seat, and a double cup holder. Sunblinds are mounted on the front and rear windows.

- Fabric seat with various adjustment options
- Double cup holder for long working days
- Sunblind's at the front and rear window



Cabin Basic with comfortable entry



Practical cup holder



Comfortable passenger seat with fabric cover

Cabin Pro

Front cab with optimum overview and excellent visibility

Numerous features are already installed in the standard equipment of the new cab. There now is a mobile phone holder with an induction charging function, a footrest, numerous storage compartments and a cooling compartment. For a long working day there is an automatic air-conditioning with heating and the operation of the air-conditioning function and lighting is integrated into the roof rail. The new control lever offers several configurable keys and an ergonomic cork handle shell. To protect the user, the pre-fitting for the automatic Cat. IV cab filter system is completely integrated in the cab roof. In addition to the basic equipment of the cab the equipment option Pro comes with a swiveling comfort leather seat with seat heating and ventilation as well as a passenger leather seat. A triple cup holder is mounted for long working days. Sunblind's are mounted on the front, rear and side windows. In addition, there is a floor mat and a terminal attachment bar



Comfort leather seat for fatigue-free working

- Swiveling comfort leather seat with seat heating and ventilation
- Triple cup holder for long working days
- Sunblind's at the front, rear and side window
- In addition, there is a floor mat and a terminal attachment bar



Cab Pro with comfort leather seat and leather passenger seat



Velours floor mat



Large cup holder



Standard footrest



Storage space under the driver seat with optional safety package



Spacious cooling compartment as standard

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PowerGear wheel drive

Wheel gear intelligent drive

The PowerGear standard drive allows for optimum performance in the field and on the road. Equipped with standard anti-slip control (ASR) and all-wheel drive, the machine easily manages any terrain. The degree of efficiency that has been optimized for the use in the crop care sector with larger wheel motors at the rear axle and the corresponding higher driving power distributes drive torques in the speed range 0-35 mph powerfully and efficiently.

- Degree of efficiency in the main working range has been specially optimized for the use in the crop care sector
- Selective traction control for every wheel
- Powerful drive even in steep terrain and at slopes
- Infinitely variable drive from 0 35 mph

HighPowerGear wheel drive

Intelligent all-wheel drive for highest requirements

For farmers who want to or have to push the limits, we offer the HighPowerGear drive: more driving power when starting, more reserves in wet conditions and more torque in the low speed range for highest requirements in the field. HighPowerGear shows its strength especially with low operational speed and extreme slopes of up to 50 %. When driving slowly below 5 mph or if the machine is on the verge of getting stuck, HighPowerGear provides the required power reserves to manage the most difficult situations.

- Can cope with slopes up to 50 %
- Maximum torque at the wheel for highest requirements in the field
- Selective traction control for every wheel
- Degree of efficiency in the main working range has been specially optimized for the use in the crop care sector
- Infinitely variable drive from 0 35 mph



The HighPowerGear wheel drive provides the required power reserves to manage the most difficult situations

TrackControl

Adapting the track width in the cab

The hydraulic flange adjustment TrackControl allows for a reliable and comfortable adjustment of the track width of the self-propelled sprayer HORSCH Leeb VL.

The track width can be adjusted infinitely from 118" to 161" to react to any crop and row width. Tramlines can be avoided and stability and driving characteristics improve while spraying.

- Hydraulic adjustment of the track width in the cab
- Adaption to different crops and row widths
- Track width from 118" to 161"



Flexibility and efficiency

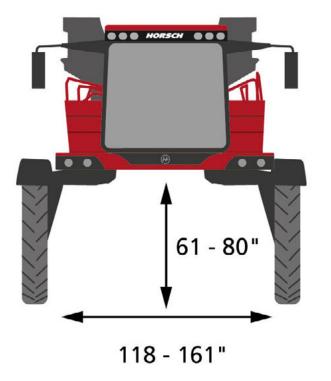
ClearanceControl

Hydraulic height adjustment ClearanceControl

With ClearanceControl the clearance can be adjusted hydraulically and gradually to keep up the optimum spraying distance and to protect the crops during operation. The clearance can be adjusted comfortably from 61" to 80" directly in the cab. The sprayer can be adapted quickly and efficiently to changing crop and growth heights or can be adjusted in an optimum way for road transport.

- Infinitely variable adaption of the clearance
- Can be operated in the cab comfortably, quickly and efficiently
- Clearance can be adapted from 61" to 80"
- Highest clearance in the market

380/105 R 54



Track widths from 118" to 161"

4-

HillControl

With the HillControl equipment, the rear axle of the self-propelled HORSCH Leeb plant protection sprayer is controlled separately. This ensures safe maneuverability on slopes even under difficult conditions. The slipping of the machine is actively overridden and the aggressiveness of the steering is continuously adjusted.



The active hillside counter-steering system HillControl compensates drift on side slopes and ensures a directionally stable following of the rear axle.

Operation is incredibly simple: activate HillControl and, if necessary, adjust the steering slightly to suit the conditions. The system stores the values until the next time the linkage is folded in – in any direction of travel across the entire field.

- Track-true self-steering of the rear axle on the slope
- Active slope counter-steering, infinitely adjustable aggressiveness
- Simple operation, stored values are recalled in any direction of travel
- Safer driveability on side slopes under demanding conditions

HillControl Pro

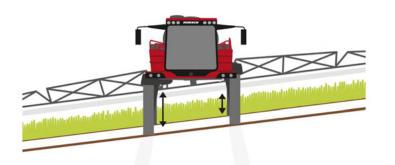
Active levelling of the vehicle chassis on the side slope

HillControl Pro takes automatic side slope compensation to the next level.

In combination with ClearanceControl and HillControl on the Leeb VN and Leeb VL self-propelled vehicles, the separate HillControl Pro activation makes it possible to bring stability to the vehicle chassis on the side slope. For this purpose, not only is the rear axle of the vehicle actively controlled, but the vehicle chassis is also adapted to the side slope by the path of the

ClearanceControl hydraulic height adjustment.

This not only provides comfort in the cab and for the workplace, but also stability on the side slope. The additional function runs in the background – completely automatically, responsively and actively.

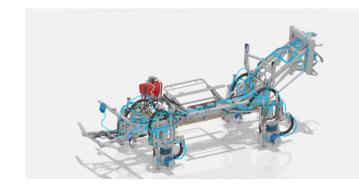


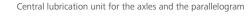
- Active levelling of the vehicle chassis on the side slope
- In combination with ClearanceControl, the vehicle chassis is permanently adjusted to the side slope
- Comfortable workplace in the cab and optimum center of gravity of the machine on the slope
- Only in combination with HillControl: true tracking of the rear axle on the side slope

Central lubrication unit

With the PowerFill filling pump, the sprayer can be filled directly in the field with unfolded boom within a very short time. The mixture that has already been mixed is pumped directly from a mixer tank to the mixture tank with up to 264 gal/min and filling times are minimized.

- Reduces the maintenance requirements and maximizes the ease of use
- Lower idle time
- Optimum lubrication







Tank of the central lubrication unit

PowerFill filling pump

Filling connection 3" with PowerFill filling pump

The central lubrication unit facilitates and automates the maintenance and care of the chassis, the telescopic axles and the parallelogram. This reduces maintenance requirements and idle times.

- Reduces journey, idle and filling times
- Powerful pump with a filling rate of up to 264 gal/min
- Filling in the field with the unfolded boom is possible
- 3" filling connection for pre-mixed mixture



Filling in the field with unfolded boom

HillControl Pro additionally regulates the clearance continuously and individually for each side to always keep the chassis in a horizontal position.

Terminal technology & steering system

Tractor terminal 1060 or 1260 with steering system

The new terminal generation Trimble 1060 or 1260 allows for controlling the machine at top level. Due to the high resolution and the sophisticated user navigation, complex machine functions can be operated comfortably. The high efficiency and the large (working) memory allow for a smooth handling of large data quantities or application maps. Thus, it becomes the perfect all-rounder for machine operation.

Combined with a completely integrated steering system with receiver, the application of your self-propelled crop care sprayer becomes even more precise and the driving comfort is maintained even on long working days. The activation VariableRate completes the precision solutions when working with application maps.



High-resolution Trimble terminal with large screen

- Intuitive machine operation via the high-resultion Trimble Terminal 1060 or 1260
- Optional extension by a second terminal or optional control via different approved external terminals
- Fully integrated steering system with receiver Trimble Nav 900
- Additional activation of VariableRate for site-specific variable application by means of application maps



Tractor terminal 1060 or 1260 with steering system



Receiver Trimble Nav 900

Camera system

Cameras for monitoring machine functions and the traffic area

Up to three high-resolution cameras can be installed at the factory and transmit their images to the screen of the 12" A-pillar display in the cab. The display of the camera images can be adjusted there at any time and adapted to the current requirements. The reversing camera is mounted on the boom center section. Its image is automatically zoomed to full screen size when reverse gear is engaged and shows the area behind the vehicle to make maneuvering easier. The lens with a view of the right front wheel helps the driver to keep precisely in lane and avoid damage to the crop. The camera on the NightLight holder focuses on the nozzles behind the vehicle when the boom is folded out and allows the function of the nozzles hidden behind the tank to be kept in view at all times.

- Integrated system with up to three cameras
- Rear view camera, camera with view of the right front wheel and camera lens for nozzle control
- Display of the different viewing angles via the standard A-pillar terminal
- Wide viewing angle and high light sensitivity for optimum visibility even in changing light conditions



Rear view camera for monitoring the area behind the vehicle



High-resolution, automatic display of the rearview camera in the A-column display



Camera integrated into the wheel housing



Camera lens with a view of the right front wheel

EQUIPMENT

TECHNICAL SPECIFICATIONS







14 gal stainless steel induction hopper incl. additional shock nozzle

Hydraulically operated high-pressure cleaner

Hose drum for outside cleaning





Wheel housing for sensitive crops

Pneumatic 4-point cabin suspension

Leeb VL	5.300 VL	6.300 VL	8.300 VL	6.460 VL	8.460 VL
Mixture tank nominal volume (gal.)	1440	1700	2140 (stainless steel only)	1700	2140 (stainless steel only)
Water-cooled engine	FPT (Fiat Powertrain Technologies) N67	FPT (Fiat Powertrain Technologies) N67	FPT (Fiat Powertrain Technologies) N67	FPT (Fiat Powertrain Technologies) Cursor 9	FPT (Fiat Powertrain Technologies) Cursor 9
Nominal power (for rpm) (HP)	288 (2200)	288 (2200)	288 (2200)	419 (2100)	419 (2100)
Maximum power (for rpm) (HP)	310 (2000)	310 (2000)	310 (2000)	460 (2000)	460 (2000)
Cylinder number/cooling	6 / water / turbo with charge-air cooling	6 / water / turbo with charge-air cooling	6 / water / turbo with charge-air cooling	6 / water / turbo with charge-air cooling	6 / water / turbo with charge-air cooling
Cylinder capacity (cm³)	6700	6700	6700	8700	8700
Max. torque (Nm/rpm)	1160 / 1500	1160 / 1500	1160 / 1500	1800 / 1500	1800 / 1500
Control	Electronic EMR	Electronic EMR	Electronic EMR	Electronic EMR	Electronic EMR
Tank capacity diesel/AdBlue (gal.)	approx. 119 / 12	approx. 119 / 12	approx. 119 / 12	approx. 190 / 19	approx. 190 / 19
Emission standard	Stage V	Stage V	Stage V	Stage V	Stage V
Working widths (ft. in.)	110' - 160'	110' - 160'	110' - 160'	110′ - 160′	110′ - 160′



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Leeb TD

Intelligent two-tank concept with optimum drawbar load distribution



The HORSCH Leeb 12 TD is designed to meet a wide range of demands for a state-of-the-art crop protection sprayer. It combines a large tank capacity with excellent maneuverability, an intelligent drawbar load control system to address weight distribution issues on tandem axle sprayers, and all the benefits of a Leeb sprayer.

With a 3,200 gal tank capacity, the Leeb 12 TD is ideal for farms that need to cover long field distances and lack the necessary logistics for frequent refills or for those applying large volumes of water or liquid fertilizer. A key advantage of the Leeb 12 TD is its ability to regulate liquid levels in two independent tanks separately. The liquid is applied in sequence – first emptying the rear tank, then the front tank – ensuring consistent drawbar load on the tractor's rear axle. This allows smaller tractors to be used with the Leeb 12 TD without needing additional ballast, reducing soil compaction and improving maneuverability. The tandem axle system features a rear axle with a maximum steering angle of 28°, ensuring excellent maneuverability. To minimize tracks and protect the soil, the Leeb 12 TD is equipped with a specialized axle steering system: the sprayer's front axle follows the tractor's rear axle, while the sprayer's rear axle follows the tractor's front axle. Additionally, the advanced BoomControl system for active boom stabilization comes standard on the Leeb 12 TD.

- Intelligent, independent control of the two mixture tanks for optimized drawbar load
- Reduced drift and high operating speeds with active boom control and low target area spacing

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- High efficiency with a 3,200 gal mixture tank
- Large tires up to 86" for maximum soil protection and low horsepower requirements



Outstanding manoeuvrability and stability with large diameter tires and low centre of gravity



Large clearance with tires up to Ø 86"

low centre or gravity

CONDITIONS OF USE



- Two-tank concept improves traction in difficult terrain by emptying the rear tank first, then the front. On slopes, this prevents the spraying mixture from shifting backward and causing traction loss.
- Heavy-duty 44,000 lbs tandem axle for maximum stability. Available in two options: a passive following axle or an actively steered tandem axle for precise track following and enhanced crop protection.
- Active boom control system (BoomControl) combined with 10" nozzle spacing ensures optimal application and reduced drift.
- High-performance 265 gal/min pump for efficient spraying and fast filling.



Theodor Leeb

The development goal for the 12 TD was to enhance the well-known efficiency of Leeb sprayers with an even larger tank capacity. With a 3,200 gal capacity, the TD provides ample field capacity, especially for farms covering long distances or requiring high water application rates. To maintain consistent drawbar load in complex application conditions, the two tanks and their contents are managed intelligently.

ContinuousCleaningSystem Pro

In addition to the characteristics of the CCS system, for the CCS Pro version several cleaning programs can be started easily and comfortably at the push of a button in the cab:

- 1. Complete cleaning: flushes injector line via the filter to the boom completely with fresh water and then continues with the continuous inside cleaning (CCS) for mixture tank and boom.
- 2. Dilution: dilute the spraying mixture in the desired ratio without much effort
- 3. Intensive washing program: recommended for an extra thorough cleaning, e.g. in case of changing between different crops
- 4. Boom cleaning: automatic rinsing of the boom, e. g. if working has been interrupted for several hours
- 5. Background cleaning: intelligent, continuous inside cleaning that cleans the inside wall of the barrel with fresh water while spraying. This prevents deposits on the tank wall.

The pressure control in the system is carried out via the pump speed. The pump only conveys the amount of liquid that is required for spraying plus the defined quantity for the agitator and thus used especially energy-saving. Fresh water as well as mixture tank are equipped with an electric level indicator for automatic washing programs and an automatic switchoff.

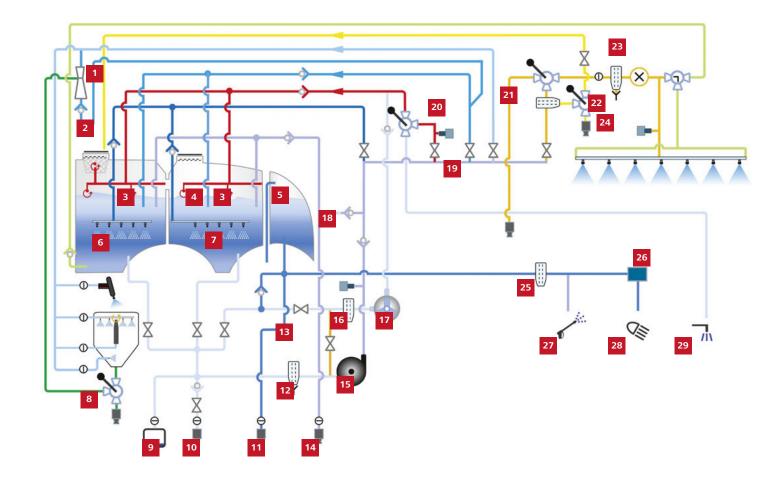


- Continuous inside cleaning with several cleaning and rinsing programs, can be operated comfortable in the cab
- Pressure sensors for pump, agitator, inside cleaning and boom, suction and pressure side electrically controlled
- Operation with a large external terminal with all important induction functions
- Quick cleaning process of the sprayer without having to get off
- Relaxed filling process due to the standard automatic two filling limits
- Automatic filling level dependent agitator performance and switch-off



External control terminal CCS Pro

Water system – CCS Pro – Leeb TD



- 1 Injector
- 2 Dome sieve
- 3 Agitator
- Internal cleaning
- 5 Fresh water tank
- 6 Spraying mixture tank 1
- 7 Spraying mixture tank 2
- 8 Filling sluice
- 9 Residual discharge
- 10 Suction filling

- 11 Filling fresh water
- **12** Discharge valve
- 13 Suction filter
- 4 Direct filling
- 15 Rotary pump
- 16 Fresh water filter
- 17 Piston diaphragm pump
- 18 Exhaust function
- 9 Electric switch unit
- 20 Pressure sensor

- 21 1. pressure filter
- 22 2. pressure filter
- 23 Flow meter
- 24 Pressure sensor
- 25 Filter
- 26 Electric pump
- 27 High-pressure cleaner
- NightLight cleaning
- 9 Outside cleaning

9 Outside cleaning

General equipment

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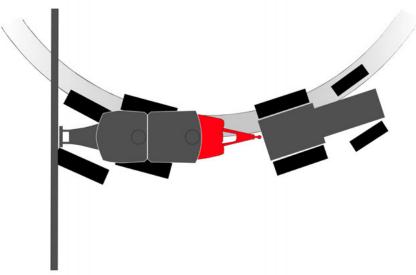
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Active steering

The kingpin steering on both axles ensures a stable linkage position while maintaining high stability. This allows the sprayer to precisely follow the tractor's tracks, significantly reducing track damage. Thanks to its contoured frame construction, the sprayer achieves large steering angles of up to 28°, even with soil-conserving tires up to 86" in diameter. This results in exceptional maneuverability and track stability, even on uneven terrain. In road mode or at speeds above 10 mph, the

steering locks automatically, but can be manually overridden from the cab via joystick for precise control during maneuvering or field operations. When driving straight, the system automatically re-centers. A key innovation is the gyroscope directly on the axle, which eliminates the need for sensors and calibration. This unique, maintenance-free design sets a new benchmark for trailed sprayers.

- Steering knuckle on both axles for precise tracking in tractor tracks, preventing crop damage
- Maximum maneuverability and stability on uneven terrain
- Joystick override from the cab for easy maneuvering
- Gyroscope directly on the axle no calibration needed
- Fully integrated into the machine software



Due to the tapered frame design, a steering angle of up to 28° is possible at the rear axle even with wide tires



Active steering of both axles is integrated in the



Maximum crop protection and exact following



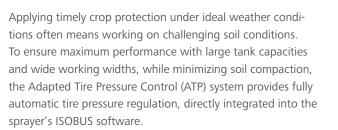
High maneuverability and stability with up to 35" of ground clearance

Adapted Tyre Pressure Control

Fully Software-Integrated Automatic Tire Pressure Control







- Automatic regulation of internal tire pressure
- Seamless integration into the sprayer's ISOBUS software
- No compromises between tank volume, working width, and soil protection
- Always optimal tire contact area for both field and road use



ATP Control – increased contact area at 14 psi tire pressure

This system continuously adjusts tire pressure based on tank fill level, ensuring the optimal tire contact area for both field operations and road transport. As a result, operators no longer have to choose between stability and soil protection – they get both. The full potential of modern tire technology is maximized for efficiency, safety, and sustainability.



Efficient on the road and gentle in the field with ATP Control

Connect & Fold System

Maximum Performance Through Intelligent Application Techniques



Connect & Fold system – suitable for standard droplegs

The Connect & Fold System enables the use of a wide variety of nozzles from different manufacturers, making it especially useful for specialty crops. It also supports under-leaf spraying systems, such as Droplegs, which can be utilized in 20" and 30" row spacing. To ensure guick and hassle-free installation of commercially available systems, a fully integrated folding mechanism is included. This smart design prevents scratches and damage to the spray tank of HORSCH Leeb sprayers, maintaining durability and efficiency in the field.

- Ideal for specialty crops like asparagus and strawberries
- Compatible with a wide range of nozzles from various manufacturers
- Supports under-leaf spraying systems, including Droplegs
- Works with standard Droplegs for 20" and 30" row spacing



Connect & Fold system – suitable for standard droplegs



Systems for underleaf spraying, e.g. droplegs

eosT10 (Pro)

The perfect complement for the machine control system. Provides additional power.



The lean design of the 10" display allows for perfect integration into any tractor cabin.

With the new terminal generation eosT10 you can experience machine control at top level. Due to the high resolution and the sophisticated user guide, even complex machine functions can be operated comfortably. The high efficiency and the large (working) memory allow for a smooth handling of large data quantities or application maps. The terminal, thus, is the perfect all-rounder for the operation of the machine.

- High-resolution 10" terminal for controlling all ISOBUS devices according to ISO 11783
- Reliable and powerful: high-performance hardware combined with intuitive, user-friendly operation in day or night mode
- Straightforward transfer of application maps with the wireless Task Data Exchange
- Various layout options allow for a simultaneous display of several applications – for an optimum overview
- eosT10 and eosT10 Pro one hardware, completed by two licence kits. Precision is always standard for us



By displaying up to 3 widgets in addition to the main working screen, the user can keep track of several applications at the same time

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EQUIPMENT

TECHNICAL SPECIFICATIONS







13.7 gal stainless steel induction hopper incl. additional shock nozzle

Boom lighting

MotionControl to smooth the horizontal movements in the boom wings







Container deposit

Hose drum for outside cleaning

Hydraulically operated high-pressure cleaner

Leeb TD	12 TD
Pump output (gal/min)	265
Empty weight (lbs)	17000 - 24000
Vertical load empty (lbs)	800 - 2400
Max. admissible vertical load (lbs)	8800
Axle load empty (lbs)	8157 - 10800
Max. admissible axle load (lbs)	22000
Total length max. (transport position) (ft. in.)	32' - 39'
Transport width (ft. in.)	8,4' - 9,8'
Transport height (ft. in.)	12,7' - 13,0'
Track widths, mechanically adjustable (ft. in.)	78 / 88 / 120
Road clearance (ft. in.)	2,95'
Mixture tank nominal volume (gal.)	3300
Mixture tank actual capacity (gal.)	3380
Fresh water tank (gal.)	225
Hand wash tank (gal.)	4
Working widths (ft. in.)	120' - 160'
Sections (Piece)	6 - 42
Working height (ft. in.)	1' - 8'
Max. working pressure (PSI)	116
Operational speed (mph)	2,5 - 12

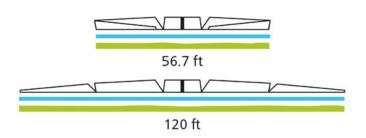


Boom variants

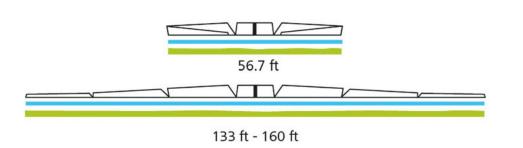
Precise technology – sophisticated to the last detail

With regard to the boom we rely on the well-proven system consisting of parallelogram suspension and the well-proven boom control system BoomControl in working widths from 110' to 160' ensures an extremely smooth boom ride even in very uneven terrain and at high operational speeds. The patented suspension with active, pneumatic control of the middle section avoids boom dipping down when cornering

and on the headlands. The wings of the folding boom are equipped with an overload protection to guarantee safe operation at any time. The weight-optimized design made of durable aluminum profiles protects nozzles, nozzle bodies and spray lines against damage. Different folding options allow for individual solutions for every farm.



BoomControl – 5-part boom with reduced working width 56.7 ft

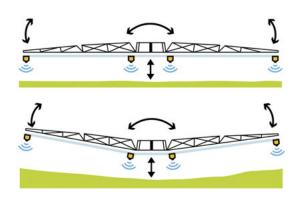


BoomControl – 7-part with reduced working width 56.7 ft

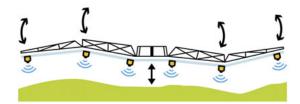


- Parallelogram suspension with BoomControl for smooth boom operation in all situations
- Patented suspension with active, pneumatic control of the middle section
- Boom options with working widths from 110' to 160'
- Stable aluminum profile for safe protection of the nozzles, nozzle bodies and spray lines against damage
- Collision protection due to overload protection and damping of the wings
- Overload protection of the outside wings towards the rear, damping of the inside wings to the front and rear





BoomControl Pro – active adaption of the boom to the terrain by means of four sensors



BoomControl Pro Plus

BoomControl Pro

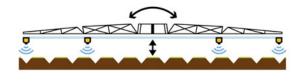
Active boom control system BoomControl Pro

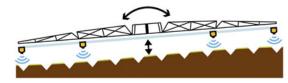
- Independent angling of the boom section and the middle section to follow the terrain
- Active adaption of the boom to the terrain due to 4 sensors
- The precise, lowest possible working height is maintained due to automatic boom control system
- Boom control system with a low target height ensures minimum drift
- Boom is completely independent from the machine

BoomControl Pro Plus

Active boom control system BoomControl Pro Plus

- Independent angling of the boom section and the middle section to follow the terrain
- Angling (lifting and lowering) of both outside wings
- Due to 6 sensors, the boom actively follows the terrain
- The precise, lowest possible working height is maintained due to automatic boom control system
- Boom control system with a low target height ensures minimum drift





BoomControl/BoomContro Pro extension – extension of the field of vision is ideal for ridge and row crops

Extension

BoomControl/BoomControl Pro

- Due to 2 additional sensors, the boom actively follows the terrain
- To increase the field of vision
- Ideal for ridge and row crops or for reduced working widths

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PrecisionSpray

Pulse width modulation – state-of-the-art application technology



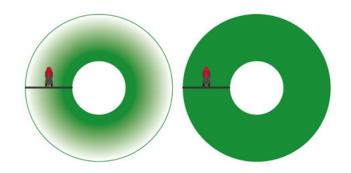
PrecisionSpray is a pulse nozzle system that triggers the nozzles with a frequency of 20 Hertz. The application rate can thus be adjusted infinitely via the duty cycle – with constant pressure and drop size with variable speed and while maintaining the spraying characteristics. This allows for using larger nozzles which are more resistant to clogging and the number of necessary nozzle sizes is minimized. The nozzles are switched on and off for an optimum longitudinal and transverse distribution.

The system is completely integrated in ISOBUS and the HORSCH sprayer software: Curve compensation and the use of application maps can actively avoid over and under applying. Active resistance management and even crop population with reduced mixture use make the sprayer the optimum tool Precision Farming.



Videolink

- Infinitely variable adaption of the volume flow with constant pressure and drop size
- Constant drop spectrum when using one nozzle
- Lower number of different nozzle sizes required
- Adaption of the application rate without changing the spraying characteristics
- Curve compensation
- Large nozzle bodies that are less prone to clogging



Avoid over and under applying due to curve compensation

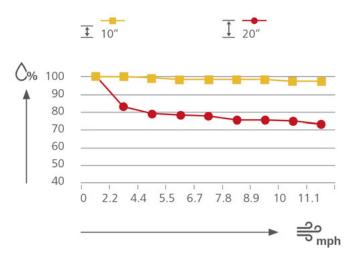
Pneumatic nozzle and section control

Performance due to diversity

Due to the pneumatic nozzle control and the pneumatic section control, it is possible to precisely switch off nozzles and sections with compressed air. Nozzle spacings of 10" and 20" are available.

Individual and intelligent application technologies allow for an optimum penetration and wetting of the population. Variable nozzle body combinations (pneumatically switchable) can also be used. All nozzles are controlled individually and are pneumatically combined in sections. This also facilitates maintenance and the easy detection and repair of errors and blockings at the nozzles. As standard, all nozzle body configurations are equipped with nozzle holders for edge nozzles. Comprehensive tests in our wind tunnel show considerable advantages with regard to the drift behavior depending on the target height.

- Individually controlled nozzles, combined pneumatically in sections
- 6 to 42 possible sections (standard sections or individual configuration options)
- Excellent penetration and wetting of the population
- Optimum target area spacing with a nozzle spacing of 10"
- Allows for individual and intelligent application technologies



Drift comparison: wetting (in %) depending on the wind force (mph) at a target area spacing of 10" and 20"



Band spraying is also no problem for a 10" spacing



10" nozzle layout: more nozzles more possibilities e.g. 3D application



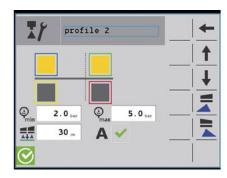
Pneumatic nozzle and section control

AutoSelect

Various combination options with up to 16 different nozzle profiles can be saved – each profile can be switched on or off in the cab. If the work is not interrupted, the optimum pressure range can be adjusted in the terminal and the corresponding nozzle size are controlled automatically continuously. Automatic adaption of the boom height depending on the chosen nozzle profiles and automatic switching between the nozzle levels. The nozzle spacings stored in the nozzle profiles serve as a basis. With more nozzles the farmer has more options to choose from.

Fully automatic AutoSelect control: Control of nozzle size or combination while at the same time adjusting the application rate and the operational speed. High comfort and safety for an optimum management of the distance along waters and structures.

- Control of the nozzle size in combination with the application rate means the operational speed is adapted
- Possibility to adjust the target height in addition to the pressure range to keep up the distance required
- Optimum distance stipulation control along waters and structures
- Automatic adaption of the boom height depending on the defined nozzle profiles
- Can be switched on or off comfortably in the cabin



AutoSelect menu in the terminal

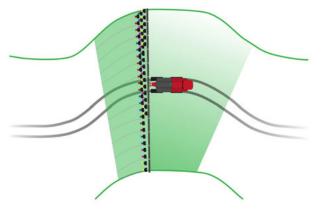


AutoSelect nozzle overlap

AutoSelect Pro

AutoSelect Pro takes the HORSCH nozzle control system to the next level. Due to the separate activation of the curve compensation, it is possible to combine profiles and thus increase the application rate on the outside of the curves in a targeted way when cornering. At the same time, the application rate is reduced by switching to a smaller nozzle size on the inside of the curve.

- All functions of AutoSelect
- In addition: activation for curve compensation for pneumatic nozzle control
- Rate adjustment when cornering due to combination of the profiles
- Reduction of over and under applying.



AutoSelect Pro: curve compensation

NightLight

Optimal spraying control at night



Innovative and powerful LED headlights ensure an optimum illumination with their heavily focused light which penetrates all spraying cones. Thus, the lighting system guarantees more safety and efficiency while spraying around the clock. A strong LED spotlight is installed per boom side to ensure optimum spraying control at twilight and at night as well as an overview of the nozzle function — also in section mode. The automatic light function switches off the headlights on the headlands to avoid blinding e.g., passers-by.

Optionally, NightLight can be combined with an automatic washing system that automatically cleans the lights and prevents dust from settling on the lights. Moreover, LED light strip at the induction center as well as a LED apron lighting are available.

- Innovative LED technology ensures optimum illumination
- Highly focused light penetrates all spraying cones
- Optimum spraying control at twilight and at night
- 100 % control of the nozzle function also for section control
- More safety and efficiency while spraying around the clock
- Optional: NightLight with cleaning
- Optional: Lighting strip at the induction center and boom apron lighting



NightLight incl. cleaning



NightLight nozzle cone illumination

Distribution system and induction hopper

No hose is the best hose

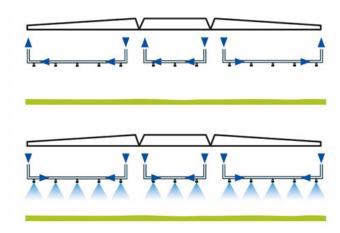
The sophisticated distribution system ensures an optimum supply of boom, intensive agitator, inside tank cleaning and induction hopper. Only one hose and one return flow hose are required for the circulation of the spraying mixture across the entire boom width, thus minimising deposits and facilitating cleaning.

The swivelling induction hopper with a gas presssure absorber and a durable stainless steel labelling is equipped with an efficient injector filling. Upper and lower rinsing nozzles create a whirl-like circulation for quickly flushing-in liquids and are also suitable for granulate. Moreover, the induction hopper is equipped with an additional canister cleaning nozzle as well as a symbol bar with coloured control levers.

As an option, the stainless steel induction hopper pot is available with a capacity of 14 gal and the additional shock nozzle.



- Permanent circulation of the active ingredient solution
- Large pipe and line diameter for optimum circulation, no deposits and blockages
- Permanent liquid at the nozzle, precise switching on and off
- Powerful induction hopper with convincing functions
- Safe cleaning: Displacement of the broth with fresh water



When the pump is running, a mixture circulates continuously in the boom (top) so that it is immediately available at the nozzle when spraying (bottom).

INTELLIGENCE

HorschConnect

Prepare today for tomorrow. Control different machine functions quite easily via the MobileControl app – your smartphone replaces the terminal! In addition, gain complete, transparent insight in all aspects of work performance and working quality with HorschConnect Telematics.



With HorschConnect telemetry solutions can be found in the seeding, planting and plant protection sector – exactly where they make sense

- Digital solutions exactly where they make sense
- Straightforward out-of-the-box solution with integrated SIM card, WIFI modem and other interfaces
- HorschConnect Telematics to document the performance of the machine
- HorschConnect Telematics for complete transparency of the working quality, e.g the application rate of all components
- Targeted and proactive service due to remote insight in the error messages
- Control of machine functions via smartphone app
 MobileControl: e.g. calibration of all metering units



The MobileControl app allows for controlling individual machine functions – completely comfortably from the smartphone



Success factor transparency: position-specific data of all relevant information like error messages, application rate, nozzle status or target area spacing



With the field boundaries import all data can be analysed over the season – even in a site-specific way



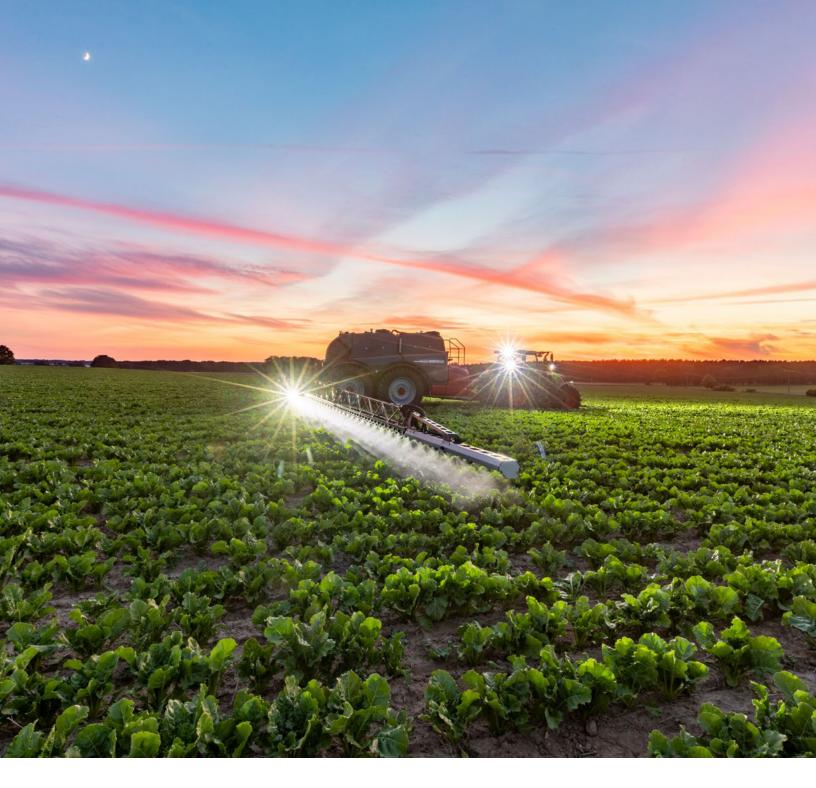
HorschConnect

Notes

HORSCH around the world

The company's growth over the years HORSCH subsidiaries Markets covered Other markets 1984 HORSCH Maschinen 2015 HORSCH Canada 2007 HORSCH Ronneburg 2011 HORSCH Leeb = 2013 HORSCH LLC 2009 HORSCH Ukraine 2015 HORSCH China 2025 HORSCH AgTec 2022 HORSCH Kasachstan 2012 HORSCH AgroVation 2008 HORSCH Rus 2012 HORSCH Polska **HORSCH Maschinen HORSCH France** HORSCH Ronneburg HORSCH Rus 1980 1990 2000 La Lucine
 Service, Sales and Marketing
 Tillage, Planting, Seeding, Spraying, Hybrid Agriculture, Ronneburg
 Production, Painting and Automated Cutting RoshinskyService, Sales, Parts and Training • Schwandorf (Headquarter) Welding
 Tillage, Planting, Seeding,
Hybrid Agriculture,
Logistics and Intelligence Training Center and Demo Garder • Tillage, Planting, Seeding, Hybrid Agriculture, Logistics and Intelligence Logistics and Intelligence HORSCH Polska **HORSCH AgroVation** HORSCH Leeb **HORSCH Ukraine** 2010 Kněžmost, CZ • Testing Farm (6.000ha)
• Tillage, Planting,
Seeding, Spraying, Production, Service, R&D, Parts • Service, Sales, Parts Marketing
• Tillage, Planting, and Demo Garden
• Tillage, Planting,
Seeding, Spraying, Hybrid Agriculture Spraying Hybrid Agriculture, Logistics and Intelligence Hybrid Agriculture, Logistics and Intelligence HORSCH LLC **HORSCH Canada HORSCH Brazil** HORSCH China Mapleton, ND • Saskatoon, SK • Curitiba, PR Service, Sales and PartsTillage, Planting, Production, Service, Sales, R&D, Parts, Marketing and Training Center Production, Service,
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 Seeding and Spraying Seeding and Spraying Seeding and Spraying • Tillage, Planting, Seeding and Spraying HORSCH AgTec **HORSCH Kasachstan** HORSCH UK HORSCH's goal is to provide the best solution for every 2020 · Cottage Grove, MN Sales, Marketing, Training and Event Center
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Logistics and Intelligence



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