Leeb Xeric FS

EFFICIENCY AND PRECISION IN FERTILISATION TECHNOLOGY

Leeb Xeric FS

Large tank capacity of 14 000 l and unique metering and distribution concept

- Large tank capacity of 14 000 l
- Efficiency and high op ational speed of up to 20 km/h
- Precision of a boom spreader, low susceptibility to wind, and precise shut-off at the boundaries
- Working widths of 36, 39, or 48 m
- Active boom control system BoomControl for optimal target area spacing and maintenance of the exact working height

The HORSCH Leeb Xeric FS meets a variety of requirements for a state-of-the-art pneumatic fertiliser spreader: it combines a large tank capacity with high manoeuvrability and stability. The HORSCH Leeb Xeric FS is equipped with an intelligent regulation of the vertical load to solve the challenge of weight shift.

The agronomic requirements on fertiliser application are constantly increasing. The fertilisation window is short, and therefore efficient technology is equired. The requirement from practical farmers is to distribute fertiliser of various qualities precisely without drift in changing wind conditions. With its capacity of 14 000 l and the available working widths of 36 m, 39 m, and 48 m, these requirements are optimally met.

The HORSCH Leeb Xeric FS is ideal for farms that need to cover a large distance between the farm and the field and use the capacity of the sp eader as they lack the necessary logistics or for very efficient op ations where the spreader is refi led directly in the field

The tandem axle unit offers precise following in the tracks and maximum population protection as well as stability on slopes due to the optional active steering of both axles. Moreover, tyres with a diameter of up to 2.19 m are possible.

We approached the challenge of wear caused by the fertiliser inside the spreader. We developed the unique metering concept PrecisionCalibrationSystem. For this purpose, the fertiliser is transported out of the tank via augers. From there, the fertiliser enters the metering box which has a fixed water measu e and rests on weighing bars. Thus, the spreader is quickly calibrated if the type of fertiliser is correctly entered.

In the metering box, 12 section metering rotors work to meter the spreading material - variably in quantity, variably per section (PrecisionSpread Pro Plus), and with curve compensation (PrecisionSpread Pro).

The fertiliser enters the airlock by gravity and only there, is is accelerated with air and transported outside through the tubes. Thus, we keep wear very low and require little air performance. Moreover, this allows for large working widths.

Hydraulic suspension and kingpin steering with a steering angle of up to 28° for high driving comfort and maximum crop protection

Maximum clearance with tyres up to 2.19 m Ø

CONDITIONS OF USE

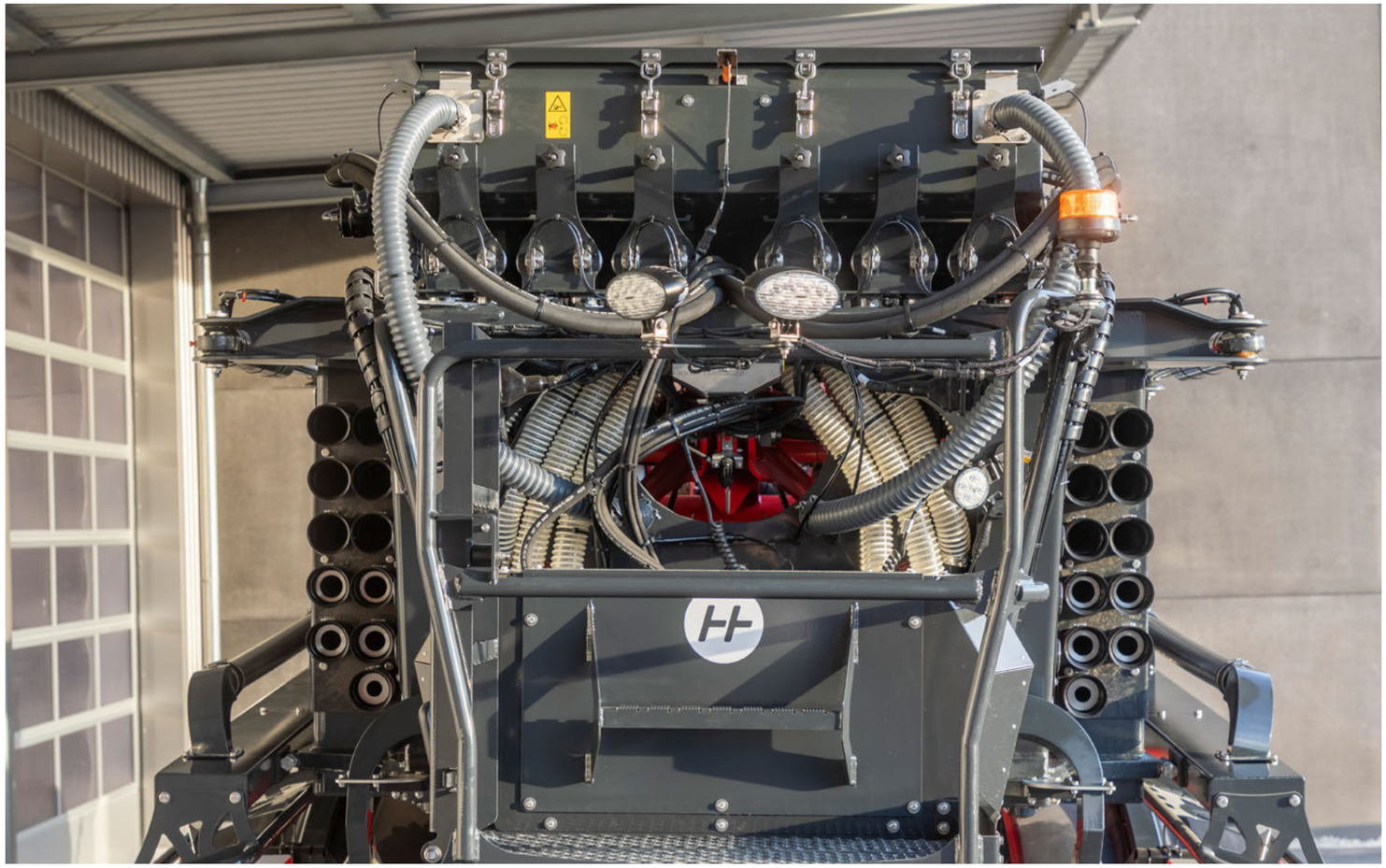
- 14 000 l fertilixer tank for maximum efficiency and wor rate with minimal number of fi ling stops
- Gentle metering: due to the innovative metering concept PrecisionCalibrationSystem, fertilizers with lower qualities can also be distributed utmost precision.
- Low air requirement and wear: the fertiliser is only supplied with air in the middle section of the boom and transported to the outlets.
- The 20 t tandem axle unit ensures utmost stability. Additionally, the active transport wheels ensure stable road holding at high driving and operational speeds. There are two options available: the passive trailing axle and the actively steered tandem axle unit for precise following in the tracks and high population protection.
- BoomControl as an active boom control system ensures optimal application in every terrain contour.

Powerful fi ling with folded or unfolded boom and large tank cover

Precise distribution of fertiliser via the boom even with strong winds

PrecisionCalibrationSystem

Innovative metering system PrecisionCalibrationSystem PCS



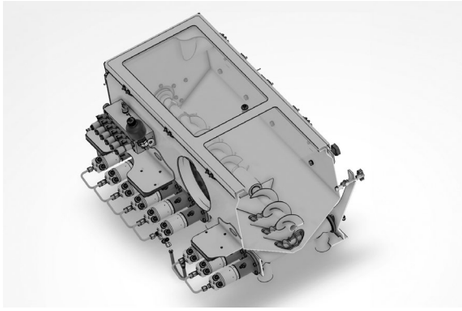
Safe platform for cleaning and maintenance work on the PrecisionCalibrationSystem

The new PrecisionCalibrationSystem PCS is the centrepiece of precise fertiliser application and distribution of the HORSCH Leeb Xeric FS. For precise metering, minimum wear, and application with a low air performance, the PrecisionCalibrationSystem PCS is positioned centrally above the boom. The spreading material is continuously conveyed into the PCS container, weighed, and the application rate is calibrated for the product and monitored.

From there, the spreading material reaches the boom middle section via 12 metering rotors via gravity, is then accelerated with air, and transported to the fertiliser outlets in the boom. Advantages of this design: air consumption is reduced, wear in the boom is minimal, and the system is not demanding with regard to the quality and the types of the spreading material.

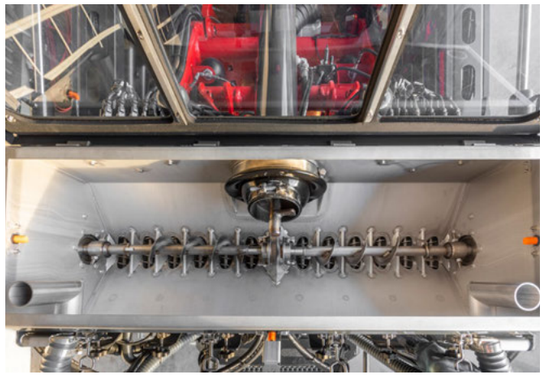
As standard, the 12 metering rotors simultaneously switch 12 sections on the machine. Additionally, for the PCS curve compensation (PrecisionSpread Pro) VariableRate and VariableRate per section (PrecisionSpread Pro Plus) are available for precise application.

For a comfortable use, the metering rotors can be removed in a user-friendly way. The PrecisionCalibrationSystem PCS is easily accessible for cleaning and maintenance work via a comfortable and safe platform.

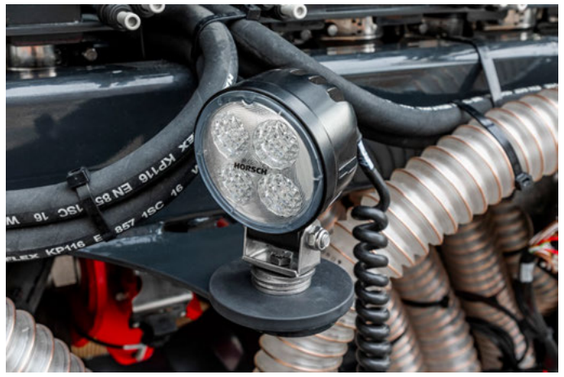


PrecisionCalibrationSystem with variable quantity control and curve compensation

- 12 rotors meter the spreading material into the airflow directly above the middle part of the boom.
- Permanent monitoring of the application rate by active weighing and calibration to the spreading material
- VariableRate, VariableRate per section and curve compensation for a precise application
- Low requirement on fertiliser quality
- Metering via gravity into the airlock, transport of the fertilizer with air only in the boom, thus requiring little air performance and resulting in very low wear.
- User-friendly change of metering rotors, even for small application rates, with supplied tools
- Comfortable and safe platform for cleaning and maintenance work



Precise metering with the PrecisionCalibrationSystem

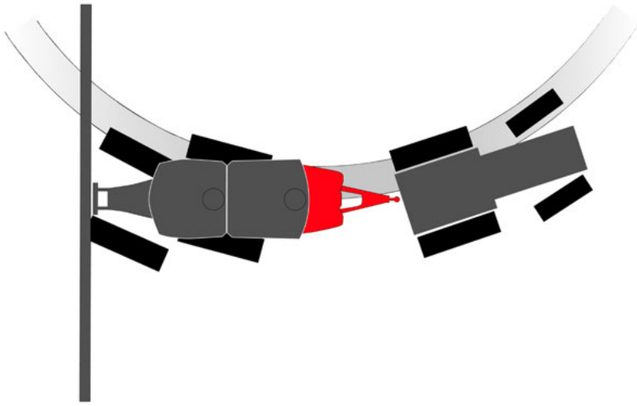


Practical hand lamp with solenoid at PrecisionCalibrationSystem

DynamicSteering

The kingpin steering of both axles ensures a smooth boom position while at the same time maintaining high stability. It ensures the most precise following of the machine in the tractor tracks and thereby significantly educes track damage. With two additional selectable steering modes in the terminal, the machine can be operated either with maximum track accuracy without scraping at the front axle or with maximum material protection during very tight turns on the headlands for minimal track damage. Due to the waisted frame design, very large steering angles (up to 28°) are possible despite the soil-protecting tyres with a diameter of 2.19 m, making the combination extremely manoeuverable and track-stable even in uneven terrain. While the steering is blocked in road mode or centered in the field at speeds above 16 km/h, it can be overridden manually in the cabin with a joystick while manoeuvering or working in the field. When driving st aight on, the steering automatically re-centers. The design with a gyroscope on the axle which works without a sensor – and thus without calibration – is unique and a benchmark among trailed systems.

- Kingpin steering of both axles for precise following in the tractor tracks prevents track damage in the crop
- Maximum manoeuverability and stability in uneven terrain
- Two additional selectable steering modes ensure maximum tracking precision without scraping or provide highest material protection in tight turns
- Can be overriden via joystick in the cabin when manoeuvring
- Gyroscope directly on the axle: no calibration required
- Integrated in machine software



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

Active steering with a steering angle of up to 28° for maximum crop protection

Active steering for maximum crop protection and stability

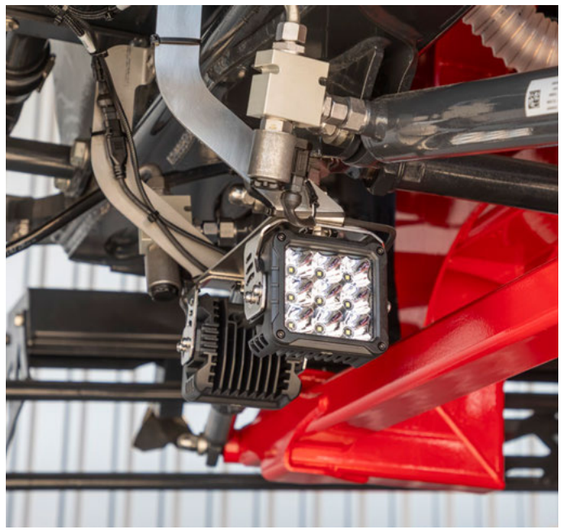
NightLight - LED lighting

Optimum application control

With their tightly focused light, innovative and powerful LED headlights provide optimum illumination that penetrates the entire spread pattern. Thus, the lighting system ensures greater safety and efficiency at work. A powerfu LED spotlight is installed on each boom side, available with white or blue light, to ensure optimal spread control at dusk and at night as well as an overview of the work pattern of the fertiliser distribution – even with section control. The automatic light function switches off the headlights on the headlands to avoid blinding, for example, passers-by.

Optionally, LED rear lights are available on the boom middle section as well as an LED apron lighting to optimally illuminate the machine in working conditions and to take some workload off the operator. From 30 m boom width or BoomControl Pro Plus, 4 headlights with white or blue light are available for optimal illumination for larger working widths or in challenging terrain at night.

- Innovative LED technology ensures optimum illumination
- Tightly focused light penetrates the spreading pattern.
- Optimal control of the work quality even at dusk and at night, monitoring during fertiliser application
- 100% control of the fertiliser distribution – even with section control
- More safety and efficiency when fertilsing ound the clock
- Optional: Choice between white or blue NightLight headlights
- Optional: LED rear lights on the boom middle section and boom apron lighting
- Optional: From 36 m boom width, 4 headlights with white or blue light for optimal illumination for larger working widths or in challenging terrain at night



NightLight stray fan lighting

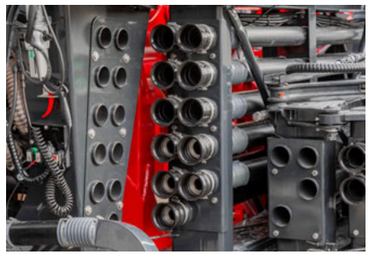
Boom

Precise technology – sophisticated to the last detail

For the boom of the HORSCH Leeb Xeric, we rely on the well-proven system consisting of a parallelogram suspension and the well-proven boom control system BoomControl in working widths of 36, 39, and 48 m which ensures an extremely stable boom position even in very hilly terrain and with high operational speeds. The patented suspension with active control of the middle section prevents immersion during cornering and on the headlands. The wings of the folding boom are equipped with an overload protection to guarantee safe operation at any time. Wear-resistant PE tubes ensure safe fertiliser transport in the boom without static charge. Low-wear hardox fertiliser deflector plates a e mounted at an offset angle and with a spacing of 1.5 m (36 m boom), 1.625 m (39 m boom), or 2.0 m (48 m boom). They ensure a long service life and an optimal longitudinal and transversal distribution of the fertiliser.

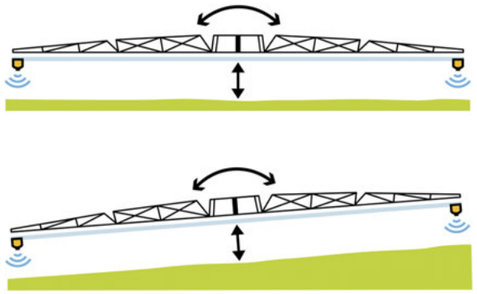
- Parallelogram suspension with BoomControl for stable boom position in all conditions
- Boom basic versions in working widths of 36 m, 39 m, and 48 m
- Wear-proof PE tubes for long service life
- Hardox deflector plates ar anged at an angle for optimal longitudinal and cross distribution
- Overload protection and damping of the wings: collision protection

Fast folding of the boom 5-part or 7-part

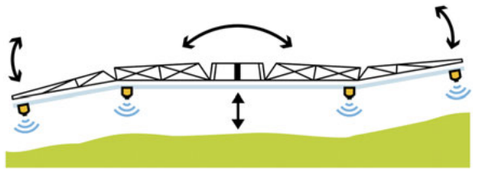


Low-wear plastic tubes for fertiliser transport

Stainless steel deflector plates for a perfect application



BoomControl – active adaption of the boom to the terrain due to two sensors



BoomControl Pro - active boom control with 4 sensors: independent angling of the outside wings, rotation of the middle section and innside wings

BoomControl

Active boom control system BoomControl

- Maintenance of the exact, lowest possible working height due to active boom control system
- Boom control with a target area spacing of 150 cm ensures an even distribution in all weather conditions.
- Active adaption of the boom to the terrain by means of two sensors

BoomControl Pro

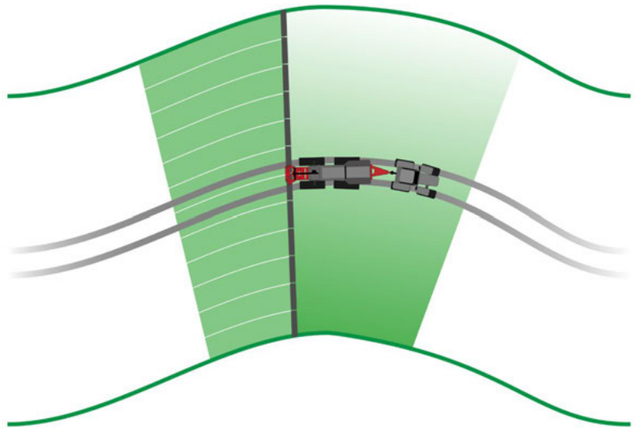
Active boom control system BoomControl Pro

- Parallel angling of the outside wings of the boom outer and rotation of the middle section to adapt to the terrain
- Active adjustment of the boom to the terrain with 4 sensors
- The maintenance of the precise working height by active boom control with a target area spacing of 150 cm ensures precise cross distribution in all weather conditions.

PrecisionSpread Pro

PrecisionSpread Pro is a separate activation for curve compensation for fertiliser application with the HORSCH Leeb Xeric. This allows for increasing the application rates on the outer sides of curves specifica ly via the rotors of the PrecisionCalibrationSystem when cornering. At the same time, the application rate is reduced by decreasing the speed of the rotors assigned to the sections on the inside of the curve. This ensures that PrecisionSpread Pro provides a homogeneous supply of the population even when cornering and along contours in the terrain.

- Activation for curve compensation for fertiliser application
- Adjustment of the quantity when cornering via the rotors of the PrecisionCalibrationSystem
- Reduction of underdose and overdosage and customised supply of the population

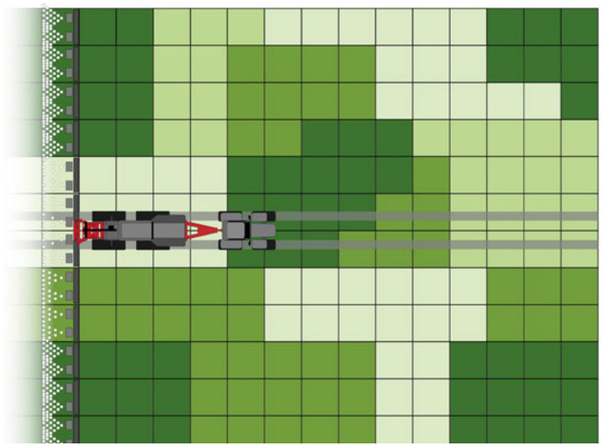


Prevention of underdose and overdosage by curve compensation

PrecisionSpread Pro Plus

PrecisionSpread Pro Plus takes HORSCH's own fertiliser application to the next level. The separate activation VariableRate per section allows for the stepless adjustment of application rates by variably regulating the metering rotors in the PrecisionCalibrationSystem within the boom width. This minimizes underdose and overdosage of the population and uses operating material effectively and economically.

- All functions of PrecisionSpread Pro
- Additionally: activation for VariableRate per section for fertiliser application
- Variable quantity adjustment by regulation of the metering rotors in the PrecisionCalibrationSystem within the boom width.
- Reduction of underdose and overdosage and customised supply of the population by means of application maps



Site-specific application by section for a p ecise supply of the population

Auger

The auger ensures an efficient ling of the fertiliser tank without having to fold or unfold the boom.

The HORSCH Leeb Xeric FS is approached from behind by a fi ling vehicle and the spreading material is transferred into the tank via the boom that is folded out.

To ensure that the fertiliser is distributed in the entire tank and the capacity is fully utilized, the auger is operated comfortably from the tractor seat without getting off. During the fi ling process, it distributes the fertiliser in the entire tank of the HORSCH Leeb Xeric FS.

This is particularly interesting for customers who fi l the vehicle efficiently with a l ge bucket capacity on the premises or directly in the track in the field

Trash wheel for optimal discharge of the fertiliser tank

Auger for fi ling when the boom is unfolded and for optimal distribution

Adapted Tire Pressure Control

On-time application in optimal weather conditions sometimes takes place in unfavorable soil conditions. To achieve maximum performance with large tank capacities and working widths while protecting the soil and avoiding compaction, the automatic tyre pressure adjustment Adapted Tyre Pressure Control (ATP) offers a fully ISOBUS software-integrated automatic regulation of the internal tyre pressure. This ensures that, depending on the fi ling level of the tank, the optimal contact area of the tyre is always achieved during road transport or in field mode so that no compromise between stability and soil protection has to be made. The possibilities of modern tyre technologies are optimally utilised.

- Automatic regulation of tyre inside pressure
- Fully integrated into the ISOBUS software
- No compromises between tank capacity, working width, and soil protection
- Always the optimum tire contact area in the field and on the oad

ATP Control – smooth running with a tyre pressure of 2.3 bar

ATP Control – increased contact area at 1.0 bar tyre pressure

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

INTELLIGENCE

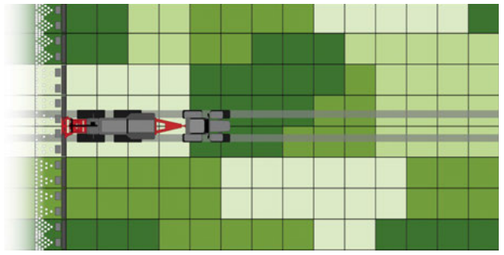
eosT10 / eosT10 Pro

Due to the high resolution and the well-thought-out user navigati-on, even complex machine functions can be operated comfortably. The high efficiency and the l ge (working) memory allow for a smooth handling of large data quantities or application maps. In addition to the traditional import resp. export of data via a USB flash drive, the t ansfer can also take place easily and conveniently online directly between the PC and the terminal.

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

- 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
- Various layout options allow for a simultaneous display of several applications – for an optimum overview
- Straightforward transfer of application maps with the wireless Task Data Exchange
- A real-time transmission of the terminal display via Remote Support facilitates the technical support.

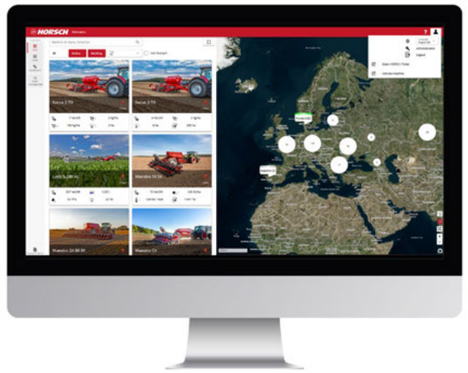
The lean design of the 10" display allows for perfect integration into any tractor cabin.



Site-specific application by section for a p ecise supply of the population

HorschConnect

Gain comprehensive, transparent insight into work rate and work quality with HorschConnect Telematics.



With HorschConnect, telemetry solutions are making their way into the sectors seeding and crop care - exactly where they make sense

- Digital solutions exactly where they make sense
- Straightforward out-of-the-box solution with already integrated SIM card, Wi-Fi 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 by remote access to error messages

Comfortably access current and past weather conditions on your PC with the weather station and HorschConnect Telematics

Digital networking with HorschConnect, GPS, and a weather station for optimal adaptation to current environmental conditions

DETAILS

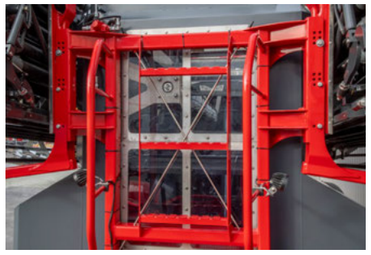
Comfortable hydraulic suspension as standard

Spacious storage compartment with tools, scale, and litre gauge for calibration

Secure positioning of the central electrics in the platform of the machine

Climbing auger with with transfer chamber to the swivel auger

Residual discharge of the climbing auger

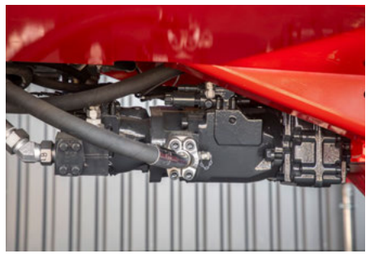


Large inspection window and boom apron lighting

Tyres up to Ø 2.19 m for maximum contact area

Hydraulic tank cover and locking device

Tank interior fitting with t ough and climbing auger



Powerful double axial piston pump

Tank grid for safe access

Tank inside light with optional camera for monitoring loading and fi ling level

TECHNICAL DATA

Leeb Xeric FS	14 FS
Tank capacity (l)	14000
Max. application rate (kg/ha)	400 (at 15 km/h)
Empty weight (kg)	11100 - 13500
Working widths (m)	36 / 39 / 48
Maximum permissible total weight (kg)	24000
Vertical load empty (kg)	600 - 1500
Max. admissible vertical load (kg)	4000
Axle load empty (kg)	5250 - 6000
Max. admissible axle load (kg)	10000
Total length max. (transport position) (m)	10,50
Transport width (m)	3,00
Transport height (m)	4,00
Filling height (m)	3,75
Track widths (m)	2,00 / 2,25
Clearance (m)	0,90
Hand wash tank (l)	15
Sections (Piece)	12
Working height (m)	1,50 - 2,00
Operational speed (km/h)	4 - 20

Your distributor

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All specifications and diag ams are approximate and not binding. Technical features and design are subject to change.

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