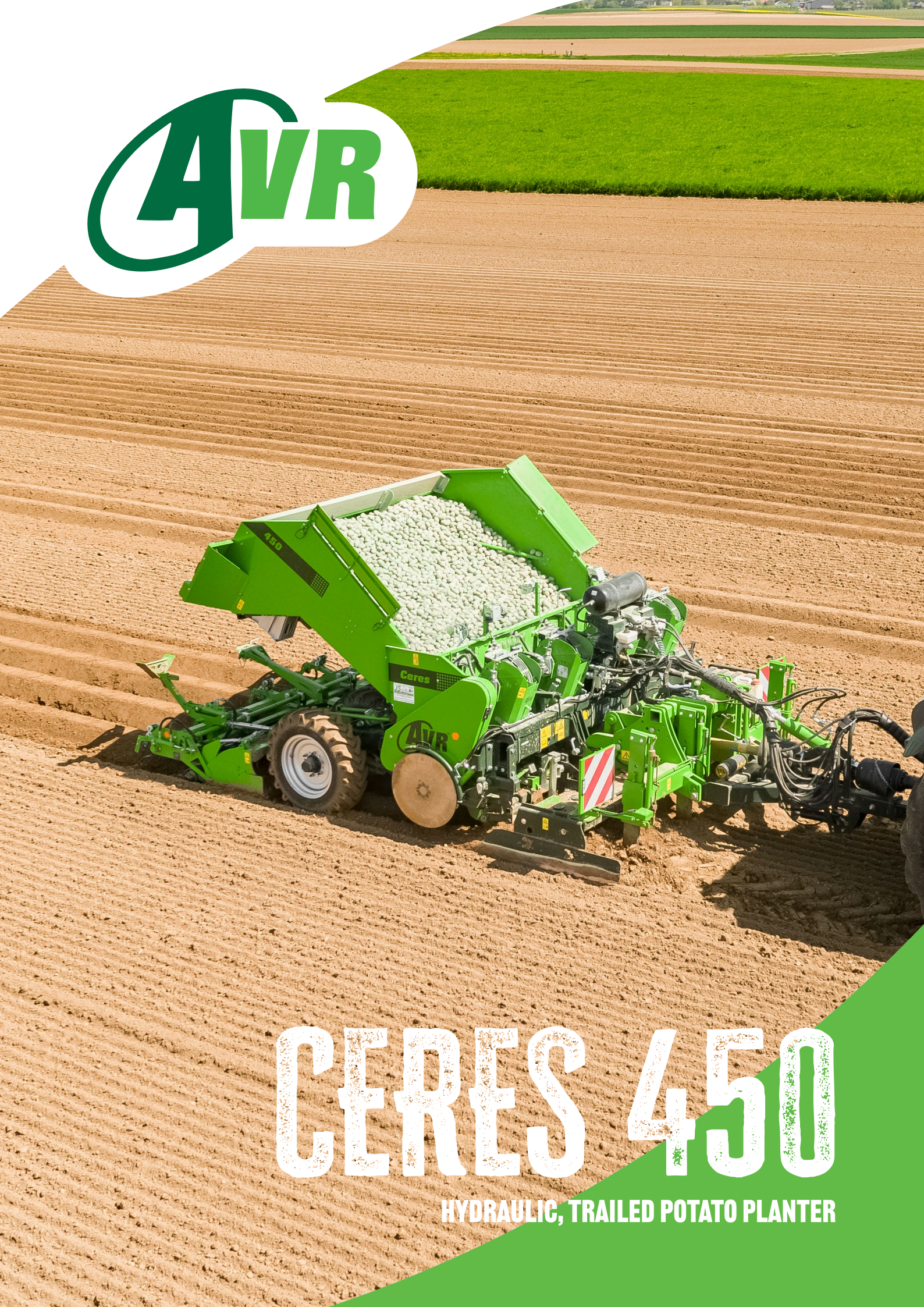


CERES 450

HYDRAULIC, TRAILED POTATO PLANTER

INTELLIGENT 4-ROW TRAILED PLANTER

CERES 450

Trailed/mounted	Trailed
Number of rows	4
Bunker capacity	3.5 (4x75) to 4 tons (4x90)
Drive	Hydraulic
Inter-row distances	4x75 - 4x80 - 4x85 - 4x90
Plant protection options	• Granular applicator • Spray kit • Powdering unit • Row fertilization

The Ceres 450 is a highly intelligent 4-row trailed planter. It owes this to its numerous automatic functions and a hydraulic motor per row, which makes flexible planting distances and row-independent planting possible. On top of that, a spacious bunker and a very precise planting element guarantee a high-quality, high-capacity planting process. When choosing the Ceres 450, you choose a machine with a high level of operator comfort that allows you to optimally use your time and resources.

Robust frame with precise depth control

The double-hinged parallelogram suspension of the furrow plough enables perfect vertical depth control – without having to adjust the planter's base frame.

The running wheels guide the furrow plough across the field and, in doing so, guarantee an ideal planting depth at all times. These wheels can be equipped with a spindle adjustment mechanism for easy adjustment of the planting depth from the side of the machine.

Different models of the furrow plough are available for stony soils, bed cultivation or preformed ridges. For the harshest conditions, the planter can be equipped with a Heavy Duty furrow plough. In that case, each of the furrow ploughs is protected by a "stone security" option.

4 ton bunker

Thanks to the spacious tipping bunker (with a 3.5 ton capacity for 4x75 models and 4 tons for 4x90), you can plant large quantities in one go and save a lot of time.

Regulating the supply of seed potatoes towards the planting channel is extremely important while planting. The automatic bunker of the Ceres 450 regulates the seed potato supply fully autonomously, making sure you never run out of seed potatoes and do not lose any time.

The Ceres 450 is a highly precise and reliable machine: thanks to a sophisticated furrow plough and an extremely precise planting element, it can plant very accurately at the set planting distance and depth.

Precise planting distance

The design of the planting element guarantees a precise planting distance. The planting element is tilted slightly forward, making sure the potato is always ready to be deposited. At the bottom, the planting element is slightly rotated and the drop height is minimal, ensuring a fast and precise placement of the potato (even on sloping terrains).

The planting distance can be set directly from the screen. The hydraulic drive of the planting element then deposits the seed potatoes at the set distance.

Row-independent planting element drive

Each planting channel row is equipped with its own hydraulic motor. This means that each row of the planting channel can be controlled separately, which offers two major advantages:

- First of all, it allows the operator to use a reliable, fast and low-maintenance row-stop system. This is very useful when planting headlands and using spray tracks. All this can also be controlled fully automatically via GPS.

- Secondly, a hydraulic motor per row allows for a variable planting distance. For example, you can choose to plant the rows in the spray track and the working passages next to it more closely.

Perfect seed potato collection

- The moving bunker floor smoothly transports the seed potatoes to the planting element. An adjustable hatch makes sure that the right amount of potatoes is transported from the bunker to the planting element.

- The right cup for every type of seed potatoes! We offer two types of standard cups (30-60 mm and 40-80 mm), each of which can be further reduced using the respective reducing cups meant for even smaller seed potatoes (25-40 mm or 28-45 mm).

- The agitation function of the planting channel and two mechanical separators at the top and bottom of the channel ensure that only one seed potato is deposited per cup.

Default cups

- Type 1 | 30-60 mm (green)
- Type 2 | 40-80 mm (yellow)

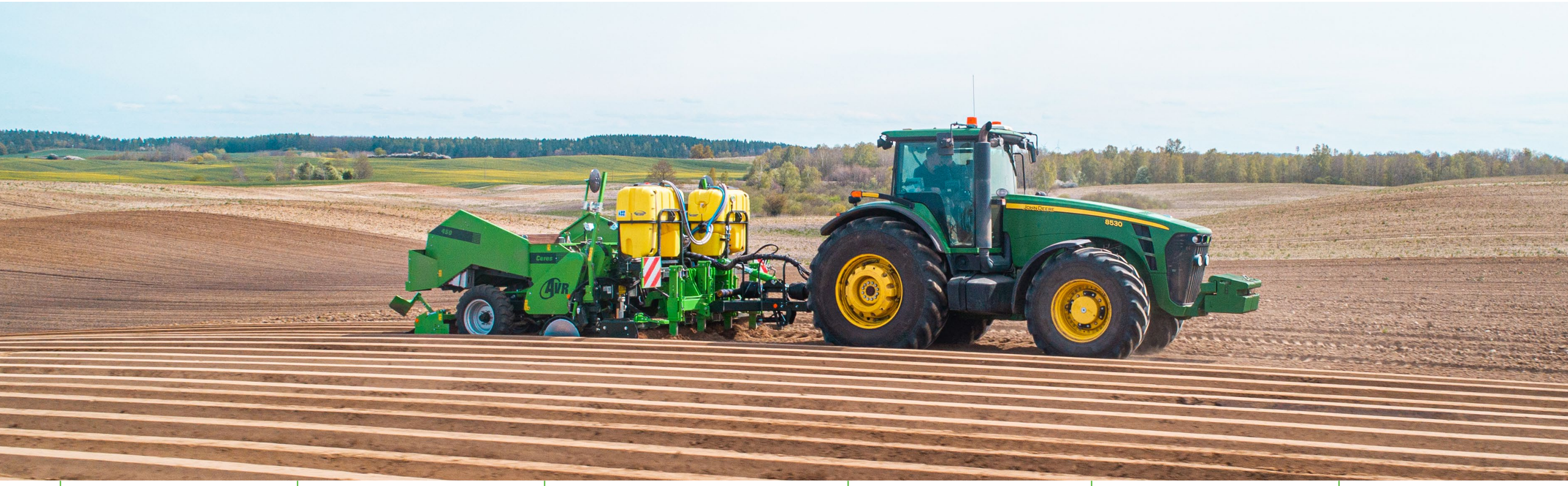
Reducing cups

- Type 1 | 25-40 mm (dark green)
- Type 2 | 28-45 mm (blue)

USER-FRIENDLY

DID YOU KNOW?

Sophisticated functions should make it easy for the driver to get the most out of his or her machine(s). That is what the Ceres 450 is designed to do. Thanks to different automatic functions, operating the planter has never been easier. This will be of great help during long working days. A smooth integration with GPS systems via the ISOBUS gateway also contributes to this.



ISOBUS connection

The ISOBUS gateway guarantees a quick and easy connection to any tractor (provided it has the necessary equipment). This allows for section control per row, an option that guarantees you are always sure the planting element will start and stop at the right time.

Spray tracks

To facilitate crop management, GPS-controlled spray track tracers are automatically lowered into the respective rows. Moreover, the planter will automatically stop the supply of seed potatoes in these rows.

PDC system

Thanks to the PDC system (Proportional Distance Control), the intake of soil into the ridging hood is automatically monitored and controlled to guarantee optimally shaped ridges.

Cameras

The Ceres 450 can be equipped with up to 4 cameras. This way, you always have an ideal overview of the machine.

Sloping terrains

The Ceres 450 performs equally well on sloping terrains as on flat fields. The agitators of the planting channels automatically adjust to the circumstances to ensure precise operation of the planting element at all times.

For uneven terrains, the machine can be equipped with sensors that automatically control the depth control function of the soil cultivation machine that is used in combination with the planter.

Anti-erosion kit

Want to prevent the soil from eroding? Using up and down movements, our automatic anti-erosion system creates small bumps in between the ridges, which prevent the soil from being washed away in case of heavy rain.

COMBINATIONS FOR EVERY APPLICATION

SOIL CULTIVATION

GE-Force

A GE-Force C full width cultivator can be fully integrated. It offers the proven efficiency of the GE-Force in a reinforced chassis with four subsoiler tines at the front to break up the tracks made by the tractor. The working depth can be set and optionally even adjusted automatically using additional sensors. The planting depth remains independent of the cultivating depth.

Integrated rotary harrow

An integrated rotary harrow is available for lighter soils containing more stones. The rotary harrow is equipped with integrated subsoiler tines. The working depth of the rotary harrow can be adjusted independently of that of the planter, since the rotary harrow can move vertically in relation to the chassis. The rotary harrow is also equipped with sensors that allow for automatic capacity control. This involves monitoring the soil flow in front of the rotary harrow.

Portal drawbar

By adding a portal drawbar, numerous combinations are possible, such as a fixed cultivator tine, a spading cultivator or combinations with a fertilizer distributor, spray kit, soil cultivation equipment, etc.

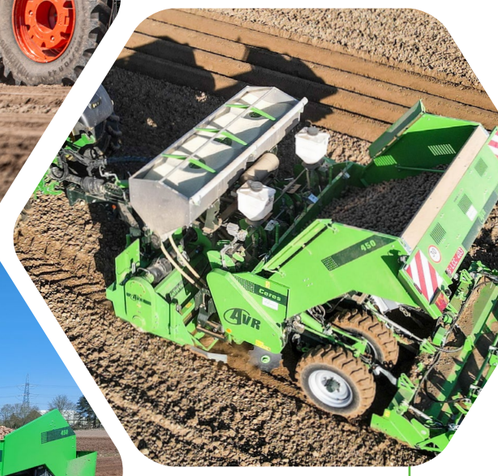
PLANT PROTECTION & FERTILIZING

Spray kit

We also offer a spray kit for the Ceres 450. The spray kit consists of two 300 liter tanks mounted on the planter and 2 or 3 spray nozzles mounted per row behind the soil opener. The spray kit can be fully controlled from the Ceres operating screen and allows for speed-dependent dosing and section control.

Granules

Using the Horstine or Startec granular applicator, all common granulated materials can be dosed while planting. The granular applicator is mounted directly onto the Ceres. The desired dosing quantity per hectare can easily be set using the operating screen of the Ceres. We also offer an electric motor with control function, making it possible for the microgranule device to operate speed-dependently at the correct location.



Powdering unit

The powdering unit ensures a safe and accurate dosing of powder protecting the tubers from Rhizoctonia.

Row fertilization

For row fertilization, a unit is available that can be mounted in front of the planter. The stainless steel tank has a capacity of 1,200 liters (optional attachments up to 1,800 liters are available). The dosing quantity is determined by precise dosing units which are driven by a hydraulic motor that allows for a speed-dependent dosing. Rows 1 and 4 can be closed for spray tracks. The fertilizer is applied at both sides of the seed potato and the depth can be adjusted in relation to the planting depth.

COMBINATIONS FOR EVERY APPLICATION

RIDGING

Tight ridge construction

After planting, the plant furrows are meticulously covered by means of large, serrated covering discs, the working width and pressure of which can easily be adjusted.

AVR ridging hood

To immediately obtain a well-formed ridge, an AVR ridging hood can be mounted. The automatic pressure control function, which allows the pressure to be set from the operating screen, makes sure that nicely shaped, homogeneous ridges are formed. In addition, the hood can be equipped with a PDC system (Proportional Distance Control). This results in a fully automated control, monitoring the amount of soil in the ridging hood and automatically adjusting the hood as needed.

Ploughs & rollers

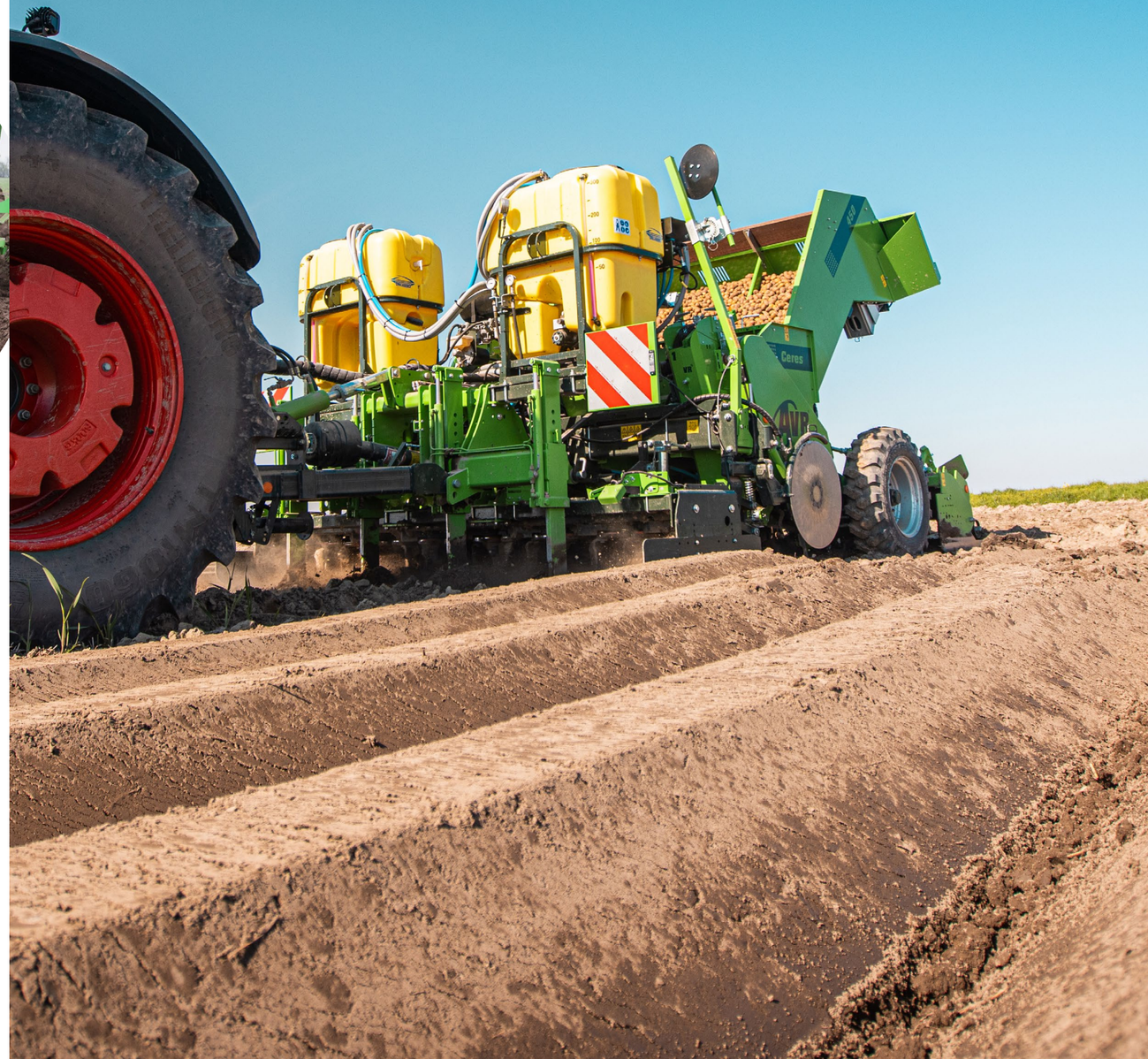
Do you want a looser ridge, use less traction or are you planting in stony soils? In that case, the Ceres 450 can be equipped with HD-sprung ploughs and cage rollers.

EASY OPERATION

The Ceres 450 is controlled via a user-friendly, intuitive touchscreen that the operator can use to easily enter parameters and adjust the machine exactly as needed. The Ceres 450 is operated using an ergonomic joystick.

Five work menus display every possible function using clear symbols. The screen can be arranged as desired. The four planting channels always remain visible in the center of the screen, which means they can always be monitored optimally during planting. You can use the terminal in the Ceres 450 to program automatic operations.

Using an additional controller, the AVR machine can also be controlled by a GPS system via ISOBUS. This allows for section control (TC-SC) and variable dosing (TC-Geo). Using ISOBUS-AUX it is also possible to use the tractor's joystick.



Connect your machine to have it yield even better results. The AVR Ceres 450 can be connected using AVR Connect, our digital platform that collects all your planting data and allows you to remotely track machine parameters.

Extensive and user-friendly field management

- By importing shape files, linking to government databases (e.g. land register), etc. You can also use your own drawings and synchronize with different tractor brands.
- Extra info when creating fields, such as variety, cut/uncut, size, amount of potatoes/ton, etc. This can for instance be useful when keeping a cultivation document.
- Activities are automatically linked to the loaded fields. The driver no longer has to perform any manual actions to indicate his or her position.
- The data can also be linked to the correct fields afterwards.

Realtime machine overview

- Field overview while planting
- Estimate the required or used amount of seed potatoes per field or in total (= number of tons/hectare planted, via number/weight factor at field creation)
- Overview of the total number of hectares planted this season
- Last position and communication time
- Indication whether or not the machine is planting

Detailed information

- Overview of the planter's measurements in the field (e.g. planting distance, miss analysis, speeds, driving status, etc.)
- Realtime overview of all technical settings, such as temperature, tractor speeds, consumption, etc. (if the tractor is connected via ISOBUS)
- Hectare counter per trip, field and total per season (based on GPS information)
- Remote tracking of alarms, alarm history and forwarding via SMS and/or email
- Filter options based on importance + alarm location
- Remotely (de)activating options
- Remote detailed analysis options for an even better service
- Geofencing zones (virtual delineation/perimeter of physical location using the GPS system) & alarms
- Mapping waiting times in the field
- External user management: The user can give others access to his or her platform and share data

AVR

Passion. Power. Potatoes.

SOIL CULTIVATORS

POTATO PLANTERS

HAULM TOPPERS

HARVESTERS

CROP HANDLING

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