



Ceres 440 Four-row mounted planter



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GREEN**

A greater yield with row-independent planting

The AVR Ceres 440 is based on the Ceres 400. It's a four-row mounted planter that is both available with hydraulically and mechanically driven planting elements. With the Ceres 440, AVR purposefully opts for ISOBUS control and a row-independent hydraulic drive. A wide bunker ensures smooth loading.

The absolute highlight of the Ceres 440 is undoubtedly its AVR Connect system, which unites all planting information and remote parameters in one digital platform to optimize planting and offer a wider range of service options.

■ ISOBUS control

The planter is controlled via ISOBUS, which means the operating screen of the GPS system or tractor can be used to control the planter (VT functionality), ensuring a greater comfort, efficiency and cost management. This allows the tractor and planter to communicate and share information effortlessly. A Müller Touch1200 ISOBUS display can optionally be supplied by AVR as well.

■ Program once, reuse over and over again

The planter is operated by means of a modern touchscreen with clear icons. The control box can be configured as desired and comes with an extensive memory module for saving machine settings and terrain data.



■ Row-independent planting element drive

A hydraulic motor per row offers two significant advantages:

First of all it guarantees a reliable, fast and low-maintenance row stop system, which is very important seeing that GPS with section control is increasingly used for planting.

Secondly, not only the crops in the rows in the spray track, but also in the connecting row in the adjacent working passages can be planted closer to each other. A greater yield in these rows – obtained by extra light, water and nutrients – can help you recuperate the loss from not-planted surfaces. Or the desired size of the (seed) potatoes in the spray tracks can be maintained more easily.

■ ISOBUS compatibility

The machine is equipped with VT functionality, meaning its data can be read from any ISOBUS compatible display.

It also offers section control (TC-SC) and variable dosing quantities based on task cards (TC-GEO). Once all data has been uploaded to the GPS system, the Ceres can apply the desired dosing quantities using the GPS system.

■ Accurate planting in less than no time

The planting element is a model of precision and reliability. Two times 20 cups mounted on the cup belt ensure a continuous precision at high planting speeds. Also at higher driving speeds, the planter operates relatively calmly.

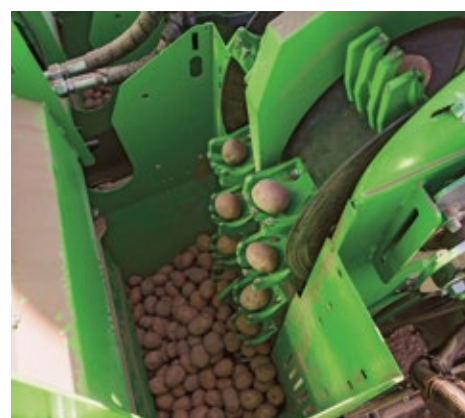
The large upper drum makes sure everything runs smoothly at the top part of the machine. The small top roller at the bottom and the slightly inclined planting element guarantee precise planting operations (also on slopes).

■ No misses, no doubles

Thanks to the carefully shaped cups and the electrical agitators, the planter does exactly what it is designed to do: deposit exactly 1 seed potato every x (set) cm. No more, no less. A miss detection system checks whether anything goes wrong and – if necessary – produces an alarm in the tractor to allow you to intervene. The cup belt can easily be tightened by turning the spindles, which augments the spring tension.

■ Plant larger volumes and save time

Several versions of the Ceres 440 are available: from a 1.5 tons fixed bunker to a 1.9 tons (4x75) or 2.1 tons (4x90) tipping bunker. The 3.20 m filling width and rubber shock absorber ensure smooth loading.



■ For all types of seed potatoes, small and large

The adjustable planting channel allows for working with all sorts of seed potatoes. It only takes mounting another cup belt and adjusting the channel to prepare the planter for the next challenge. The table offers an overview of the existing AVR cups.

Seed potatoes - Cup dimensions		
	Standard (green)	Option: large (yellow)
Standard cups	30-60 mm	40-80 mm
Reducing cups	25-40 mm (dark green)	28-45 mm (blue)

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The pulse sensors in the wheels and planting channels are identical in the hydraulically driven planter, which means planting is always possible, even when one sensor is malfunctioning. Just set a fixed speed using the display (or via ISOBUS GPS or tractor speed for pulling in) and you are good to go. Guaranteed reliability.

Perfect planting bed preparation, tight ridge construction

■ Tight ridge construction...

After planting, the plant furrows are meticulously covered by means of large, serrated covering discs (510 mm), the working width and pressure of which can easily be adjusted. To immediately obtain a well-formed ridge, a ridging hood can be mounted.

An automatic pressure control with accumulator is installed as standard for all ridging hoods, allowing for the pressure on the ridges to be set from the operating screen.

Optionally, a PDC (Proportional Distance Control) system can be used to measure the amount of soil present in the ridging hood and make adjustments if necessary.

■ Soil preparation, planting and ridging in one system

Planting bed preparation in front of and planting and ridging behind the tractor. The AVR Multivator front cultivator makes sure the planting bed is perfectly crumbled. The noses in the full width plate already push the soil into beds, which makes it possible to plant in untravelled soil using a tractor with row-crop tires. When compared to a power harrow, a front cultivator ensures a better crumbling, less smearing and a lower fuel consumption.

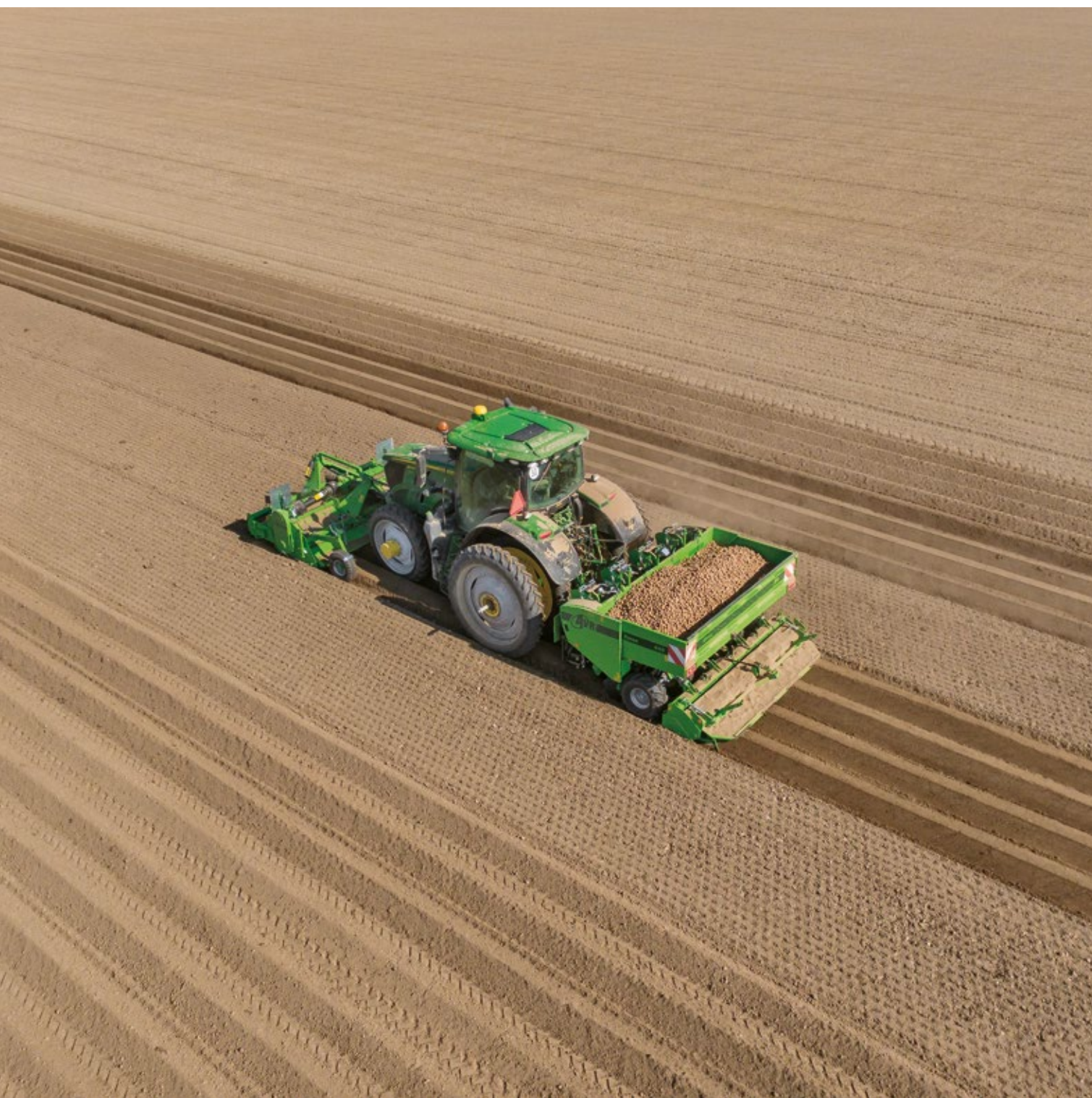
The Multivator is equipped with a 3 speed gearbox and front rod roller as standard. Using suitable conversion parts, the cultivator can also be used as a rear full width cultivator. It is even possible to mount everything at the rear.

If you have a powerful tractor, it is possible to use an AVR Compact III with hydraulic cultivating legs, a Ceres 440 mounted on top and a ridging hood at the back. A stable drive and reinforced frame ensure carefree planting.



■ KEEN & GREEN:

The depth control wheels can be adjusted using a spindle that can be operated from the machine's exterior for extra ease of use and operational safety.



Even more in one working passage...

■ **Horstine granular applicator**

Using the Horstine granular applicator, all common granulated materials can be dosed while planting. The granular applicator is mounted neatly onto the Ceres. The dosing quantity depends on the width of the rotor disc (3, 6 or 8 mm) and the rotation speed. Once the applicator is calibrated, you can easily set the desired number of kilograms per hectare using the operating screen.

■ **Delvano spray kit**

We also offer a spray kit produced by the Belgian manufacturer Delvano. It comprises a 400 l tank with pump unit to be mounted in the tractor's front lift, piping and 2 or 3 spray nozzles per row, neatly mounted behind the soil opener.

The system can easily be controlled using the CERES computer. A speed-dependent dosing quantity depending on the set number of liters and spray nozzles, and section control are possible.

■ **ZIBO powdering unit**

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



AVR Connect

Connect your machine for an even greater yield

The AVR Ceres 440 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:**

- Importing a shape file, linking to government databases (e.g. land register), using own drawings, synchronizing with tractor brands (e.g. John Deere), etc.
- Extra info with field creation, 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 position.
- The data can also be linked to the correct fields afterwards.

▪ **Real time machine overview:**

- Field overview while planting (done/to do).
 - Estimate the required or used amount of seed potatoes per field or in total (= number of tons/ha 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.

▪ **Detail “As applied” information:** Overview of the planter’s measurements in the field (e.g. planting distance, miss analysis, speeds, driving status, etc.).

- Real time 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.
 - Filtering based on importance + alarm location.
- Remotely activating/deactivating options.
- Remote detailed analysis options for a better service.
- Geofencing zones (virtual delineation/perimeter of physical location using the GPS system) & alerting.
- Mapping waiting times in the field.
- External user management: The user can give others access to his platform and share data.



	Ceres 440
Pulled / mounted	Mounted
Number of rows	4
Bunker capacity	1,500 kg (optional)
Hydraulic tipping bunker capacity (optional) (4x75 - 4x90)	1,900 - 2,100 kg
Drive	Mechanical or hydraulic
Inter row distances	4x75 - 4x80 - 4x85 - 4x90
Plant protection options	Granular applicator - powdering unit - spray kits

Our KEEN & GREEN quality label indicates that our machines are equipped with techniques that promote durability and ease of use.

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■ **KEEN**

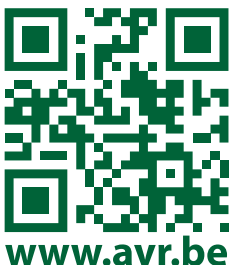
AVR never stops innovating and designs smart machines that make your work life easier and allow you to maximize your profits.

■ **GREEN**

Our machines are not only called green because of their striking color, but also because of their durability. The machines consume as little fuel as possible, and their solid construction ensures a very long lifespan. This means you will have recovered the costs of your investment in no time.



AVR bv, with head office in Roeselare, Belgium, produces a comprehensive selection of sophisticated machines for the potato industry (and other bulbous and tuberous plants). This includes planting bed preparation, planting, ridging, haulming, harvesting and hangar storage. Our mission is to make sure that more marketable products end up in the hangar using less input. So as to be able to offer you optimal support, we invest for instance in an extensive dealer network and a strong service department. AVR employs about 180 employees internationally, has a network of more than 100 dealers and had a turnover of 61 million euros in 2019.



www.avr.be

Ask for more information, we'll be happy to help you:

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