



**AMAZONE**

Inter-row hoe

**Venterra**



# Welcome to the world of mechanical weed control: the Venterra from AMAZONE





# Master weed control with the Venterra from AMAZONE

Future-oriented agriculture must ensure high yields whilst at the same time protecting the environment as much as possible. The Venterra hoe fulfils the requirement for weed control with the utmost in precision.

Mechanical weed control in between the crop row, even at advanced stages of growth, can significantly reduce the need for chemical plant protection. The hoe also plays a key role where chemical plant protection agents are less effective, for instance in the case of weeds that have already developed resistance. During mechanical weeding, the capillarity of the soil surface is broken, water loss minimised and, at the same time, water infiltration is improved. Better aeration of the crop by removing weeds can also reduce fungal attack.

There are many good reasons why the Venterra inter-row hoe from AMAZONE can be an important pillar for new arable farming concepts as a replacement or extension of chemical plant protection.

1. Precise guidance of the hoe blades with shift frame and camera control.

2. Parallelograms with a high frame clearance of up to 1 m and a maximum lift of up to 50 cm with part-width section control.

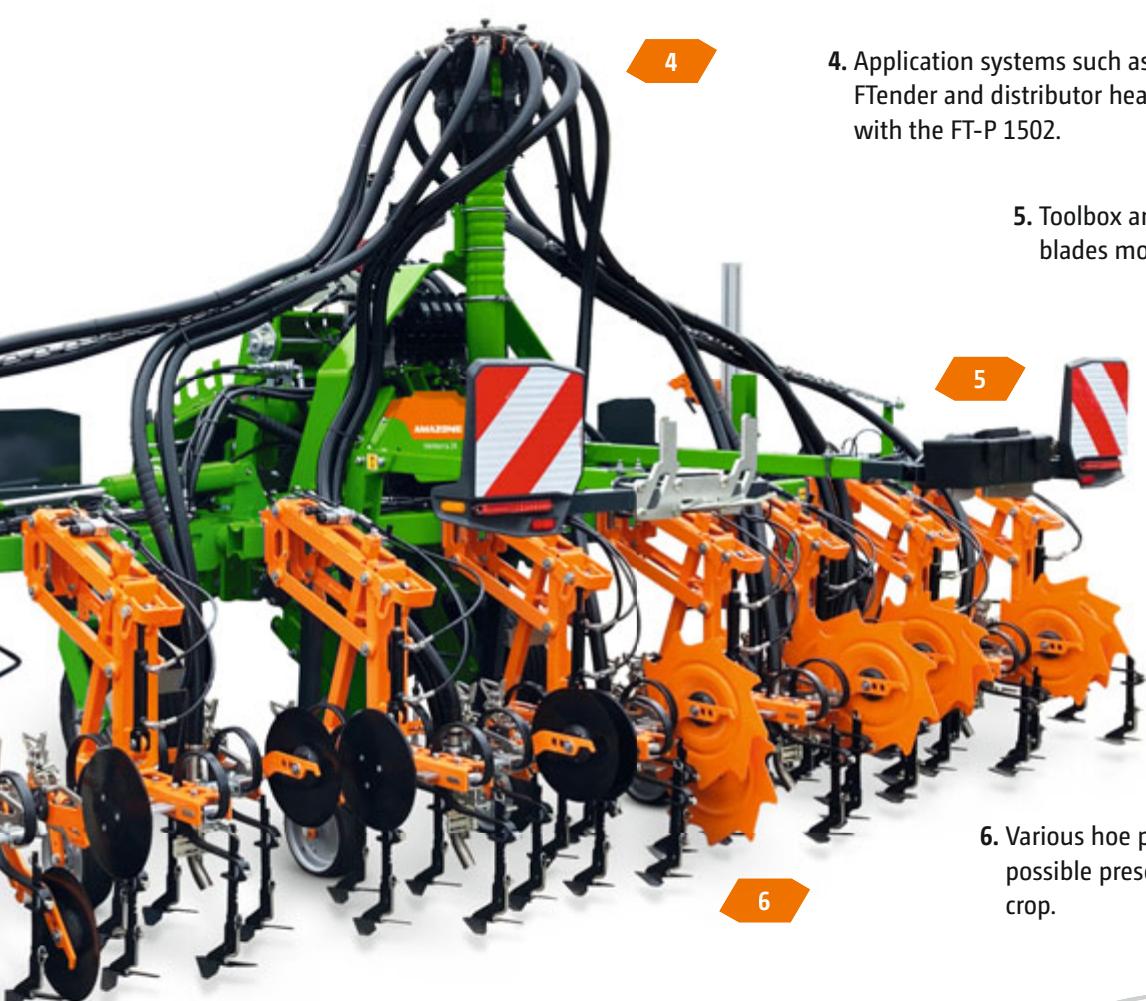
3. Robust hoe blades with the RapidoClip system for a quick, tool-less changeover.



Model overview	Venterra 1K	Venterra 2K	Venterra VR 4
Working width (m)	1.3–4.2	4.5–6.75	7.2–12.8
Mounting variants	Front or rear	Front or rear	Rear
Shift frame	Optional	Optional	Standard

# The Venterra concept:

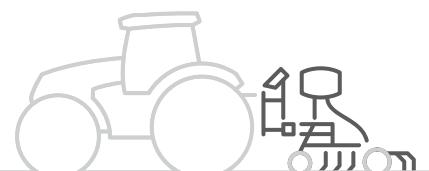
Optimum weed control in the crop yet maximum flexibility



4. Application systems such as RowSpread, using the FTender and distributor head or RowSpray band spraying with the FT-P 1502.

5. Toolbox and holder for spare hoe blades mounted on the machine.

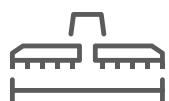
6. Various hoe protection discs for the best possible preservation of the crop in any crop.



## Venterra inter-row hoe



**MORE INFORMATION**  
**Venterra hoe**  
[www.amazone.net/venterra](http://www.amazone.net/venterra)



1.3 m – 12.8 m

Flexible from  
12.5 cm

Front or rear mounting



Up to 15 km/h

## **Reliable hoeing with maximum efficiency and flexibility**

The Venterra offers solutions for mechanical weed control that are ideal in the care of a wide variety of crops such as cereals, beet, maize, vegetables and specialist crops. Various parallelograms guide the blades precisely in the crop, so that maximum protection of the soil and crop is ensured. Everything from a single source - a Venterra hoe includes state-of-the-art technology from AMAZONE which provides the driver with the best possible support in their quest to deliver optimum results.



PRECISION

### **Precise!**

The highest level of precision in the hoeing tools thanks to exact guidance along the crop rows with a camera-controlled shift frame. Part-width section control with individual row lifting also enables hoeing to be carried out in wedge shaped fields without damaging the crop.



FLEXIBILITY

### **Adaptable!**

Flexible adaptation to various crops and operating conditions. Easy replacement of the hoe blades within seconds using the RapidoClip system.



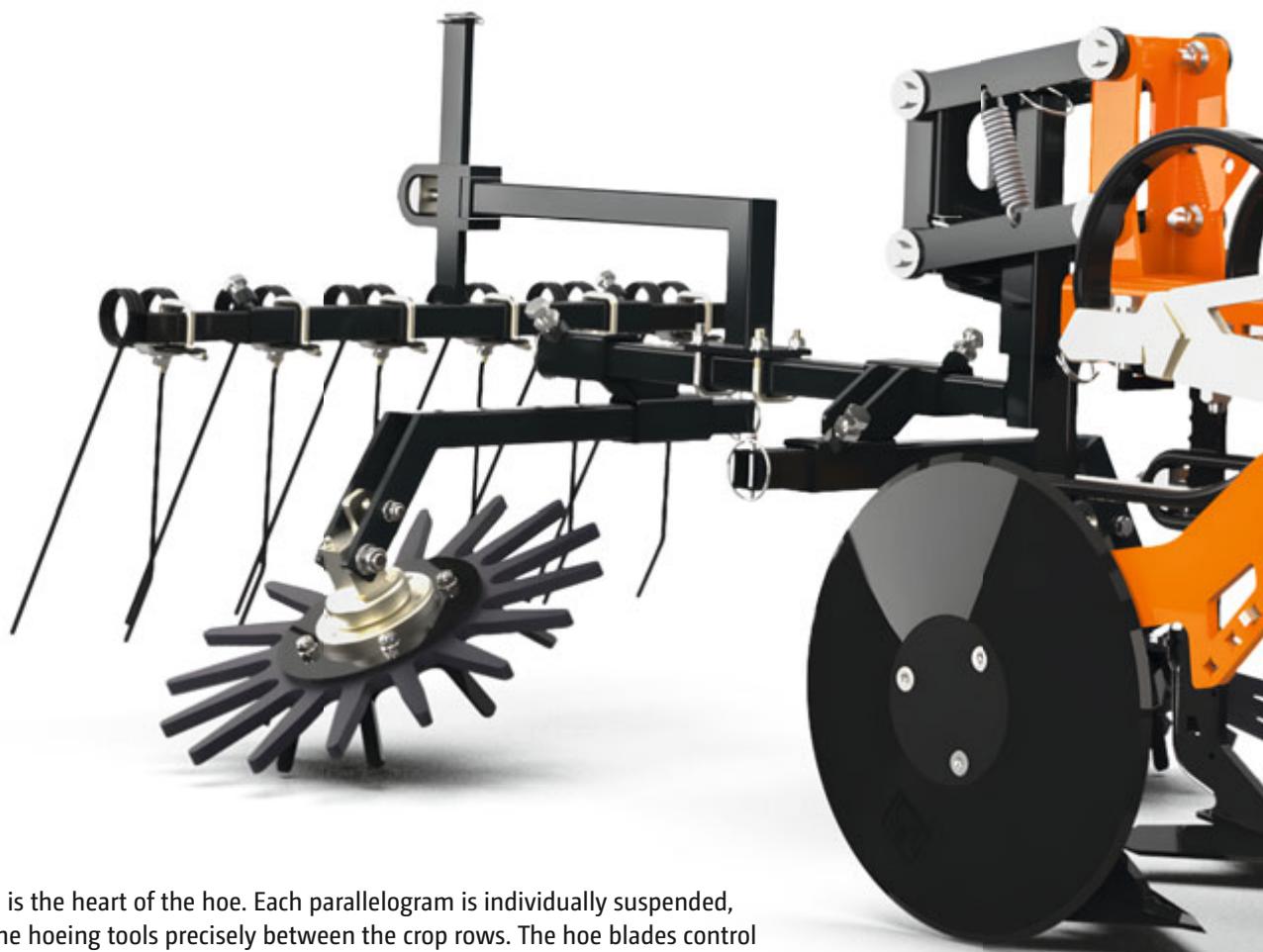
SUSTAINABILITY

### **Future-orientated!**

Effective, sustainable and environmentally-friendly control of weeds in the row, especially as resistance develops. Plant protection can be achieved with a reduction in the use of chemical agents of up to 85 % in combination with the precision RowSpray band spraying system.

# The heart of the hoe

Parallelogram with hoeing tools



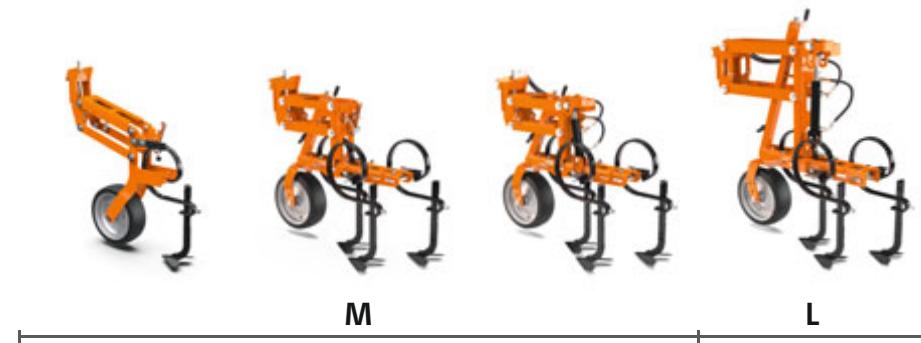
The parallelogram is the heart of the hoe. Each parallelogram is individually suspended, so that it guides the hoeing tools precisely between the crop rows. The hoe blades control weeds effectively, while the hoe protection discs prevent small crop plants from being buried in the row. The finger hoes in turn remove weeds from the base of the row – without damaging the crop. The following harrows comb out the weeds and remove soil from the roots. With a very high frame clearance and the option of lifting individual parallelograms, the Venterra is perfect for mechanical weed control in any crop!



# Parallelograms

Precise tool guidance on any type of ground

The parallelogram is the foundation for optimum tool guidance of the hoe. The Venterra can be equipped with a wide range of different parallelograms, so that it can be optimally adapted to the crop and any other special requirement. The Venterra is equipped with one parallelogram per crop row to ensure that the soil-engaging parts are guided with absolute precision. The Venterra from AMAZONE offers the highest quality with the best results in work.



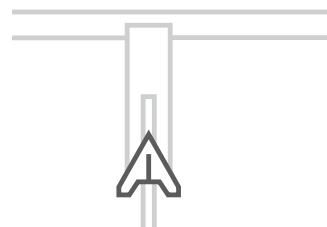
	EKP-M	KPP-M	KPP-M SC	KPP-L SC
Type		M		L
Frame clearance height (cm)		up to 80		up to 100
Venterra 1K	✓	✓	✓	
Venterra 2K	✓	✓	✓	✓
Venterra VR 4	✓	✓	✓	
Part-width section control			✓	✓
Parallelogram lift (cm)			25	50
Row widths (cm)	16–37.5	from 12.5	from 12.5	from 12.5
Weight (kg)	22	30	35	52
Guide wheel (mm)		300 x 100		
Number of hoe blades	1–3		1–5	
Maintenance-free pivot points	✓	✓	✓	✓



## EKP single combined parallelogram

### The lightweight specialist

- ✓ One hoe blade per parallelogram as standard
- ✓ Optionally expandable up to 3 hoe blades
- ✓ Working depth adjustment in steps
- ✓ Can be extended with additional tools such as following harrows or shallow ridgers
- ✓ One tension spring as standard
- ✓ Optional second tension spring for more contact pressure
- ✓ Ideal for cereals, vegetable crops and specialist crops

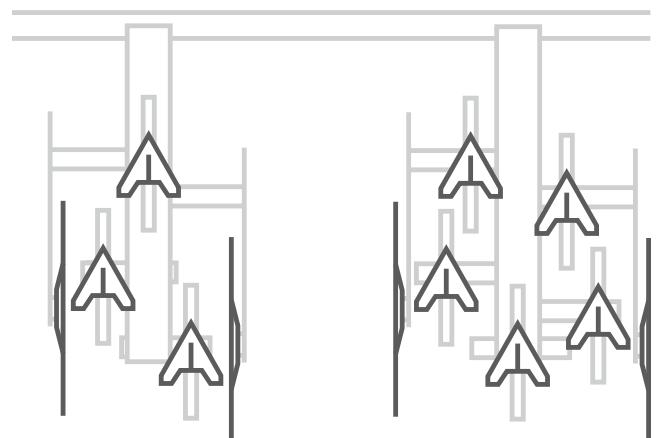


Configuration for row widths  
from 16 cm to 37.5 cm

## KPP combined parallelogram

### The all-rounder

- ✓ 5 positions for tool carriers
- ✓ Stepless working depth adjustment
- ✓ Crop-friendly blade configuration
- ✓ Generous overlap between the hoe blades meaning that no weeds are left standing
- ✓ Wide variety of additional tools such as hoe protection discs or finger hoes
- ✓ Application systems for band spraying, fertilisation and undersowing



Configuration for row widths  
of 45 cm and 50 cm

Configuration for a row  
width of 75 cm

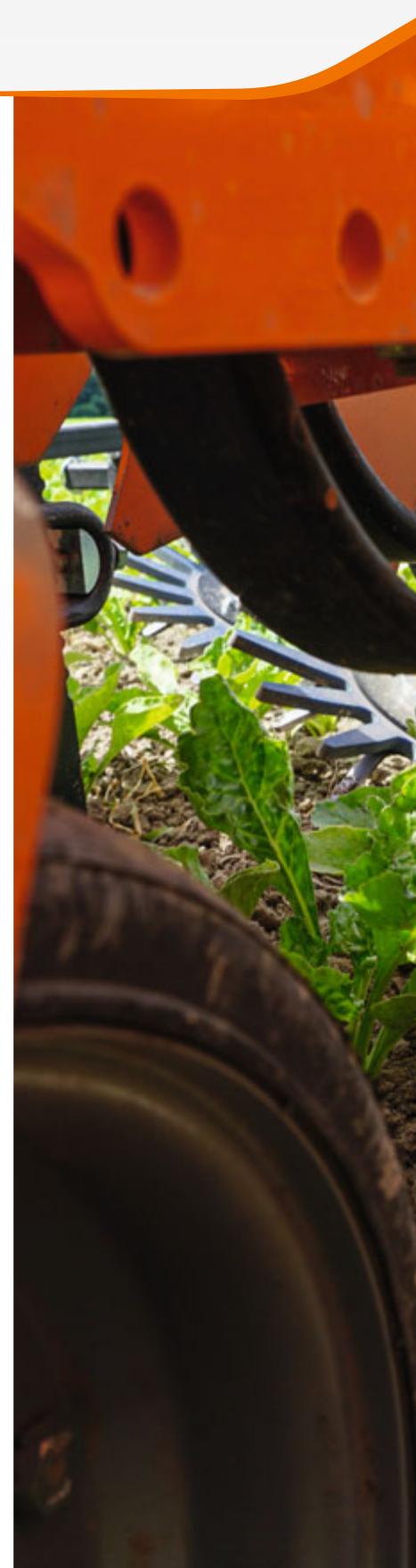


# Hoe blades

## Tools for any application

### RapidoClip duckfoot share

The duckfoot share is the crucial element for optimal soil movement. The flat design ensures direct desiccation of the weeds leaving them left on the surface. With blade widths from 80 mm to 380 mm, the right cutting width is available for any row width. The long flanks minimise the susceptibility to blocking and provide an intentional overlap of several blades in a row, thereby preventing underground rhizomes from slipping through. Hard-faced variants offer reduced wear.



### Offset blade

Offset blades offer an alternative to duckfoot shares and work directly against the crop row. The offset blade enables precise cutting along the crop rows with virtually no soil movement into the crop row, thereby protecting the plants from being buried. Offset blades are particularly suitable for working in vegetables or specialist crops.



### Chisel points

Chisel points are available from AMAZONE as optional equipment. Where the row spacings is narrow, as is often the case in cereal crops, they can be used to work in the adjoining row. Moreover, the chisel points can be used on heavy and/or dry soils to break up the soil.



### Spring tines

Spring tines are the low-cost alternative to the RapidoClip hoe blades. They are particularly suitable for stony conditions as they can move sideways. They can also be used for working deeper. In addition, the steeper position of the points moves more soil and generates a mixing effect.





# Changing the hoe blades couldn't be easier

RapidoClip system



## Hard-faced for an even longer service life

The share shafts and RapidoClip hoe blades are also available in a hard-faced version as an option. The service life of this variant is up to 5 times longer and is especially recommended for use on highly abrasive soils or where high outputs without downtime are required.



- ✓ **Ingenious:** the hoe blades can be changed without tools in less than 10 seconds.
- ✓ **Cost-effective:** saves money as the shaft is extremely robust and only the blade plate has to be replaced as a spare part
- ✓ **Reliable:** hoe blade is securely retained under all conditions
- ✓ **Precise:** sharp hoe blade with a shallow angle of attack
- ✓ **Adaptable:** lockable in any position, flexible and can even be used on hoes from other manufacturers

## Hoe blade change in record time

The patented RapidoClip system is a tool-less quick-change system for hoe blades and enables worn hoe blades to be replaced in next to no time, both in the field and back in the yard.



### MORE INFORMATION

Hoe blade change with the RapidoClip system



## Everything you need stored neatly in its place

The optional wearing part carrier enables a sufficient number of new hoe blades and vibro-springs to be carried on-board. Parts for other areas of the machine can be stored in the toolbox where they are readily accessible.



# Crop burial avoided

Burial protection with the hoe protection discs



The principle behind hoeing is "as early as possible". This means that the first passes with the hoe are performed during the early crop growth stages. Most crops are very sensitive to being buried with soil, particularly at these early growth stages. For this reason, AMAZONE offers different burial protection systems for various crops and row widths. Our active burial protection system enables working speeds to be doubled or tripled in those initial hoeing passes compared to use without hoe protection discs.

## RowDisc SR

- ✓ Toothed protection disc
- ✓ Diameter 500 mm
- ✓ For crops with sensitive leaves
- ✓ Blunt teeth prevent leaf damage
- ✓ For areas with stony soils
- ✓ Simple adjustment from transport to the working position
- ✓ 3-stage spring loading



## RowDisc SD

- ✓ Smooth hoe protection disc
- ✓ Diameter 317 mm
- ✓ Cutting effect from the sharp chamfer
- ✓ For high organic matter, mulch sowing and hard, capped soils
- ✓ Simple adjustment from transport to the working position
- ✓ 3-stage spring loading



# Weed control in the row

Finger hoes



## Advantages of the finger hoe

- ✓ Weeds are torn out and buried via the "wiping effect"
- ✓ The soil surface in the crop row is broken
- ✓ Row widths from 30 cm: mounted on a separate parallelogram
- ✓ Optimum depth control thanks to the separate parallelogram
- ✓ Working angle of the finger hoes adjustable in 2 steps



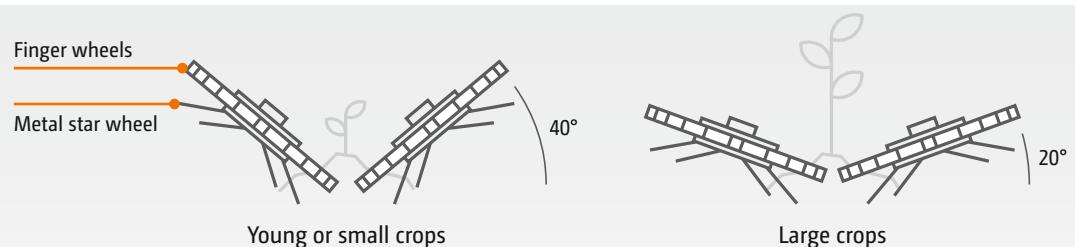
## Working in the plant row

Soil movement within the plant row represents the biggest challenge for mechanical weed control. The finger hoe works in the plant row, which is inaccessible to the hoe shares. 2 finger wheels made of hardened plastic reach through the crop row from both sides. They are independently driven by an additional metal star wheel which grips in the soil. Weeds in the cotyledon stage or sprouting stage are torn out and buried. A separate, spring-loaded parallelogram ensures precise height guidance of the finger hoe, as the utmost care and precision is required when working in the row.

## Adjustment of the finger hoe to any crop

The inclination of the Venterra finger hoe can be adjusted to tailor the aggressiveness of the finger wheels to suit the size of the crop. For young and sensitive crops, a setting angle of 40° is recommended for the 1st and 2nd pass with the hoe. This slows down the rotational speed of the finger wheels, making them work more gently.

For established, taller crops and high weed infestation, an angle of 20° is recommended for the 2nd, 3rd and, if applicable, 4th pass through. In this case, the rotational speed of the finger wheels is higher. This achieves a more aggressive working effect.



# Simply "bury" the weeds

## Ridging tools

Earthing up the plant rows is the simplest form of mechanical weed control in the crop row. Small weeds are covered by soil and die. Weed seeds that have not yet germinated are deprived of the light needed to germinate. There is a suitable ridging tool for every hoe and for all conditions. The shallow ridgers mounted on a share shaft are recommended for earthing up rows of cereals. Whereas, for earthing up crops with larger row widths, such as sunflowers or maize, the ridging discs are the preferred option.



Shallow ridger

- ✓ Shallow earthing up
- ✓ Soil flowing from the hoe blades is channelled into the plant row
- ✓ Attached to the RapidoClip share shaft
- ✓ Double-sided shallow ridger for row widths up to 37.5 cm
- ✓ Single-sided shallow ridger for row widths from 37.5 cm



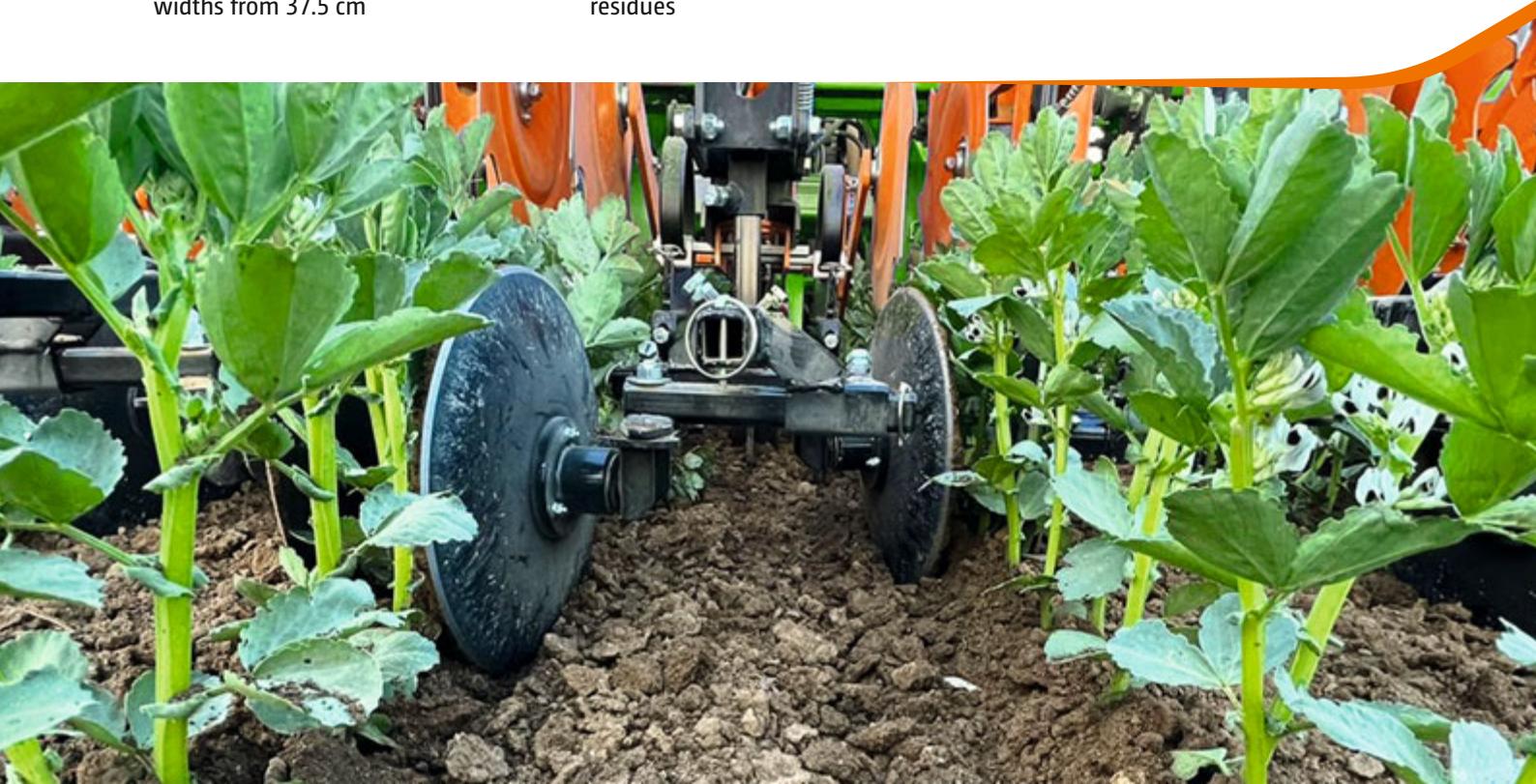
Ridging discs

- ✓ Shallow to intensive earthing up
- ✓ Rigidly attached to the KPP parallelogram or the parallelogram of the finger hoe
- ✓ Row widths from 37.5 cm
- ✓ Adjustable working angle of the ridging discs
- ✓ For stony soils or soils with crop residues



Share ridger

- ✓ Earthing up in ridge crops
- ✓ Intensive earthing up in row crops
- ✓ Row spacings from 62 to 80 cm
- ✓ Mounted in the KPP parallelogram



# Thoroughly harrowed

Harrow for exposing weeds, grasses and roots

The following harrow can be attached to the hoe parallelogram to trail behind the hoe blades and assist with weed control. The following harrow is used to expose and remove soil from the hoed weeds and weed roots. This accelerates desiccation of the weeds, thereby more effectively preventing regrowth. The following harrow can also be used to incorporate seeds when undersowing. The shallow incorporation of the seed ensures better seed/soil contact and therefore faster germination.

- ✓ Mounted on the KPP or EKP parallelogram
- ✓ Row widths from 12.5 cm
- ✓ Accelerates desiccation of cut weeds
- ✓ Shallow incorporation of seed for undersown crops
- ✓ Adjustable for aggressiveness



# Front or rear – the Venterra always fits

## Front or rear mounting

For an even better visibility of the hoe in work, the Venterra 1K and 2K can be attached to the front in combination with the length-adjustable front mounting carrier. The parallelograms are towed by the front mounting carrier when the Venterra is attached to the front. This ensures the ideal contour following of the parallelograms, in the same way as when rear mounted, and a high quality of work is guaranteed. All the equipment options for the rear-mounted parallelograms, such as part-width section control or additional tools such as finger hoes or ridging discs, can also be used when on the front.

## With even more flexibility for a high-tech hoe

The Venterra's frame is equipped from the factory with the coupling points for the front mounting carrier as well as the 3-point linkage for the rear of the tractor or for attachment to a shift frame. This means that the Venterra can be

mounted on the front or the rear without any problems. If the option is made for a front-mounted implement today, it can easily be converted to a high-tech hoe with camera control and a shift frame at a later date.



## Front mounting of the Venterra

- ✓ For the Venterra 1K and 2K with Type M parallelograms (EKP-M, KKP-M, KKP-M SC)
- ✓ Possible with part-width section control for parallelogram lifting
- ✓ All hydraulic functions are controlled via just 1 double-acting spool valve in the front
- ✓ Can be equipped with a camera system to increase road safety



# Precise row guidance

## Row guidance system

Damage-free hoeing of row crops requires maximum precision. The Venterra's row guidance system, consisting of control unit and shift frame, allows the operator to react immediately to slight changes in the crop rows by controlling the parallelograms with centimetre precision. Hoeing is only carried out between the crop rows where the weeds are present – the crop remains undamaged.

The Venterra 1K and 2K can be combined with the compact VR 2 linear shift frame or the extremely flexible AV 5 parallel shift frame. The standard 3-point coupling on the shift frames means that they can be used for different Venterra hoe frames.

Various control units are available for controlling the shift frame.

A row guidance system is particularly suitable for cultivating large fields or fields on hilly terrain. Here, the system supports the driver by controlling the parallelograms in the row, and driving errors or the gradient can be easily compensated for. This increases driver comfort, protects the crops and also usually results in higher forward speeds and so more area covered.

## Row guidance system control units

The machine can be kept on track with different control units. Various options are available, from row sensor systems and manual steering to electronic steering via a camera.

### Row sensor

Sensitive running along the plant row

- ✓ Supplements the Smart Vision or Horus camera system
- ✓ Row sensor overrides the camera signal
- ✓ Row sensor in solo operation
- ✓ For crops which develop a strong stem, such as maize or sunflowers, and for crops in late growth stages, such as sugar beet or soya beans
- ✓ Accurate row guidance up to row closure or in cross-winds



### Manual control

Precisely along the row with a co-pilot

- ✓ Hydraulic displacement of the shift frame via the steering wheel
- ✓ For specialist crops or crops in very early growth stages
- ✓ Safety back-up for heavily weed-infested crops
- ✓ Comfortable working conditions in the steering seat thanks to integrated drink and parasol holders



The Horus and Smart Vision camera systems offer maximum comfort and precision in row guidance.



# The watchful eye

Horus and Smart Vision camera systems for precise row guidance

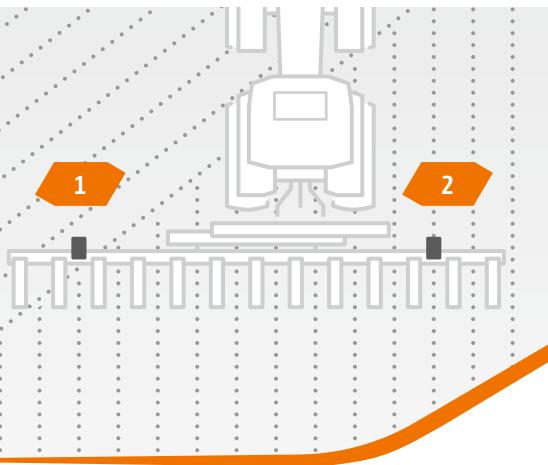


## Horus camera system

### The proven standard

- ✓ Detection starting from a plant size of 2 x 2 cm
- ✓ Multiple-row detection for up to 5 rows
- ✓ 2D and 3D mode
- ✓ Colour selection
- ✓ Working speeds of up to 20 km/h
- ✓ Work lights for working after dark
- ✓ Intuitive touch display





Overview of a second camera for precise working on the headland.

If the first camera (1, fitted on the left as standard) detects a different angle of the crop rows at the headland, the current setting of the row guidance system is retained in headland mode. Alternatively, a second camera (2) can be installed on the right, which takes over the row guidance up to the end of the wedge shaped field.



## Smart Vision camera system

**Maximum precision with AMAZONE's in-house development**

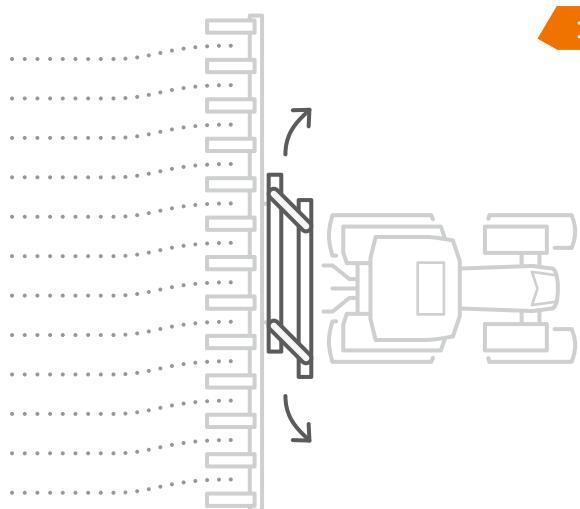
- ✓ High-contrast image with full HD resolution
- ✓ Automatic slope correction via a tilt sensor
- ✓ Detection starting from a plant size of 2 x 2 cm
- ✓ Multiple-row detection for up to 5 rows
- ✓ Working speeds of up to 20 km/h
- ✓ High-resolution 10" display
- ✓ Additional WorkCam camera possible; this is trained on the hoeing tools
- ✓ Work lights for working after dark



# Exactly on the right track

Shift frame for precise row guidance



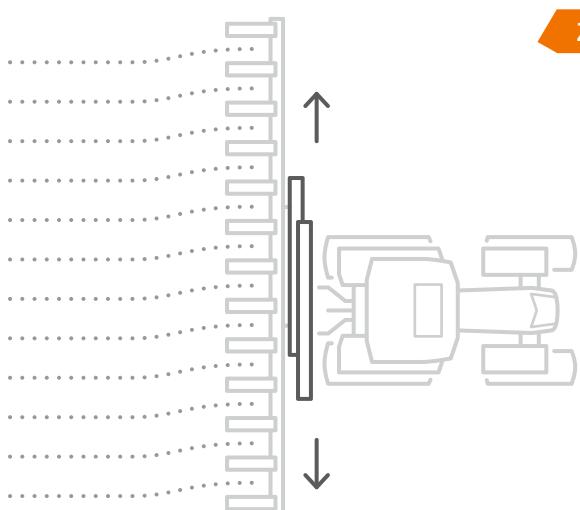


1

## Parallel shift frame AV 5

### The flexible all-rounder

- ✓ Shift travel 620 mm (+/- 320 mm)
- ✓ Overall depth of 920 mm
- ✓ Support wheels 195/55 R10
- ✓ Track widths: 1.5 m, 1.8 m, 2 m, 2.25 m
- ✓ Track widths up to 3 m with extension kit
- ✓ Quick-change system for different hoe frames
- ✓ Optional stabilisation discs when on slopes
- ✓ Easy to maintain with just a few lubrication points
- ✓ Oil supply via single-acting spool valve and pressure-free return flow



2

## Linear shift frame VR 2

### The compact specialist when on slopes

- ✓ Shift travel 600 mm (+/- 300 mm)
- ✓ Overall depth of 470 mm
- ✓ Support wheels 195/55 R10 or 225/55 R12
- ✓ Flexible track widths: 1.5 to 2.25 m
- ✓ Track widths up to 3 m with extension kit
- ✓ Quick-change system for different hoe frames
- ✓ Optional stabilisation discs when on slopes
- ✓ Easy to maintain due to the central lubrication point for the shift frame
- ✓ Hydraulic system and electronics protected behind covers
- ✓ For mounted implements up to 2.7 t
- ✓ Oil supply via single-acting spool valve and pressure-free return flow or via load sensing
- ✓ Centralised oil circuit for the shift frame, part-width section control and FT-P front tank

# AmaTron 4 ISOBUS terminal

## Full functionality



The AmaTron 4 ISOBUS operator terminal developed in-house by AMAZONE enables convenient tablet-style control of any ISOBUS-enabled agricultural machine. AmaTron 4 makes all ISOBUS functionality possible - with added convenience, user-friendliness and overviews. And yet: it performs even better in combination with AMAZONE agricultural machinery and guarantees full functionality when it comes to precision farming.



### ROBUSTNESS

#### STURDY!

- ✓ Low-reflection, 8" display with waterproof and dust-proof aluminium housing
- ✓ Rear-mounted hand rest for a firm grip



### RELIABILITY

#### WELL THOUGHT THROUGH!

- ✓ Practical and clear menu navigation for simple and intuitive use
- ✓ Operation via touch display or via soft keys
- ✓ Simple documentation and job management: work first - then save the data
- ✓ Optional software licences for maximising every opportunity in precision agriculture



### COMFORT

#### COMFORT!

- ✓ App carousel for quick and easy navigation at the swipe of a finger
- ✓ Freely configurable status bar – the most important parameters available at a glance, all of the time
- ✓ The practical quick-start menu allows rapid import and export of job data

## AMATRON Share App for digital data transfer. Test it now for free!

The AmaTron Share App, which is connected to the AmaTron 4 via a Wi-Fi hotspot, allows all data to be conveniently imported and exported online.

For example, the App enables application maps to be easily sent from the office to the AmaTron 4 for completion. Job data can also be sent to customers or back to the office as PDF documentation via the cloud, email or using a messenger service such as WhatsApp after job has been completed. This is user-friendly data management!



The AmaTron Share App

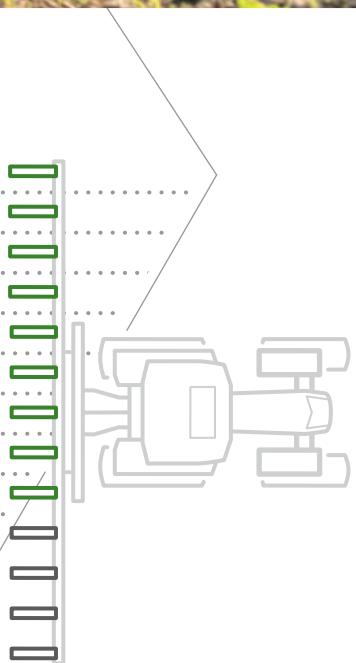


Extended functionality via licences	Function in AmaTron 4
<b>GPS-Maps&amp;Doc</b>	<ul style="list-style-type: none"> <li>Inactive field boundaries and automatic field detection</li> <li>Documentation via ISOBUS Task Controller or PDF export</li> <li>Application maps in ISO-XML format and Shape file format</li> <li>Online data exchange via the AmaTron Share App</li> </ul>
<b>GPS-Switch basic</b>	<ul style="list-style-type: none"> <li>Section Control with up to 16 part-width sections</li> <li>Virtual headland</li> <li>Automatic boom lowering</li> <li>HeadlandControl and parabolic switching</li> </ul>
<b>GPS-Switch pro</b>	<ul style="list-style-type: none"> <li>Section Control with up to 128 part-width sections and for up to 2 independent, ISO-BUS-enabled machines</li> <li>Auto-zoom, obstacle marking</li> <li>MultiBoom - Section Control for up to 4 different materials</li> <li>Spot spraying</li> </ul>
<b>GPS-Track</b>	<ul style="list-style-type: none"> <li>Optical parallel guidance aid</li> <li>Various different track modes</li> <li>ISOBUS Level 1 tramline control</li> </ul>
<b>AmaCam</b>	<ul style="list-style-type: none"> <li>Camera display with reversing aid facility</li> </ul>
<b>AmaTron Twin</b>	<ul style="list-style-type: none"> <li>Display extension using the AmaTron Twin App</li> </ul>
<b>GPS-ScenarioControl</b>	<ul style="list-style-type: none"> <li>AmaTron Twin licence extension, for cross-machine route display and automation of complex switching processes when fertilising</li> </ul>



# Automatic part-width section control via GPS-Switch

Hoeing down into the last corner with individual parallelogram lifting



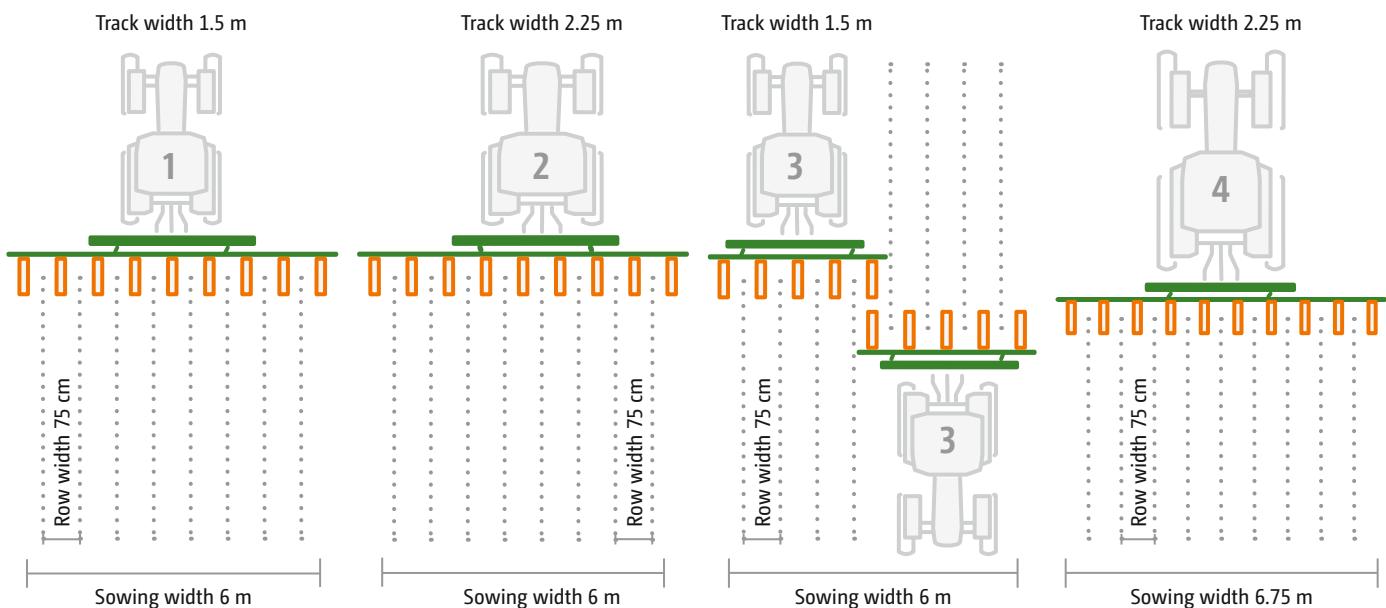
The hoeing units can be hydraulically lifted and lowered individually via the automatic part-width section control. In tapered fields, this allows hoeing right into the corner of each row on the headland without damaging a single plant.

- ✓ Lift height of the KPP-M SC parallelogram: 25 cm
- ✓ Lift height of the KPP-L SC parallelogram: 50 cm
- ✓ Manual control or via GPS
- ✓ Operation via an ISOBUS-compatible operator terminal or AmaTron 4
- ✓ Documentation of the area worked



# Track widths

Common examples and the appropriate hoeing configurations

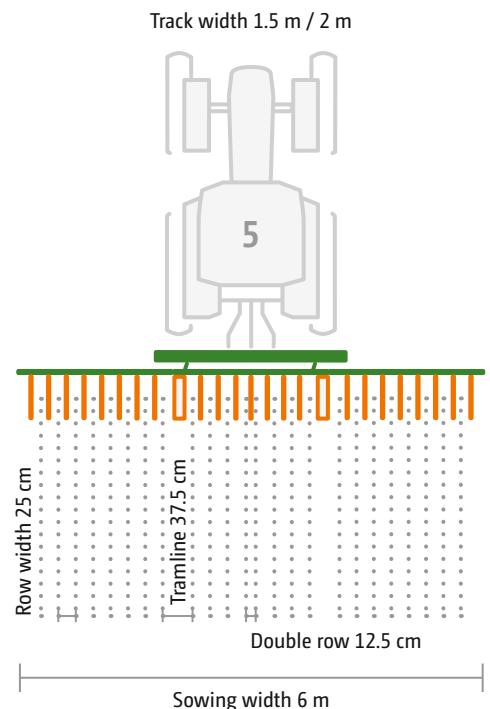


## Row spacing of 75 cm and sowing widths of 6 m or 6.75 m

The illustrations above show how different track widths (TW) and working widths can be implemented for a row spacing of 75 cm. Depending on the tractor track width, the hoe is configured symmetrically (examples 1 and 4) or asymmetrically (example 2). For large sowing widths, it is also possible to use a hoe with half the sowing width (example 3).

## Row spacing 25 cm

In addition to the classic hoed crops such as maize and beet, mechanical weed control is also possible in cereals or legumes. It is important to sow with a double row width (25 or 30 cm). The example below (5) shows an example of sowing with double seed row spacing. This means that every second coulter was closed on a seed drill with a 12.5 cm row spacing. To ensure that a row spacing of 12.5 cm and a tramline of 37.5 cm is also produced in the second pass, a double row (12.5 cm) is sown at the centre of the tractor. This division with a double row and tramline width results in a track width of 1.5 or 2 m. The hoe is configured symmetrically.



Row width with a sowing width of 6 m	24x25 cm	12x45 cm	12x50 cm	8x75 cm	9x75 cm
Track width	1.50 m	✓		✓ *	✓
	1.80 m		✓		
	2.00 m	✓		✓	
	2.25 m		✓ *		✓

\* asymmetrical

## Hoeing at the same width as sowing

The diagram (example 6) illustrates the following situation: sowing was carried out with a 6-row precision air seeder with a working width of 4.5 metres and a row spacing of 75 cm and an RTK-guided tractor.

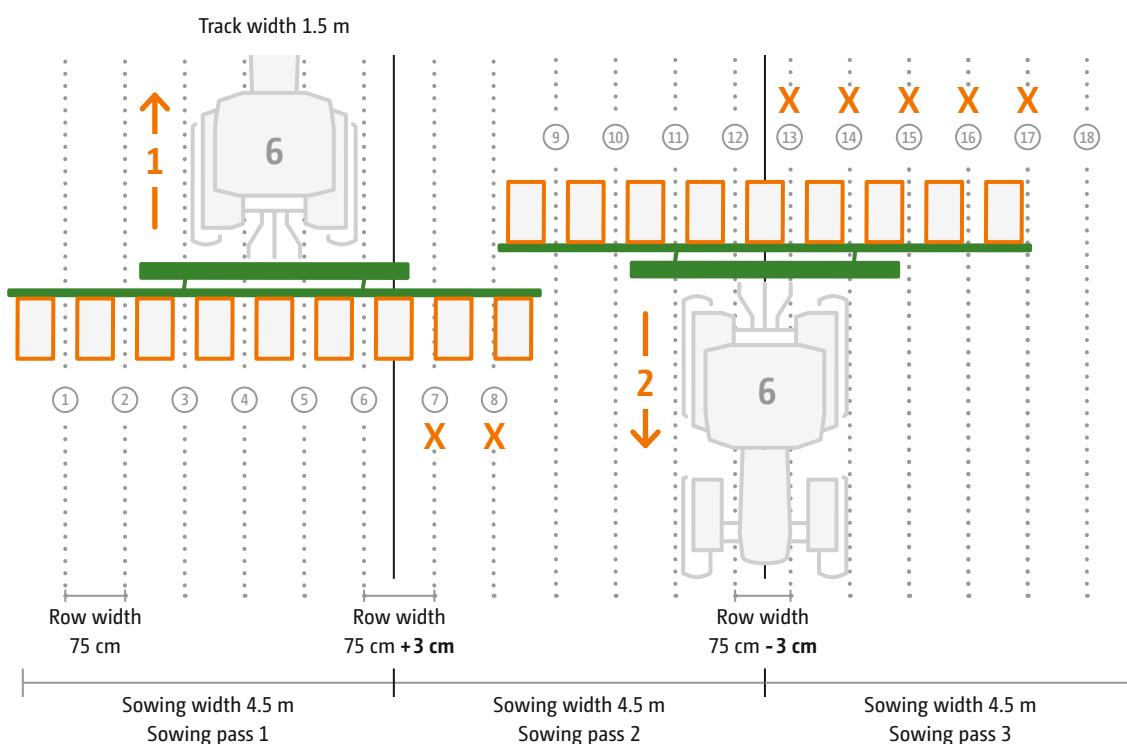
The attempt to weed the crop with a 9-row hoe and a row spacing of 75 cm is shown below.

It can be seen that perfect matching up to the next seed row cannot always be guaranteed due to the inaccuracy of the RTK correction signal with a deviation of up to +/- 3 cm per each working width of the seed drill.

In this example, the distance between seed rows 6 and 7 from the first and second passes for sowing is 75 cm + 3 cm, while the distance between seed rows 12 and 13 from the second and third passes for sowing is 75 cm - 3 cm.

Due to this offset, seed rows 7 and 8 are damaged during the first pass with the hoe, as the hoe blades of the last two parallelograms travel in the crop row. In the second pass of the hoe, seed rows 9 to 12 are hoed correctly, but seed rows 13 to 17 are damaged.

This would not happen with a hoe whose working width is the same as the working width of the seed drill. Consequently, hoeing cannot be wider than sowing, even when sowing with RTK precision.



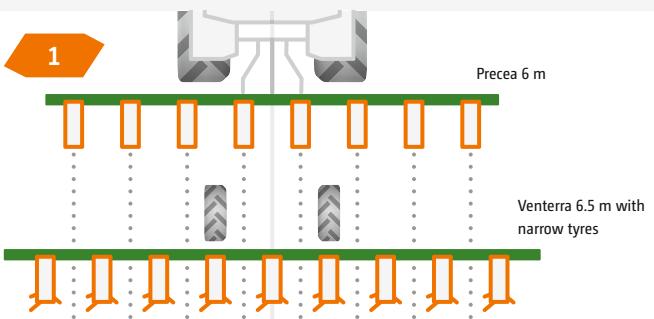
# Track widths

## Common examples and the appropriate hoe configurations

The Venterra can be tailored to the Precea or Precea-TCC precision air seeder from AMAZONE.

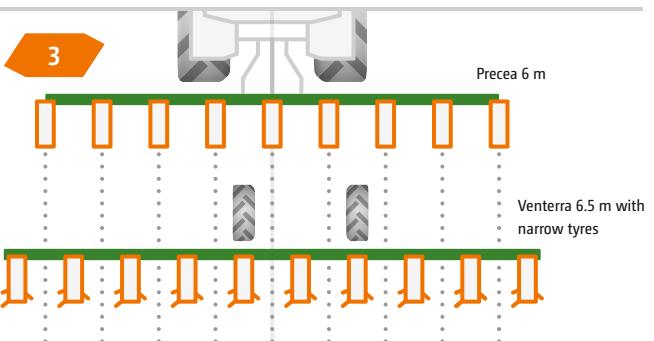
### Precea 6 m with 8 rows and 75 cm row spacing and Venterra 6.5 m with 9 parallelograms and 75 cm row spacing

1. A track width of 150 cm is ideal for crop care, symmetrical mounting.
2. A track width of 225 cm is possible for crop care, but asymmetrical mounting is necessary.

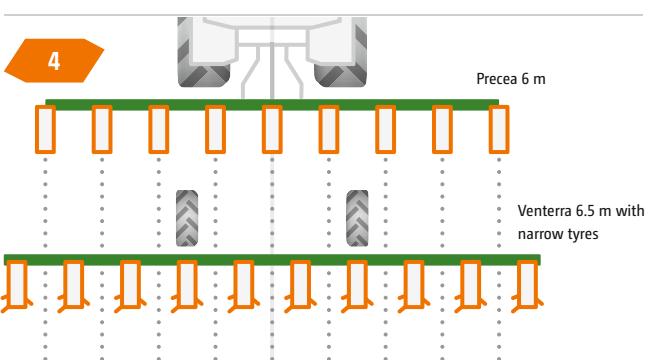


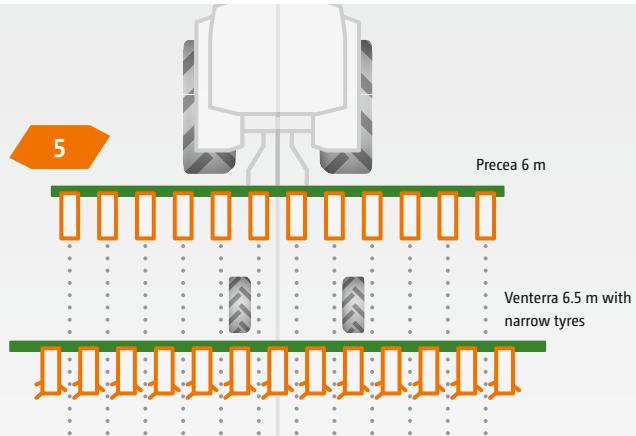
### Precea 6 m with 9 rows and 75 cm row spacing and Venterra 6.5 m with 10 parallelograms and 75 cm row spacing

3. A track width of 150 cm is possible for crop care, but asymmetrical mounting is necessary.
4. A track width of 225 cm is ideal for crop care, symmetrical mounting.

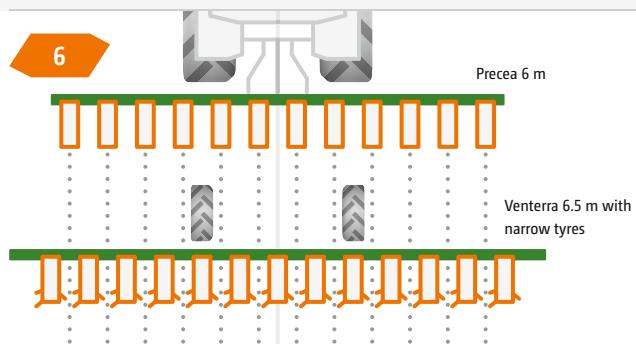


**Note:** The examples and appropriate hoeing configurations shown are specified for typical profiles of standard tyres of 710 mm and narrow tyres of 300 mm.





**Precea 6 m with 12 rows and 50 cm row spacing and Venterra 6.5 m with 13 parallelograms and 50 cm row spacing**



5. A track width of 150 cm is possible for crop care, but asymmetrical mounting is necessary.
6. A track width of 200 cm is ideal for crop care, symmetrical mounting.

## Folding



### Working half-folded

The wings on the Venterra VR 4 in a 9 m working width can be folded in separately. This reduces the working width from 9 metres to 6 metres. The machine's high level of flexibility allows it to be used for a wide range of crops and operating conditions.

The double folding system provides a transport width of less than 3 metres in just a few moments to speed up field changes.

# Hoeing and fertilising at the same time

RowSpread distributor head application system with FTender for fertiliser or seed



## Multiple work steps in just one pass

The Venterra can be equipped with the RowSpread distributor head from AMAZONE for applying fertiliser or undersowing crops during weed control. Everything from a single source - bringing pioneering arable farming concepts to the field!



### Tailored fertilisation with a reduced number of passes

Row crops such as maize or beet benefit from tailored fertilisation after the seedling has developed. Yields can be increased by minimising weed pressure through hoeing on the one hand and providing additional nutrients through fertiliser or micro-granules on the other.

### RowSpread distribution head with FTender

On the one hand, the system enables effective and efficient fertilisation of crops or the application of seed, e.g. an undersown crop, together with simultaneous mechanical weed control.

#### Advantages:

- ✓ High output due to the large hopper capacities of either 1,600 l or 2,200 l
- ✓ The twin-chamber hopper enables seed and fertiliser to be combined
- ✓ Individual distribution: to the plant row, between the plant rows or with full area coverage via baffle plates
- ✓ Tool combinations in the hoe enable the incorporation of the fertiliser or seed
- ✓ More comfort thanks to full ISOBUS implementation in the machine operation
- ✓ Large opening enables quick and easy filling
- ✓ Comfortable and fast coupling possible
- ✓ Easy calibration is possible via the calibration button or TwinTerminal

Model	Capacity (l)	Hopper (m)	Conveying system
FTender 1600	1,600	single-tip	pressurised
FTender 2200	2,200	single-tip	pressurised
FTender 2200-C	2,200	twin-tip	pressurised

# Simultaneous hoeing and spraying

Application via the RowSpray band spraying system with FT-P 1502 front tank

Everything from a single source – with band spraying integrated in the hoe, the use of plant protection agents can be reduced by up to 85 % compared to conventional full-width spraying, depending on the row width. This not only reduces costs and protects the environment, but can also significantly reduce the risk of weed resistance. However, RowSpray is not only used for weed control but also for precise fertilisation with liquid fertiliser directly on the crop row – and part-width section control is included.

The spray agent or foliar fertiliser is carried in the FT-P 1502 front tank from AMAZONE. It is applied in the form of a precise band application over the individual crop rows in front of the hoeing tools. On the other hand, the hoe blade mechanically hoes out the weeds between the rows without the use of chemicals and breaks the capillarity at the same time. The integration of the systems reduces labour and input costs and protects the environment.

## Advantages:

- ✓ Band spraying directly over the crop row
- ✓ Hoeing reduces the use of plant protection agents by up to 85 %
- ✓ Band sprayer nozzle holder on the parallelogram for precise height guidance of the nozzles above the soil
- ✓ Triple nozzle holder
- ✓ Part-width section control via part-width valve chest
- ✓ Central coupling point for the spray agent connection on the shift frame





# FT-P 1502 autonomous front tank

The versatile partner in modern crop production!

## FT-P 1502 autonomous front tank

The FT-P 1502 front tank with a capacity of 1,500 litres is the ideal partner for any applications with liquid products.

### Applications for the standalone front tank:

- ✓ Band spraying in conjunction with the Venterra hoe
- ✓ Liquid fertilisation during sowing with the Precea precision air seeder or the Primera DMC direct seed drill
- ✓ Application of bio-stimulants during sowing
- ✓ Other individual applications

## Precise application

The liquid product is pumped through hoses to the shares on the Venterra. The hoses are carefully routed and protected from stone impacts and damage by protective coverings. The spray agent is sprayed precisely onto the row of crops via a nozzle. A band sprayer nozzle holder on the parallelogram ensures precise height guidance of the nozzles above the soil.



Testimonial from Lars Eikelboom  
QR-Code for the video



## Simple, intelligent operation with the SmartCenter

The operator station of the FT-P 1502 front tank is positioned on the left-hand side and so is easily accessible. The operator station can be equipped with the Comfort-Pack as an option. This includes the TwinTerminal 3.0 for operating the suction side, automatic fill stop for suction filling, fill level dependent, auto-dynamic agitation regulation and remotely controlled, automatic cleaning programmes for quick and thorough cleaning. The FT-P 1502 front tank is equipped with a 180 l fresh water tank that enables efficient cleaning. For autonomous operation, the FT-P 1502 front tank is provided with a hydraulically-driven 180 l/min piston diaphragm pump and can also be equipped with part-width section control. The oil requirement for operating the pump is 35 l/min.



TwinTerminal 3.0



FT-P 1502 autonomous front tank

Primera DMC direct seed drill



Precea precision air seeder



Venterra hoe





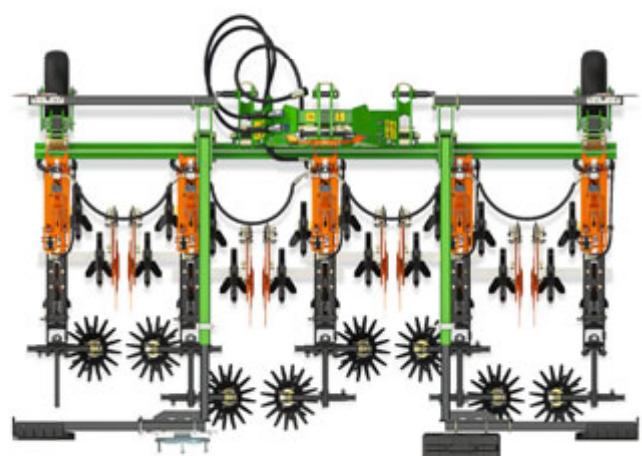


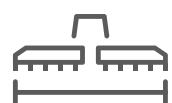
# Venterra 1K and 1K-long



## The advantages of the Venterra 1K and 1K-long

- Equipped with the Type M parallelograms and tools from the Venterra range for full operational capability and the best field results in working widths from 1.3 to 4.2 m
- Convertible front and rear mounting, as well as optionally available with a row guidance system with a control unit and shift frame which can be retrofitted without any problems
- The Venterra 1K frame can be equipped with a mechanical-folding frame extension kit as an option





1.3 m – 4.2 m

Flexible from  
12.5 cm

Front or rear mounted

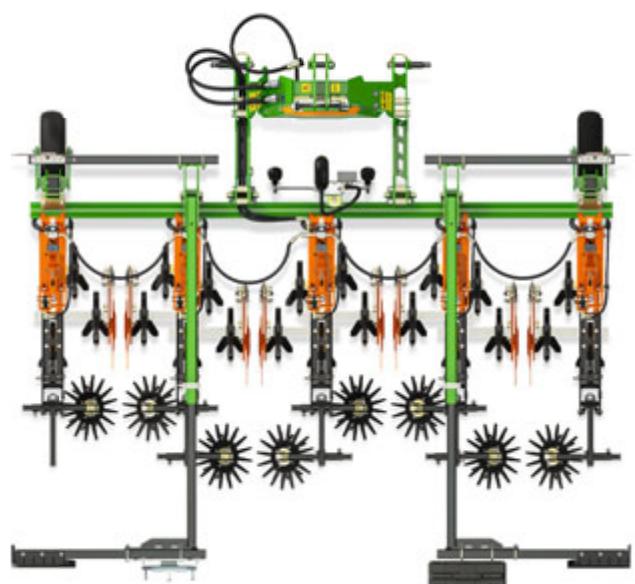


Up to 15 km/h



### Special feature of the Venterra 1K-long

- ➊ For the camera-controlled version of the Venterra 1K with shift frame, the machine is equipped with a long frame, so that the camera has enough space in front of the frame for image acquisition
- ➋ This makes it ideal for specialist crops and narrow working widths

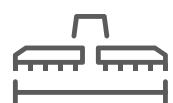


# Venterra 2K



## The advantages of the Venterra 2K

- ✓ Very high frame clearance of up to 100 cm for working in tall crops such as maize or sunflowers up until just before row closure and where there is late weed infestation
- ✓ Fast, hydraulic folding to a transport width of less than 3 m for quick field changes and safe road transport
- ✓ Convertible front and rear mounting, as well as optionally available with a row guidance system with a control unit and shift frame which can be retrofitted without any problems
- ✓ Optional support wheels on the frame for smooth running of the hoe frame



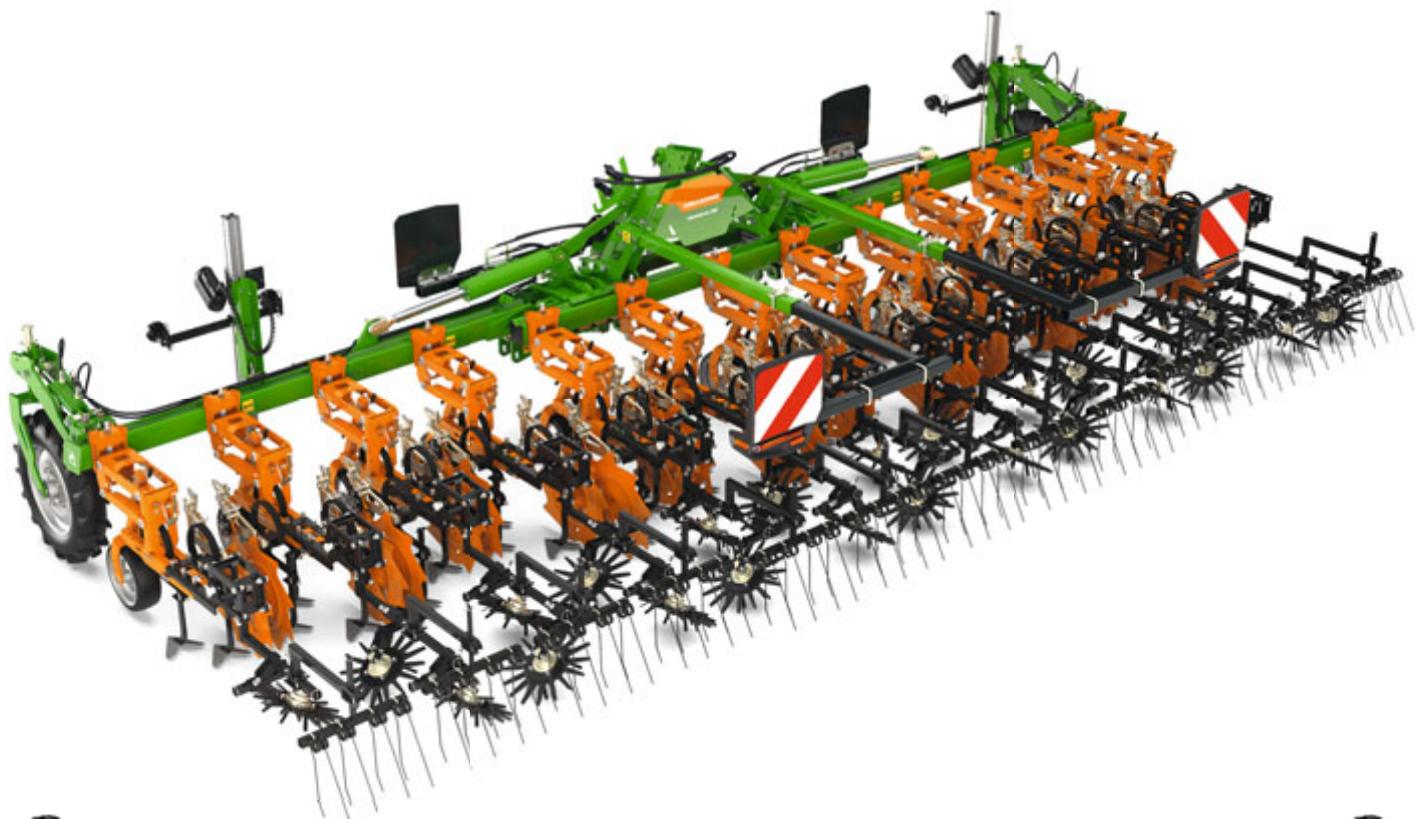
4.5 m – 6.75 m

Flexible from  
12.5 cm

Front or rear mounted



Up to 15 km/h



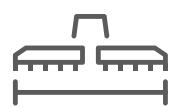
# Venterra VR 4



## The advantages of the Venterra VR 4

- ✓ Very precise working results, even at these large working widths of up to 12 m, thanks to the standard, camera-controlled row guidance system with VR 4 shift frame with a sliding travel of up to 60 cm
- ✓ Operation partially folded is possible for maximum flexibility to match in with different working widths of seed drills
- ✓ Support wheels on the frame for optimised weight distribution and an integrated shift frame for a centre of gravity close to the tractor





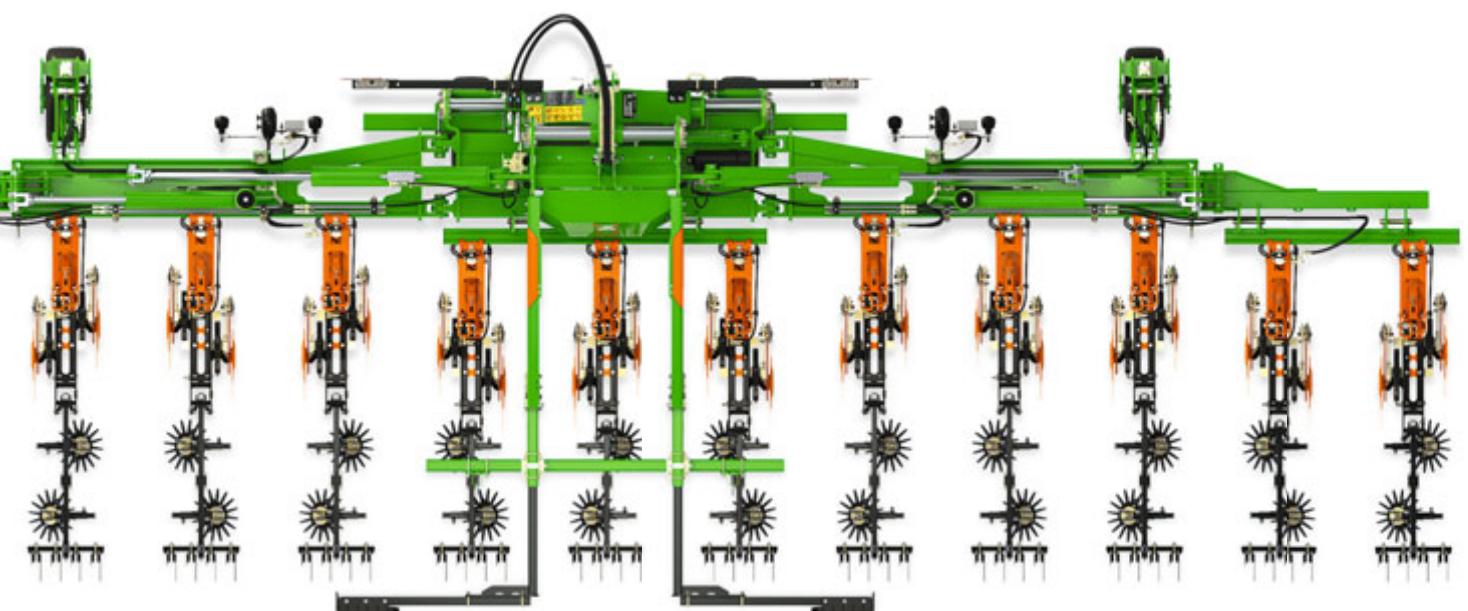
7.2 m – 12.8 m

Flexible from  
12.5 cm

Rear mounted



Up to 15 km/h



# Technical data:

## Venterra inter-row hoe

Model	Venterra 1K	Venterra 2K	Venterra VR 4
Working width (m)	1.30–4.20	4.50–6.75	7.20–12.80
Row spacing (cm)	flexible from 12.5 cm		
Frame height in the field	(M) 80 cm	(M) 80 or (L) 100 cm	(M) 80 cm
Transport width	3.00	2.95	2.99
Weight (75 cm rows) (kg)	560*	1,268*	2,876/3,232**
Front mounting	✓	✓	
Rear mounting	✓	✓	✓
Camera control	✓	✓	✓
Part-width section control	✓	✓	✓
Linkage	Cat. 2 or 3		Cat. 3
Power requirement (kW/hp)	44/60	60/80	from 118/160

\* Rear mounting with Type KPP-M parallelogram and a row spacing of 75 cm

\*\* Venterra VR 4 (9 m)/Venterra VR 4 (12 m) rear-mounted with an integrated shift frame, Type KPP-M parallelogram and a row spacing of 75 cm

Illustrations, content and technical data are not binding and may differ depending on the level of equipment. Country-specific road traffic regulations apply and must be complied with, meaning that special approval may be required. The permissible axle loads and total weights of the tractor should be checked. Not all the listed combination options are possible with all tractor manufacturers.



# The original is simply better

AMAZONE service and quality



Experience that pays off. AMAZONE therefore guarantees you the highest quality thanks to a very high level of vertical integration across its own factories in Europe – and it has been doing so for more than 140 years. The original is simply better.

In most cases, things need to happen very quickly, especially when time is tight for optimum weed control. That is why AMAZONE offers a first-class parts service with genuine parts that are precisely matched to your machine.

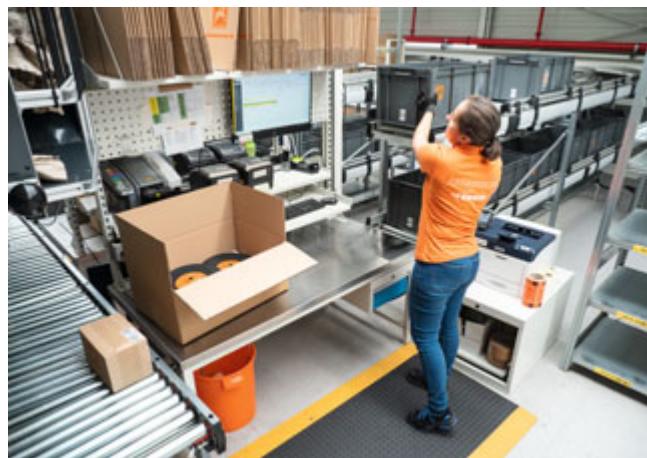
So your machine is always ready for use - quality parts and available worldwide.

The Global Parts Centre in Tecklenburg-Leeden in Germany is the base for our worldwide parts logistics system. This ensures optimum availability of parts, even for older machines. Whenever you need us, the AMAZONE service team is there for you, supported by a network of competent and highly trained sales partners and service technicians.

Exact weed control from the very first metre.

## The advantages of genuine parts and wearing metal:

- ✓ Quality, reliability and performance
- ✓ Immediate availability, even for older machines
- ✓ Higher resale value of your used machine



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