FLEXCARE V Folding hoe technology



Flexibility meets precision



Mechanical crop care





Thanks to its unique design, the FLEXCARE row crop cultivator made by PÖTTINGER offers full flexibility working in a variety of crops. The row spacing, the working width of the hoe elements and the fine adjustments of the finger hoe are completely adjustable without the need for tools. The machine features precise depth control and crop-conserving operation.

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All information on technical data, dimensions, weights, output, etc. and the images shown, are approximate and are not binding. The machines shown do not feature country-specific equipment and may include equipment that is not supplied as standard, or is not available in all regions. Your PÖTTINGER dealership would be pleased to provide you with more information.

Successful mechanical weed control



Plant protection is evolving

For decades, increasing yields have been ensured by using chemical crop protection However, with increasing use, the resistance of harmful organisms also increases, meaning that the effectiveness of plant protection products is stagnating. Fewer permits are being issued for plant protection products with new active ingredients. Furthermore, consumer acceptance of chemical pesticides is declining, and new health and environmental goals require a reduction in their usage.

PÖTTINGER accepts these challenges and now includes mechanical crop care machines in its product range for sustainable, crop-specific and site-specific plant protection.

Objectives of mechanical weed control

A key objective of mechanical crop care is to promote the growth of the crop. To achieve this, competition from weeds and grasses must be kept to a minimum. A high density of weeds cause:

- Reduction in yield, or even a failed crop
- Contaminated crop or seed
- Difficult, cost-intensive harvesting conditions

By using our crop care machines, it is possible to avoid higher production and follow-up costs.

Mechanical crop care







Agronomic factors

Successful mechanical weed control depends on several factors. The crop, weeds, soil, weather, and the machine settings all play an important role.

- Nurturing a healthy crop depends on the most suitable sowing time, the quality of the seed and the best seed drill technology for the plant.
- The timing and intensity of crop care depend on the plant growth stage, the type of weeds and the level of infestation.
- The type of weeds and their propagation determine the choice of the right crop care machine. The settings of the weeding tools must be adapted to the type and size of weeds.

Key location factors

Mechanical crop care machines need to be set up to perfectly match the location-specific conditions.

- The soil conditions include soil type, soil state and soil moisture. The intensity and timing of the crop care application can be calculated accordingly. The quantity of stones in the soil and preceding tillage passes determine the tool settings.
- The timing of the application must also be adapted to parameters that cannot be changed. This includes weather conditions such as ambient temperature, soil temperature, precipitation, direct sunlight and wind.

Successful mechanical weed control



For a healthy crop

Mechanical cultivation of the topsoil leads to better nutrient availability. The working results of the crop care machines give the crop a growth advantage over the weeds.

Targeted mechanical plant protection can reduce the use of chemical plant protection products (PPPs) and, in ideal cases, replace them entirely. The combination of mechanical and chemical plant protection can improve the effectiveness of existing PPP processes.

Integrated crop protection saves PPPs and prevents them from entering surface water and groundwater. The variety of species and biodiversity are then preserved and promoted.

Positive effects on the soil

The positive side effects of mechanical crop care are reflected in the structure of the soil. Heavily encrusted soils can be broken up. This promotes quality tilth and thus improves the drainage capacity of the soil. Aeration of the soil ensures a higher activity of microorganisms, which promote the build-up of humus.

Versatile applications in different crops

The QR code takes you to a list of weed control measures for various crops and suitable application time windows.



This QR code takes you directly to the application.

Mechanical crop care



Adjustable FLEXCARE parameters

Settings on the machine can be adjusted to handle different operating conditions. Many of the settings can be made without the need for tools.

Different duck foot shares, weeding blades and following tools allow the machine to be quickly optimised to the operating conditions. Various control systems ensure the best working results.

Working effects of mechanical weed control

Different row crop cultivation effects can be achieved using FLEXCARE hoeing technology.

- Cutting: The leaves are completely separated from the root system. The plant stops growing as a result. The root system perishes and the leaves dry out.
- Covering: The weeds are covered with soil.
 Photosynthesis is prevented by the lack of sunlight so that the weeds perish.
- Breaking up incrustations: The vibrating movement of the weeding tools effectively breaks up incrustations.

The highest precision



Precision work

The prerequisite for a precise hoeing process is the accurate guidance of the machine between the rows. PÖTTINGER achieves this thanks to the compact design of the machine and its large 450 mm diameter flanged wheels, and by mounting the row crop cultivator close to the tractor. The strong 180 x 180 mm cross-section frame makes the machine extremely robust.

Ultimate ground tracking

Parallelogram mountings ensures that the set working depth is maintained consistently and precisely. To ensure the best working results, hydraulic adjustment of the ground pressure of all tools is available as an option. Even in difficult conditions, the FLEXCARE row crop cultivator offers an impressive range of adjustment possibilities.

Narrow hoeing band

All the hoe elements are arranged in a single row to achieve a narrow hoeing band and minimise the potential space for weeds. This means that even very young crops can be hoed reliably and precisely. With the optional camera steering, fatigue-free work is possible even with a very narrow hoeing band of 5 cm.

Inter-row & intra-row

During hoeing, it is important to define where the tools work.

Inter-row stands for hoeing between crop rows, using duck foot shares and weeding blades.

Intra-row stands for hoeing between plants within one row. Finger hoes and edging plates are used for this purpose.





Individual lifting of hoe elements

The optional electro-hydraulic individual lifting of the hoe elements ensures minimal damage to the crops in wedgeshaped fields. These are conveniently controlled using a toggle switch. The standard central lifting system raises up to 20 hoe elements simultaneously.

Manual electro-hydraulic control system

Being able to control the hoe elements individually using the manual electro-hydraulic control system provides an even higher level of precision and reliability. This enables the coulter pressure to be adjusted according to the site conditions in order to optimise performance.

Section Control

With the optional Section Control individual row lifting system, the hoe elements can be raised and lowered via ISOBUS with pinpoint accuracy using GPS. This happens automatically when the headland boundary is reached. Ultimately, it protects the crop in field corners, overlaps and along field edges.

Automatic electro-hydraulic control system

Each hoe element has a double-acting hydraulic cylinder to raise and lower the hoe according to GPS signals at the headland and in field corners. This means less fatigue for the driver, who can focus on the working results of the row crop cultivator.

Maximum flexibility



Modular configuration

In order to keep your investment costs as low as possible, all hoe elements feature a uniform, modular design. To increase machine utilisation, three to five tools with row widths of 25 to 80 cm can be attached to one element. This gives you the capability of cultivating different crops with different row widths with just one machine.

Short changeover times

Achieve high outputs and complete jobs quickly using time-saving tool changes and quick setting adjustments. Independently of varying row spacings and different soil or plant conditions, the row crop cultivator can be adjusted to any site-specific conditions in a matter of minutes.

- Adjust the hoe elements to different row widths
- Adapt the height and width of the weeding tools
- Align the following tools
- Set the flanged wheels to the row width

All settings can be carried out without the need for tools.





The FLEXCARE row crop cultivator can handle row widths between 25 and 160 cm. The number of hoe elements can be freely selected depending on the frame width. Each tool carrier can be adapted for up to 5 hoe elements, giving a choice of configurations. All weeding tools are equipped with a spring hoe clamped to the adjustment rail. The following tools are also available:

- Duck foot shares 140, 160 or 180 mm wide
- Edging plate 90 mm for duck foot share 180 mm
- Straight weeding blades 160 or 180 mm wide

Large scalloped plant protection discs can also be fitted, and finger hoes with a diameter of 310 and 370 mm can be attached as following tools.



PÖTTINGER ensures that these machines deliver the highest reliability. Thanks to the large underframe clearance of 550 mm, the machine can be used even in well developed crops. A high clearance ensures reliable operation, even if there is a lot of organic matter. Crop care on rough ground and hilly terrain is no problem for the FLEXCARE row crop cultivator.

Easy to use



Easy adjustment

Setting up the machine plays a decisive role in achieving perfect crop care results. PÖTTINGER guarantees simple, time-saving adjustment of the individual elements to keep your operation profitable.

Straightforward adaptation

With the FLEXCARE row crop cultivator, there is no need for time-consuming measurement and alignment of the weeding tools. A preset hole matrix and indicator scales on each component make it easy to set up all the tools identically.

Equipped for every row width

Configuring the weeding tools and setting up the machine for different crops is completely flexible:

- Simply adjust and change the row width using a hole matrix in 25 mm steps, secure in place using a springloaded press stud and eccentric clamp
- Set the working width of each hoe element using a hole matrix with 15 mm steps and secure using springloaded press studs
- Depth adjustment is infinitely variable using a mechanical spindle with scale
- Each tool leg is height adjustable using a clamped connection. Notches with 15 mm steps provide an indication.
- The finger hoes can be conveniently pivoted in/out as well as adjusted in position and angle using eccentric clamps





Convenient operation

An integrated hydraulic shift frame is standard and ensures convenient operation. The hydraulically controlled frame greatly reduces driver fatigue while maintaining a high level of precision. By constantly adjusting the frame to the row, plant damage and crop losses are avoided while compensating for planting inaccuracies. A narrow hoeing band is the result.

Camera assisted row tracking

On the FLEXCARE there are two optional camera systems that precisely control the row alignment of the row crop cultivator and compensate for any inaccuracies:

1. Analog camera: The camera transmits a live image to a screen in the tractor cab. The hydraulic shift frame can be controlled by the driver using a double-acting spool valve.

2. 2D camera: In conjunction with the electro-hydraulic shift frame, the rows are detected by a 2D camera and the software controls the tracking of the row crop cultivator. As an option, a second synchronised camera is also available. This adds another layer of accuracy.

Low maintenance requirement

The parallelogram mounting is equipped with sealed plain bearings for minimum maintenance. These are easy to replace in order to retain row tracking accuracy at high operating speeds.

Sealed bearings

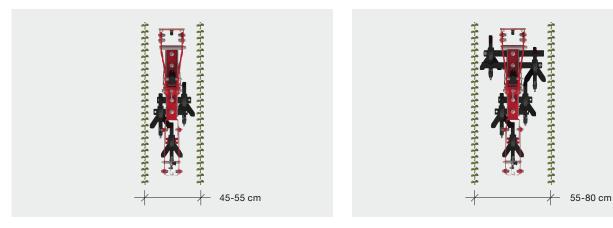
All rotating components are mounted on maintenance-free sealed bearings. The FLEXCARE therefore has no greasing points.

One hoe element for all crops

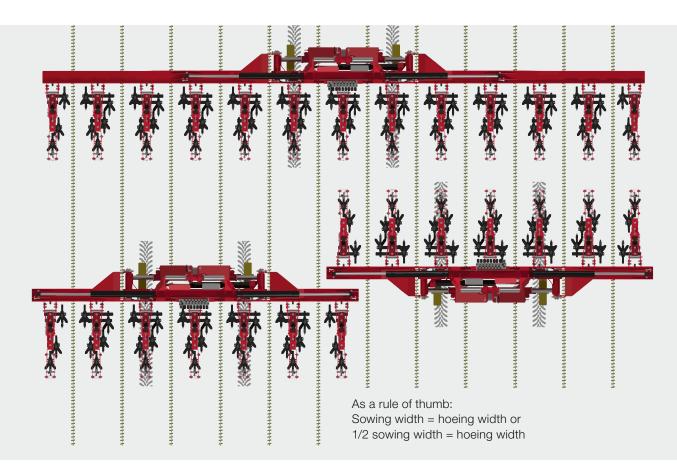


For crops with row spacings of 25 to 30 cm, such as cereals or special crops, one hoe tool is used per row. The distance to the row of plants is determined by choosing the width of the duck foot share. In order to minimise the overall weight of the FLEXCARE, each hoe element is equipped with three hoe tools.

If a row spacing of 30 to 45 cm needs to be processed, one hoe element is used per row. The hoe elements are equipped with two hoe tools. One centre and one side hoe tool provide sufficient coverage. This guarantees a fullsurface movement with sufficient overlap.



Sugar beet, soybeans and even oil seed rape are grown in many places with row spacings of 45 to 55 cm. For successful weed control between the rows, the hoe element is equipped with three inter-row hoe tools. One hoe element is used for each plant row. With five hoe tools, row spacings between 55 and 80 cm can be processed. This promotes the growth of maize and sunflower seeds, for example. For row spacings wider than 80 cm, two hoe elements per row can be used.



Prerequisites for perfect working results

Perfect results can only be achieved with the right choice of hoe in relation to the sowing width, row spacing and tractor track width. The aim of the process is to work as close as possible to the crop without damaging the crop or its root system.

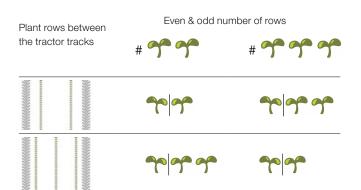
A decisive configuration

The tractor track width and the number of rows to be worked have a decisive influence on the configuration of the hoe. With a symmetrical set-up, the same number of rows are located to the left and right of the tractor centreline. With an asymmetrical set-up, the number of rows differs. In order to utilise the full range of the shift frame even with an asymmetrical set-up, we recommend equipping the FLEXCARE with the optional frame extension.

Sowing width meets hoeing width

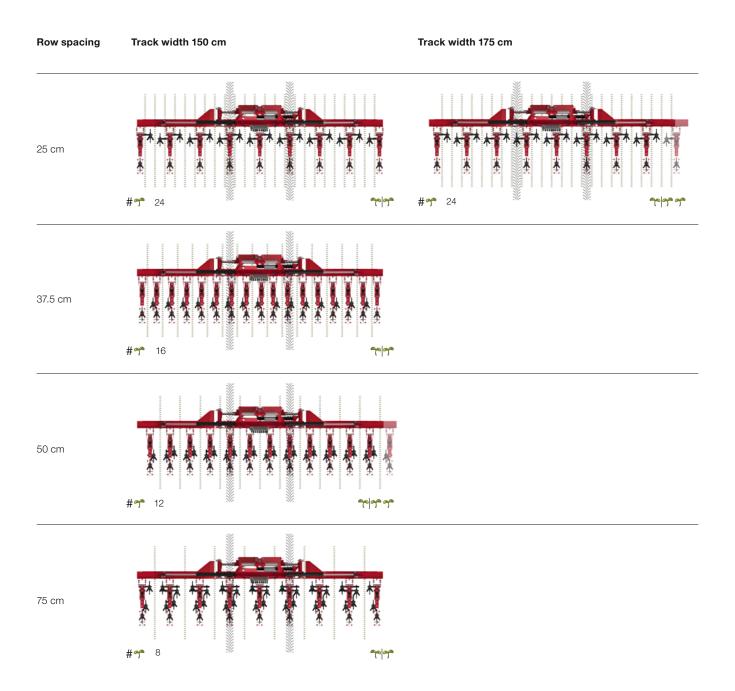
Despite the very latest guidance systems, track deviations are possible. For loss-free hoeing passes, the working width of the hoe must match the working width of the seed drill. The graphic shows an example with a seed drill width of nine metres and a row spacing of 75 centimetres. In this case, either a FLEXCARE V 9200 or a FLEXCARE V 4700 can be used.

Symmetrical or asymmetrical?



Hoeing hacks guide

The hoeing hacks guide provides information on possible configurations of a FLEXCARE V 6200 depending on row spacing and tractor track width. The alignment of the hoe elements can also be transferred to the other FLEXCARE models.



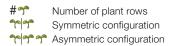


Track width 200 cm

Track width 225 cm







The graphic only shows some of the possible configurations and does not represent a complete overview of variations.

Folding hoe technology





Folding hoe technology



1 Mounting

Thanks to different lower linkage and top link positions, the row crop cultivator can be attached to a wide range of tractor geometries. This ensures the machine can be deployed even when conditions change.

- Cat. II / 2 mounting on 4.7 and 6.2 m machine, Cat. III / 3 mounting on 9.2 m machine
- 3 lower linkage and 2 top link positions

2 Hydraulic shift frame

A hydraulic shift frame is integrated into the main frame to optimise plant row tracking.

- Shift path +/- 25 cm
- Controlled manually, or automatically with the optional electro-hydraulic control system

Flanged wheels

The large flanged wheels with a diameter of 450 mm increase the precision of the FLEXCARE. Smooth running is ensured during operation.

- Width-adjustable for track widths between 150 and 200 cm
- Recommended for camera steering

4 Plant detection

The row crop cultivator can be precisely guided along the row using an optional 2D camera. Camera steering enables a narrow hoeing band of 2 cm

- Detects 1 to 8 plant rows on each camera
- With easily adjustable tripod and LED floodlights for night work
- A second synchronised camera is available as an option for maximum accuracy – recommended for machines with individual row lifting or section control



5 Parallelogram mounting

Each hoe element is mounted on a parallelogram for optimum ground tracking. Ground pressure and soil entry can also be adapted using an optional hydraulic cylinder.

- Precision control of the hoe elements
- With Section Control as an option

6 Hoe elements

The hoe elements feature a modular configuration for flexible operation. This allows rapid adjustment and expansion of the tools for different row widths and crops.

- Fast adaptation to changing conditions
- Row widths between 25 80 cm per hoe element

7 Tool carrier

A total of 5 tool slots are available on the tool carrier. A weeding tool is always located in the middle. The tool carrier is supplied with 3 tools as standard.

- Guarantees a uniform cut over the entire area
- Flexible choice of tool configuration

Spring hoe

All hoeshares on the FLEXCARE are attached to a spring hoe. This ensures a tidy cut and optimum crumbling of the soil because the tools oscillate during operation and at the same time reduce the tractive force required. In addition, this allows each share to be adjusted separately in its working depth and quickly exchanged if necessary.

Folding hoe technology



1 Deployment example: Maize – row width 75 cm

2 Deployment example: Sugar beet - row width 45-55 cm

3 Deployment example: Soybeans – row width 45-55 cm





Superstructure – flexible and light

The configuration of the FLEXCARE hoe elements can be matched exactly to meet your needs. The FLEXCARE can be converted for different deployment scenarios within a very short time.

Deployment example: Maize – row width 75 cm

- Duck foot share 180 mm with straight leg (1x)
- □ Duck foot share 180 mm with straight leg (2x)
- □ Extended hoe element 800 mm
- Duck foot share 140 mm with angled leg (2x)
- Plant protection disc
- □ Finger hoe 370 or 310 mm

Deployment example: Sugar beet – row width 45-55 cm

- Duck foot share 180 mm with straight leg (1x)
- □ Weeding blade 180 mm with straight leg (2x)
- □ Extended hoe element
- □ Finger hoe 310 or 370 mm

Deployment example: Soybeans – row width 45-55 cm

- Duck foot share 180 mm with straight leg (1x)
- □ Duck foot share 180 mm with straight leg (2x)
- □ Edging plate 90 mm



Folding hoe technology





Duck foot share 140 mm.

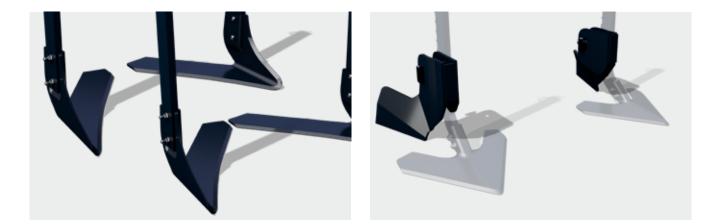
The standard tool on the FLEXCARE V. The working width of 140 mm ensures maximum flexibility of use.

With angled leg

Duck foot share 160 or 180 mm

The optional 160 or 180 mm wide duck foot shares provide more overlap to guarantee that the weeds are removed.

With straight leg



Weeding blade 160 or 180 mm

The optional weeding blades produce a clean, sharp-edged cutting pattern along the hoeing band. Hoeing at an early stage of growth actively moves the flow of soil away from the row of plants and effectively prevents them from being covered with soil.

- Extension required up to 80 cm, separately
- With straight leg

Edging plate 90 mm

For ridging within the row of plants: With some crops, such as soybeans and maize, weeds can be very well regulated in the row by covering them with soil. At the same time, this often brings about a positive effect on the crop.

- Requires duck foot shares 180 mm with straight leg
- Clamp mounting on the share leg





Plant protection disc

When used with duck foot shares, large diameter plant protection discs protect young crops from being covered with soil.

- Can be locked in upper position
- Easy to remove

Finger hoe 310 or 370 mm

The finger hoes feature separate parallelogram guidance. This ensures optimum ground tracking. to conserve the crop.

- For working within the rows
- Medium hardness handles all crops





Expansion up to 80 cm

The optional extension is used to process wider row spacings of up to 80 cm with just one hoe element. This allows a total of five hoe shares to be mounted on one tool carrier.

Frame extension 300 mm

With the 300 mm wide frame extension, the FLEXCARE can be adapted even more variably to your site conditions. Required in places for the asymmetrical adaptation of the machine to the row widths in the field.

Unit including spring hoe

Accessories













FLEXCARE	Hoe element 25-55 cm	Extension 55-80 cm	Frame extension 30 cm	Hydraulic shift frame	Flanged wheels width adjustable
FLEXCARE V 4700					
FLEXCARE V 6200					
FLEXCARE V 9200	•			•	







Duck foot share

160 mm, straight



180 mm, straight



Weeding blade

160 mm



Weeding blade 180 mm

FLEXCARE V 4700	•		
FLEXCARE V 6200	•		
FLEXCARE V 9200			

Often ordered together













Hydraulic central lifting	Hydraulic individual lifting	Section Control	Camera steering with one camera	Additional camera second side	Camera analog
•					





Plant protection disc Edging plate 90 mm



Parallelogram for following tools





Jockey wheels 16.0/9.50-8

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Configure your own machine.

Technical data



FLEXCARE	V 4700	V 6200	V 9200
Working width	4,70 m	6.20 m	9.20 m
Maximum number of hoe elements	16	20*	20*
Minimum number of hoe elements	5	7	11
Transport width (m)	3.00 m	3.00 m	3.00 m
Transport height (m)	2.50 m	3.35 m	3.90 m
Transport length (m)	2.20 m	2.20 m	2.20 m
Frame dimensions	180 x 180 mm	180 x 180 mm	180 x 180 mm
Underframe clearance	820 mm	820 mm	820 mm
Jockey wheel tyres	_	_	16.0/9.50-8
Tare weight	800 kg	875 kg	1,500 kg
Weight of basic version ¹	1,425 kg	1,650 kg	2,565 kg
Power requirement	90 hp	110 hp	160 hp

* Applies only to central lifting

 $^{^{\}rm 1}$ basic machine + flanged wheels + elements with row spacing of 75 cm

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My machines

Add your PÖTTINGER machinery to "My machines" and assign a name. You will receive valuable information such as: useful tips on your machine, operating instructions, spare parts lists, maintenance information, as well as all the technical details and documentation.

Info on the product range

MyPÖTTINGER provides you with machine-specific information for all machines built starting 1997.

Scan the QR code on the machine's data plate with a smartphone or tablet or go to www.mypoettinger.com and enter the machine number from the comfort of your own home. You will immediately receive all the information on your machine, such as: instruction manuals, equipment options information, brochures, photos and videos.

ORIGINAL PARTS



Rely on the original

PÖTTINGER Original Parts meet the highest demands in terms of functionality, reliability and performance. These are characteristics that PÖTTINGER is committed to delivering.

That is why we manufacture PÖTTINGER Original Parts from the highest quality materials. We ideally match each individual spare part and wear part to your machinery's overall system. This is because different soil and operating conditions often need to be taken into consideration.

He have been listening to our customers and now offer three different lines - CLASSIC, DURASTAR and DURASTAR PLUS - to make sure you have the right part to meet every requirement. Original parts are worth every cent, because know-how cannot be copied.



Your advantages

- Immediate and long-term availability.
- Maximum durability thanks to innovative production processes and the use of the highest quality materials.
- Avoidance of malfunctions due to a perfect fit.
- The best working results thanks to optimum match to the overall system of the machine.
- Save time and costs thanks to longer replacement intervals on wear parts.
- Comprehensive quality testing.
- Ongoing advancement through research and development.
- Worldwide spare parts supply.
- Attractive, competitive prices for all spare parts.



Wear parts

The CLASSIC line is for standard duty applications. With these ORIGINAL INSIDE parts we have defined the benchmark for quality, best price/ performance ratio and reliability.

DURASTAR is the innovation on the wear components market - durable, high quality, productive and reliable.

Are you used to putting your machines to work in the most extreme conditions? Then the DURASTAR PLUS line is the right choice for you.

POTTINGER



More success with PÖTTINGER

- A family-owned company since 1871 Your reliable partner
- Specialist for arable and grassland
- Future-safe innovation for outstanding working results
- Roots in Austria at home throughout the world

Rely on FLEXCARE

- Modular design of hoe elements for different crops and row widths between 25 and 160 cm
- Easy adjustment of hoe elements, weeding blades and following tools as well as plant protection discs
- Integrated, hydraulic shift frame with optional camera steering for absolute precision
- Optional electro-hydraulic individual lifting of the hoe elements with adjustable ground pressure

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