

# Flexibility meets precision



## Mechanical crop care





Thanks to its unique design, the new 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.

### Table of contents

Successful mechanical weed control	4-7
Folding hoeing technology	8-9
The highest precision	10-11
Flexible in operation	12-13
Easy to use	14-15
All the advantages at a glance	16-17
Accessories / Technical data	18-23
Accessories Technical data MyPÖTTINGER / ORIGINAL PARTS	18-19 20-21 22-23

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, resulting in the effectiveness of plant protection products 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 sharp 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







### Crop cultivation factors

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

- A healthy and vital crop depends on the most suitable sowing time, the quality of the seed and the best seed drill technology for the plant. The intensity and timing of the crop care depend largely on how far the crop has developed.
- 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. This influences the intensity and timing of the crop care measures. The quantity of stones in the soil and preceding tillage passes determine the tool settings.
- The time frame 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 PPPs 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 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 below takes you to a list of weed control measures for various crops and suitable application time windows.



## 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 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.
- Overturning: 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 cultivation tools effectively breaks up incrustations.

## Folding hoeing technology





## The highest precision



### Precision work

The prerequisite for a precise hoeing process is accurate row tracking. 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.

## FLEXCARE V





### 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. A hoe bandwidth of between 5 and 10 cm is possible using the optional camera steering system.

#### 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 ridging shares 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 21 hoe elements simultaneously.

#### Electro-hydraulic control system

Being able to control the hoe elements individually provides an even higher level of precision and reliability. Using this system the pressure can be adjusted according to the site conditions in order to optimise performance.

## Flexible in operation



### 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.

## FLEXCARE V





### Variability of the weeding 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, allowing you to choose any configuration. All weeding tools are equipped with a spring hoe clamped to the adjustment rail. The following tools are also available:

- Duck foot share 160 or 180 mm wide
- Ridging share
- Straight or angled weeding blades 160 or 180 mm wide

In addition, large scalloped plant protection discs as well as finger hoes with a diameter of 370 mm available in two different levels of hardness can be attached as following tools.

## Reliable operation in all conditions

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.

## Greatest convenience



### 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

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

## FLEXCARE V





### Convenient operation

An integrated hydraulic shift frame is standard and ensures convenient operation. The hydraulically controlled frame takes a lot of stress off the driver 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.

## The advantages at a glance.



#### 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 6.6 m machine, Cat. III / 3 mounting on 9.2 m machine
- 3 lower linkage and 2 top link positions

#### 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

#### Parallelogram mounting

Each hoe element is mounted on a parallelogram for optimum ground tracking. Ground pressure and cultivation performance can be adjusted using an optional hydraulic cylinder.

- Lifting height of up to 40 cm
- Precision control of the hoe elements

#### 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 between 5 and 10 cm.

- Detects 1 to 8 plant rows
- A second synchronised camera is available as an option for maximum accuracy.





#### 5 Following tools on separate parallelogram

The finger hoes are mounted on a separate parallelogram. This ensures optimum ground tracking to conserve the crop.

- The finger hoes are available in two different hardness levels
- Hardness levels: yellow = medium, red = hard

#### 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 shallow cultivation over the entire area
- Flexible choice of tool configuration

#### Tool settings

All settings can be carried out without the need for tools. This enables rapid adjustment to differing operating conditions.

- Hole matrices provide an indication of the required row width
- Secured using press studs and eccentric clamps

## Accessories









#### FLEXCARE

Hoe element 25-50 cm

Hoe element 25-80 cm

Hydraulic shift frame

FLEXCARE V 4700	•	•	
FLEXCARE V 6200			
FLEXCARE V 9200			

<u>[</u> ∡€€⊘		V	
FLEXCARE	Duck foot share 160 mm	Duck foot share 180 mm	Weeding blade 160 mm
FLEXCARE V 4700			
FLEXCARE V 6200			

 $\blacksquare$  = Standard,  $\Box$  = Optional

FLEXCARE V 9200

## Often ordered together









Hydraulic central lifting	Electro-hydraulic individual lifting	Camera steering	Flanged wheels
•			•
			•



#### More equipment options

- Parking stands are standard
- Jockey wheels 20.5 x 8.0-10
- Camera steering with 2 cameras optional
- Camera steering analog optional

## Technical data



## FLEXCARE V

FLEXCARE	V 4700	V 6200	V 9200
Working width	4,70 m	6.20 m	9.20 m
Maximum number of hoe elements	18	21*	21*
Minimum number of hoe elements	5	7	11
Transport width (m)	3.00 m		
Transport height (m)	2.50 m	3.35 m	3.90 m
Transport length (m)		2.20 m	
Frame dimensions	180 x 180 mm		
Underframe clearance	820 mm		
Jockey wheel tyres	20.5 x 8.0-10		
Weight from <sup>1</sup>	800 kg	875 kg	1,500 kg
Power requirement	90 hp	110 hp	160 hp

<sup>\*</sup> Applies only to central lifting
<sup>1</sup> Basic machine

## MyPÖTTINGER



## MyPÖTTINGER – it's easy. Anytime. Anywhere.

NEW STARTING 17/11/2021

#### Benefit from numerous advantages

MyPÖTTINGER is our customer portal that provides you with key information about your PÖTTINGER machines.

Get specific information and useful tips on your PÖTTINGER machines in "My machines". And find out more about the PÖTTINGER product range.

#### 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

### Ask for more information:

#### PÖTTINGER Landtechnik GmbH

Industriegelände 1 4710 Grieskirchen Austria Phone +43 7248 600-0 info@poettinger.at www.poettinger.at

#### Alois PÖTTINGER UK Ltd.

15 St Marks Road, Corby Northamptonshire, NN18 8AN United Kingdom Phone + 44 1536 272 220 info@pottinger.uk www.pottinger.uk

#### POETTINGER Canada Inc.

460 Rue Robinson Sud Granby, QC, J2G 7N6 Canada Phone +1 450 372 5595 Fax +1 866 417 1683 info@poettinger.ca www.poettinger.ca

#### POETTINGER US, Inc.

393 Pilot Drive Valparaiso, IN 46383 USA Phone +1 219 510 5534 Fax + 1 219 707 5412 info@poettinger.us www.poettinger.us

#### **PÖTTINGER Australia PTY LTD**

11 Efficient Drive Truganina VIC 3029 Australia Phone +61 3 8353 2770 info@poettinger.com.au www.poettinger.com.au

#### POETTINGER Ireland Ltd.

Glenaleamy, Powerstown Road, Clonmel, Co. Tipperary Ireland Phone +353 52 6125766 info@poettinger.ie www.poettinger.ie

#### Importer for New Zealand: Origin Agroup

PO Box 673, 57 Hautapu Road Cambridge New Zealand Phone +64 7 823 7582 info@originagroup.co.nz www.originagroup.co.nz

#### Importer for South Africa: VALTRAC

Cnr. Water & Buiten Street 9585 Parys South Africa Phone +27 56 817 7338 7308 wynn@valtrac.co.za www.valtrac.co.za

