

POTATO TECHNOLOGY
SUGAR BEET TECHNOLOGY
VEGETABLE TECHNOLOGY

GRIMME

HARVESTING SUCCESS!

Series GL cup planting machines

Short, compact, mounted: GL 410, GL 420 and GL 420 Exacta



GL-series: the 4-row, mounted planting machines with the large potential

Successful potato cultivation starts with the use of the correct technology which is adapted to the individual cultivation conditions. The planting

machines GL 410 and GL 420 adapt the approved Grimme planting elements, which ensures the precise placement of the tuber. Due to the short, compact

design, both machines can be mounted on the tractor and, depending on their equipment, are suitable for both farmers and contractors.

GL MODELS

Classic planting but with a system



GL 410

Classic planting machine

With 4 wheels

With fixed, deep or flat bunker



GL 420

Classic planting machine

With 2 or 4 wheels

With fixed, deep or flat bunker

Combination for complete ridge construction

BUNKER MODELS

GL 410



Fixed bunker 1,000 kg (1)

Hydraulic tipping bunker deep 1,200 kg (2)



Hydraulic tipping bunker flat 1,200 kg (3)

GL 420



Fixed bunker 1,200 kg (4)

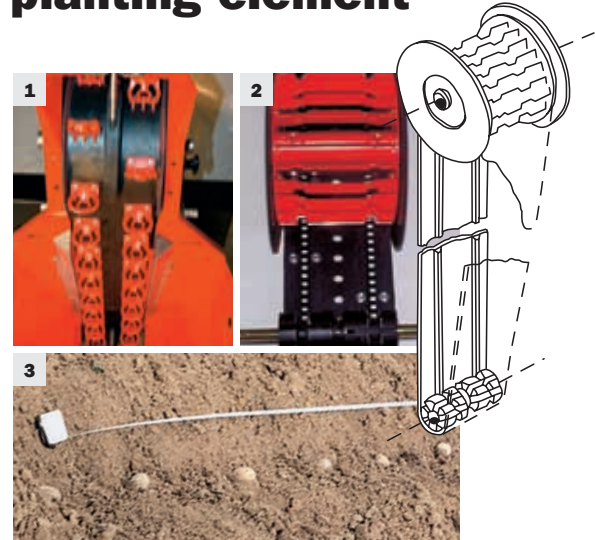
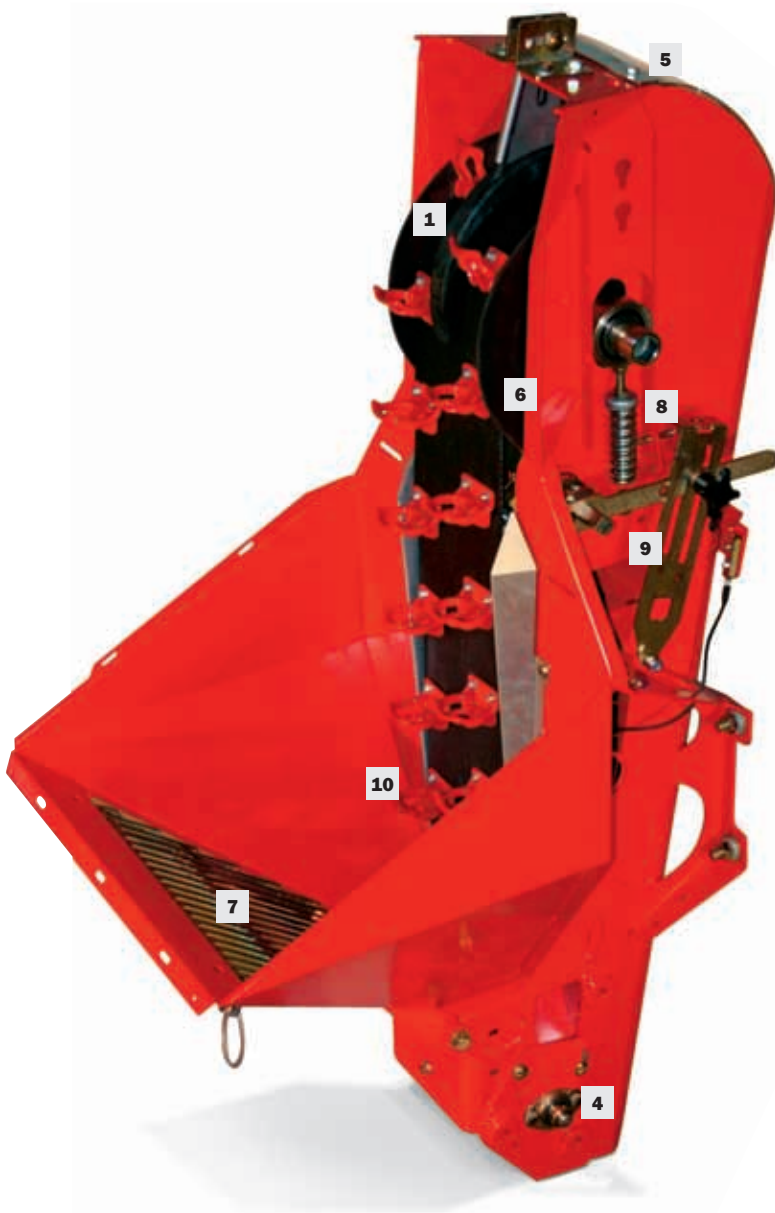
Hydraulic tipping bunker deep 1,700 kg (5)



Hydraulic tipping bunker flat 2,000 kg (6)

THE ORIGINAL

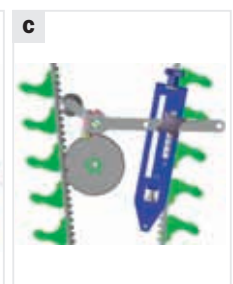
Innovative, accurate and easy to operate: the Grimme planting element



Small details that make a huge difference: The large soft rubber belt pulley (1) at the top guarantees a secure entrainment and a safe transfer, even for long potatoes. In addition, it ensures secure actuation and accurate belt guidance. Two reinforced guide ribs (2) behind the belt achieve a reliable deflection at the top belt pulley (even for large potatoes). The smaller bottom belt pulley (4) guarantees a fast opening and thus an accurate placement (3).

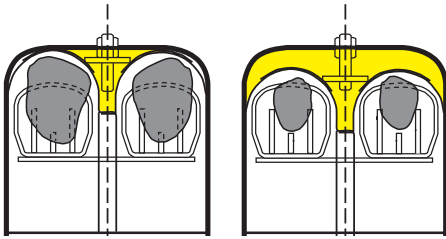
- 5** Provides a good view: The large inspection window at the machine's cup mechanism
- 6** Custom-made conveying: The cup belt safely picks up the tubers from the pick up chamber and plants them gently in the soil.
- 7** A clean matter: Inserted grills (Option) – instead of a VA cover – prevent dirt from accumulating in front of and inside the cup.
- 8** Convenient and easy: The cup belt with quick clamping device can be tensioned or slackened without tools in the blink of an eye.
- 9** Well shaken is half planted: The mechanical agitator behind the cup belt reduces double allocation of the planting cups.
- 10** Whether for small, large, thick, oversized, cut or chitted tubers: With the exchangeable inserts and planting cups it is possible to plant all types of potatoes.

Core competence during separation: With the aid of a simple adjustment screw (A), the mechanical agitator (B) or optionally the electrical intensive agitator (C) can be set to the potato characteristics. This ensures a reliable filling of the pick up chamber.



FEATURES

Still more reasons to decide for the original



What doesn't fit is made to fit: with the adjustable drop pipe inserts. Can be set to narrow for small or to very wide for large potatoes.

Small? Large? Oversized? Cut? Chitted? Which tubers you decide to use – with the differently sized exchangeable Grimme inserts and planting cups, planting the most different types of potatoes is no problem at all. With their round (narrow) edges, they pick up the potatoes from the bunker in a particularly gentle manner.



Everything under control: You have a good view of the cup mechanism (1) at all times.

The large funnel-shaped inlet (2) enables the safe placement of long, large potatoes.



Ideally equipped: The quick clamping device (3) for convenient slackening, changing and cleaning the cup belt

Simply convenient: The easily accessible chain case (4) and the convenient planting distance adjustment in 27 steps – even special distances are easy to set.



Brilliantly equipped: For unloading, the pick up chamber floor or the grills (Option) can be opened wide by means of a handle (5).

Permanently sturdy: The planting elements are connected by means of pto shafts (6).



In order to create driving lanes or on wedge-shaped run outs, the planting elements can be switched off individually from the tractor: Either with mechanical (7) or even more conveniently with electric rams (8).

FURROW OPENER

GL 410: Fixtures, Fittings and Accessories

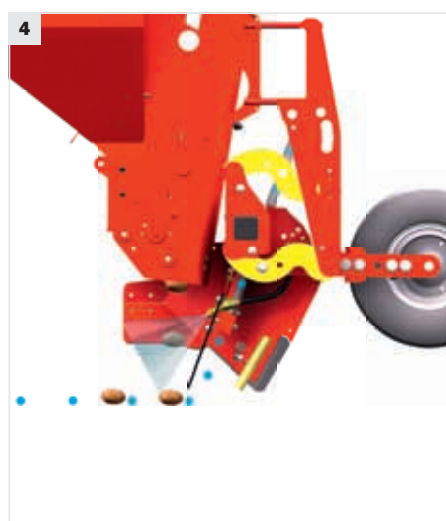
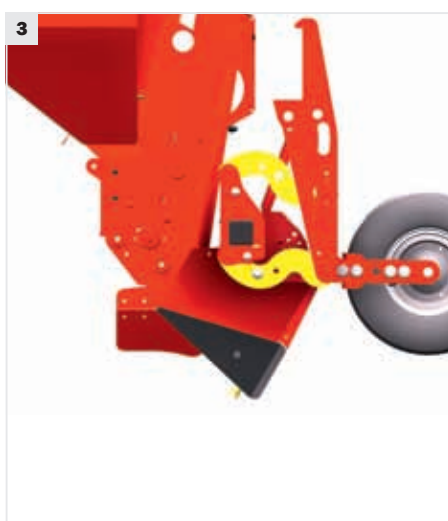
Series equipment proven in thousands of applications: The height adjustable, fixed furrow opener (1) – a round steel point arranged centrally at the tip draws a furrow for tuber placement.

Option: The furrow opener in the parallelogram (2) enables an improved depth control due to uneven terrain surface.



Option: The furrow opener (3) which is pulled in the parallelogram creates a very accurate furrow thanks to its narrow, steep design and thus prevents the tubers from rolling away to the side.

Furrow opener for granular and liquid chemical application (Option) (4)



Use our accessory range with front fertiliser box and drum system (5)



GL 410: the ultimate finish



The pulled furrow opener (1) encloses the planting element and is guided via the feeler wheel. Behind the wheels (2), ridge construction is carried out by 460 mm covering discs (3), followed by the ridge shaping board (4) to create the final shape.



Optionally, ridge construction can also be created with a lattice roller (5), which promotes the exchange of oxygen and moisture in the ridge by creating a crumbed structure.



Another possibility is the ridge construction with the aid of covering bodies (6) behind the covering discs.

FURROW OPENER

GL 420: Fixtures, Fittings and Accessories

On the GL 420, the furrow opener in the parallelogram (1) is part of the series equipment.

Furrow opener for granular and liquid chemical application (Option) (2)



Depth guidance at your discretion: Parallelogram guidance of all four furrow openers jointly via two feeler wheels (3)

Alternatively: Parallelogram guidance of respectively two furrow openers (4) via a feeler wheel for improved guidance in cropped terrain or under stony conditions



A tactile sensor (1) controls the raising and lowering of the tine bar (3) and the ridge shaping board (4) via hydraulic cylinders (2).

The furrow opener (6) is in each case moved along in the same direction via a mechanical toggle joint (5).

Thus, even under changing conditions, a constant coverage of the tubers (7) is always ensured.

In this way, your potatoes emerge even more uniformly!



GL 420: the ultimate finish



The small, but subtle difference: The pulled furrow opener (1) encloses the planting element and is guided via the feeler wheel. Ridge construction takes place already in front of the wheels (3) by the 510 mm large covering discs (2). Final ridge construction is carried out here with a ridge shaping board (4).



Optionally, ridge construction with the GL 420 can also be carried out with a lattice roller (5).



The covering discs directly behind the furrow openers already construct the ridge almost completely. The ridge shaping board thus does not have to fetch additional earth.

EARLY POTATOES

Use the head start offered by chitted potatoes – with the moving floor module

Moving floor module instead of tipping bunker: For all who want to take advantage of the head start offered by chitting, Grimme offers a long moving floor as an option. The long floor provides you with more time to pour subsequent tubers carefully onto the presentation belts.

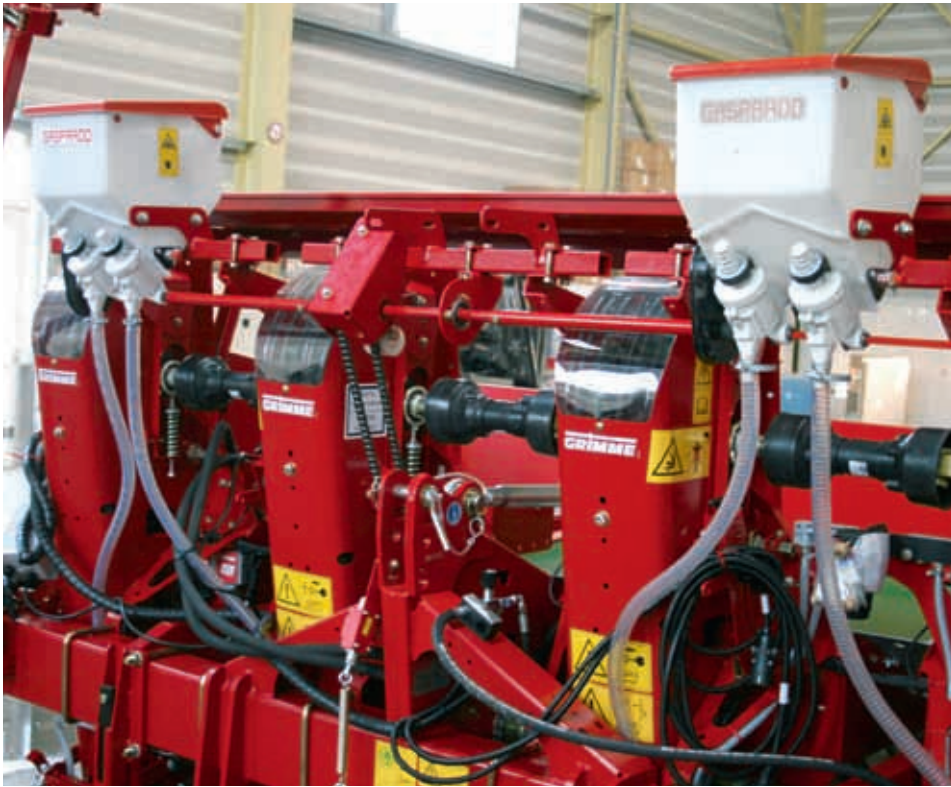


Moving floor module with convenient footprint for an ergonomic filling of the moving floor



ADDITIONAL EQUIPMENT

Variety that leaves nothing to be desired



Combined plant protection:
The GL 420 can optionally be equipped with a certified and approved granular applicator. The dosing adjustment is simply carried out with hand wheels on the storage container. With the aid of the electric coupling, the fertiliser boxes are conveniently operated from the tractor. The granulate is reliably placed in the vicinity of the tuber.



Driver relief on long working days: A sensor in front of the planting element detects the level of potatoes in the pick up chamber. Briefly raising and lowering the bunker again ensures an optimum and gentle filling of the pick up chamber (Option).

COMBINED RIDGE CONSTRUCTION

Cleverly combined: GR 300 in front attachment – GL 420 at the rear

Combination for finished ridge layout

1

Soil cultivation in front and rear attachment

2

Placing of the potato

(furrow opener, large covering discs)

3

Finished ridge construction

(ridge construction, lattice roller)

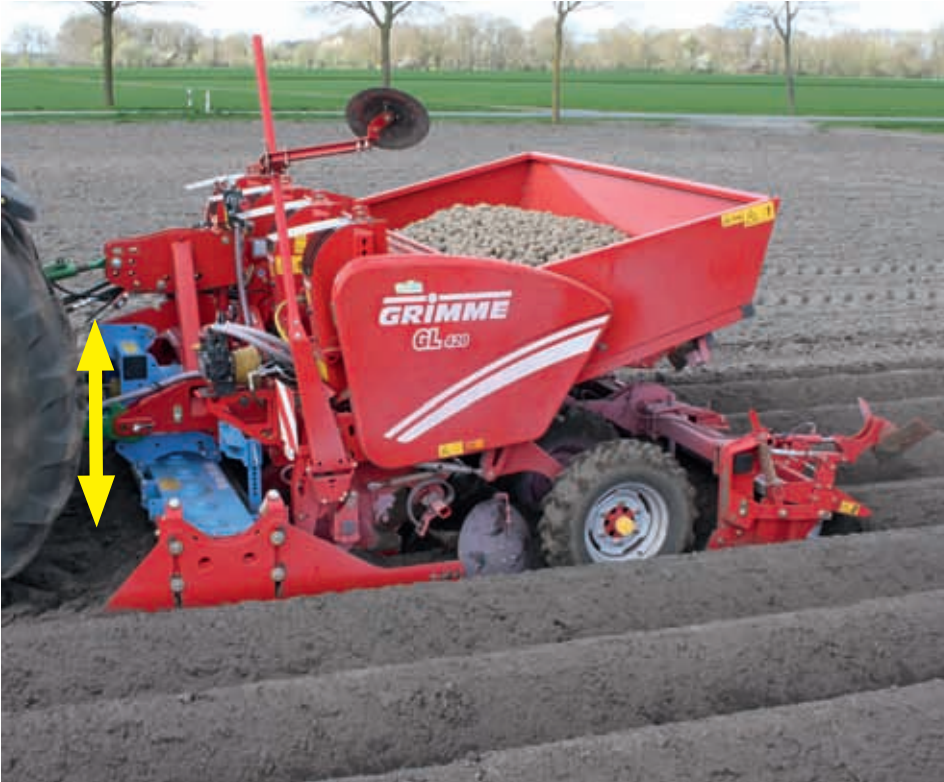
The machine combination of front and rear attachment facilitates an ideal exploitation of the available attachment places on the tractor. The planting machine is mounted closely behind the tractor via a very short bracket system.



Ground guide plates are built into the Rota Tiller GR 300. With these, the earth in front of the wheels is cleared so that the tractor does not pass over the later growth area of the tuber.



The combination in rear attachment



Several types of cultivation, one goal – variable depth guidance of the soil cultivation equipment: The mounting bracket of the planting machine carries the device for soil cultivation, here a Lemken Zirkon 10. The depth of this device can be hydraulically adjusted by 180 mm.



GL 420 in combination with the Grimme Rota Tiller GR 300 in rear attachment. The depth guidance of the GR 300 is easy to adjust via a hole pattern in eight levels. Both attachment versions for soil cultivation devices ensure that the potato planting depth can be adjusted independently of the cultivation depth.

SHORT AND COMPACT

GL 420 Exacta: the new combination planting machine

NEW

Short, mounted and with the approved arrangement of our heavy duty planting element – that is the Grimme GL 420 Exacta.



As a standard, the Exacta is equipped with hydraulic drive, control terminal GBT 850 and miss indicator.



FEATURES

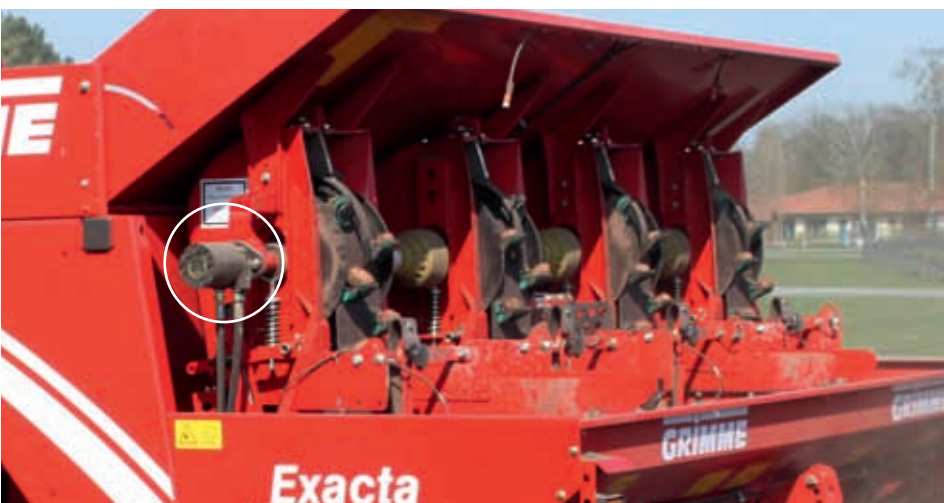
Comprehensive from the word go



Depth guidance of the furrow openers is carried out via a mechanical link between the ridging hiller and the pulled furrow openers in the parallelogram.



Sensors ensure the correct filling of the pick up chamber and control the presentation belts.



The planting elements are controlled via a hydraulic drive (infinitely variable planting distance).

COMBINED RIDGE CONSTRUCTION

Planting technology in a new dimension

*With its distinctive design,
the machine exhibits its strengths
especially where the terrain is
narrow, sloping or hilly.*



1 Carrying roller between the tractor wheels

3 Track indicator

5 Approved Grimme planting elements

7 Ridge shaping board

2 Grimme GR 300 for soil cultivation

4 Bunker for 1.6 t or 2 t (Option)

6 Controlled feed belts for optimum tuber feed



The GR 300 cultivates the full width (1). The 110 tines are arranged in spiral shape, thus guaranteeing a quiet run.



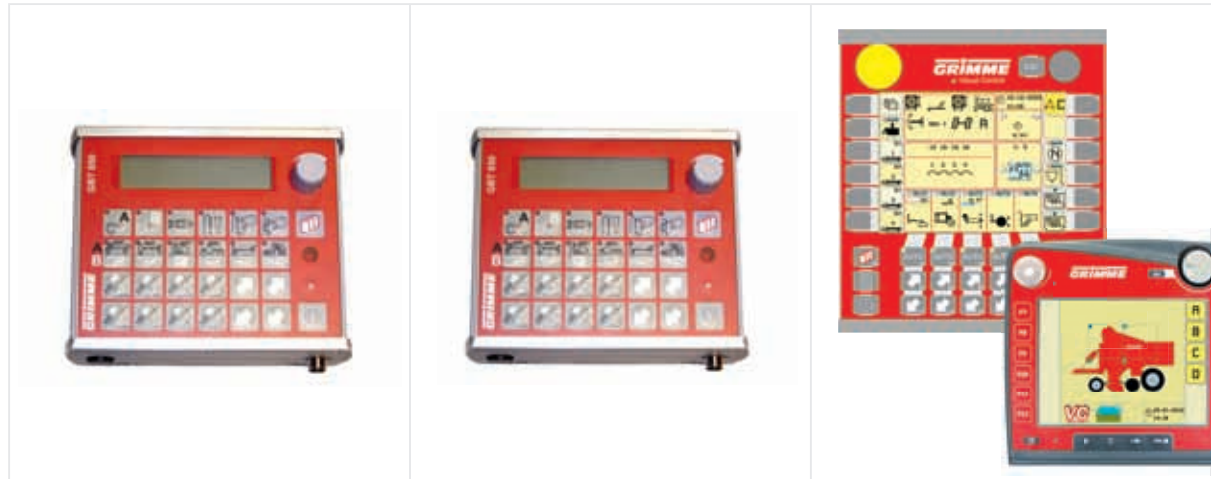
Thanks to the easy filling chute (2), it is possible to fill very gently with front loader or filling conveyor.



The quantity in the element (3) is very accurately controlled via sensors. After tuber placement, ridge construction is carried out immediately via the ridge shaping board (4).



Tie your own convenience package with the matching terminal



Description	<p>GBT 850 with keyboard and rotary potentiometer</p> <p>For the simple operation of electric functions</p>	<p>GBT 850 with keyboard and rotary potentiometer</p> <p>For the simple operation of electric and selected hydraulic functions</p>	<p>VC 50</p> <p>Colour monitor with touch screen function, easily comprehensible symbols (pictograms) and rotary potentiometer</p> <p>Professional terminal with comprehensive special functions, fully programmable, comprehensive diagnostics function for the machine</p>
	<p>Mechanical drive of the planting element</p>	<p>Hydraulic drive of the planting element</p>	<p>Hydraulic single row drive of the planting element (page 15, illustration bottom)</p>
	<p>Options for more convenience</p> <ul style="list-style-type: none"> · Fault indicator · Electric intensive agitator with speed adjustment · Power cut-off during raising (among others deactivation of the agitator) · Hectare meter 	<ul style="list-style-type: none"> · One hydraulic motor jointly for four planting elements (for four rows) · Fault indicator · Electric intensive agitator with speed adjustment · Power cut-off during raising (among others deactivation of the agitator) · Hectare meter 	<ul style="list-style-type: none"> · Hydraulic single row drive (1 hydraulic motor per row) · Electric intensive agitator with speed adjustment · Power cut-off during raising (among others deactivation of the agitator) · Hectare meter · Function "Clever Planting"

CCI 200 **NEW**

Functions as for the VC 50. Additional use spanning several machines and manufacturers possible. An investment into the future on the basis of approved technology.



CCI-SOBUS

Accurate at any rate: constant or variable planting distances



If the planting machine is equipped with a common, mechanical drive for the planting elements, the planting distance can be adjusted in 27 levels from 14 to 50 cm.

A hydraulic driving lane clearing unit is optionally available.



If the machine is equipped with a common hydraulic drive of the planting elements, the hydraulic supply is from the tractor and permits planting distances which are adjustable in an infinitely variable manner.

An automatic driving lane system to adapt the planting distances is optionally available.



NEW

Exclusive Grimme know-how: "Clever Planting" for optimised planting distances

A hydraulic single row drive of the planting elements facilitates planting distances in the driving lane as to the left and right of the driving lane which are optimised from a plant cultivation point of view – for a more even tuber growth. An option that is especially recommended for farmers wishing to produce uniform tuber. At the push of a button, it is possible to activate hydraulic driving lane clearing units and an automatic driving lane system.



Technical data

	GL 410	GL 420	GL 420 Exacta
Length	1,900 mm	2,300 mm	2,200 mm
Width	3,150 mm (at 75 cm row width)	3,150 mm	3,290 mm
Height	1,850 mm (upper edge element)	1,850 mm	2,550 mm
Row width	Series: 75 cm Option: 75 – 90 cm	Series: 75 cm Option: 75 – 90 cm	Series: 75 cm Option: 75 – 90 cm
Bunker capacity	Series: 900 kg fixed bunker Option: 1,200 kg tipping bunker deep 1,200 kg tipping bunker flat	Series: 1,400 kg tipping bunker deep 2 wheels 1,700 kg tipping bunker deep 4 wheels 2,000 kg tipping bunker flat 4 wheels Option: 1,200 kg fixed bunker 2,000 kg large bunker	Series: 1,600 kg fixed bunker Option: 2,000 kg fixed bunker
Tyres	Series: 7.00 x 12 AS Option: 7.5 x 20 AS, 11.00 x 12 AS	Series: 10.80 x 12, 7.5 x 16 AS	None
Chassis	4 wheels	2 or 4 wheels	None
Furrow opener	Series: fixed	Series: furrow opener in the parallelogram Option: pulled furrow opener in the parallelogram	Series: pulled furrow opener in the parallelogram
Depth guidance of the furrow openers	Series: fixed Option: 1 feeler wheel in front of the furrow opener	Series: 1 feeler wheel in front of each furrow opener Option: · 4 pulled furrow openers, 2 feeler wheels outside · 2 pulled furrow openers each, 1 feeler wheel · rope connection with the ridge shaping board	Series: mechanical connection between ridge shaping board and furrow opener

Your Grimme Partner for advice and service:

No claims can be raised in respect of texts, illustrations, technical specifications, dimensions and weights, equipment as well as performance specifications. They are approximate and non-binding. Changes in the course of technical enhancement are possible at any time.

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