

GRIMME

HARVESTING SUCCESS!

VARITRON 200/270

2-row potato harvester with cart elevator the VARITRON 200 or with ring elevator and 7 tonne moving floor bunker the VARITRON 270



Home on all fields: VARITRON 200 and 270

No matter, if you decide for the cart elevator – the VARITRON 200 – or for the 7 tonne moving floor bunker – the VARITRON 270 – both potato harvesters give the highest harvesting, sieving and separating output, under different harvest conditions. You see the success from the start with the unique view of the intake unit and intake web. The harvester with a choice of a 326 HP Mercedes-Benz

engine ensures that the machine always has the power to adapt to the different harvesting conditions in potato and vegetable fields. Separator options available include Roller Separator, VARIO RS, MULTISEP, Double-MULTISEP, and fine Haulm Elevators bottom and top (single or in combination). Customers can also choose from wheels all round, or a combination of large wheels and rubber

track unit (left-hand side) to extend the harvesting season in adverse conditions. As always at Grimme the main focus is gentle harvesting combined with maximum possible output. Grimme's innovative VISUAL-CONTROL VC 100 touch screen terminal provides the operator with extensive monitoring and control possibilities. Harvesting success with the VARITRON 200 and 270.

VARITRON 200

Gentle harvesting: VARITRON 200 with cart elevator

Good visibility: All parts of the VARITRON 200 are visible from the drivers cab. Also ensures the machine an easy access for maintenance. The VARITRON 200 transfers the crop on the shortest way from the soil onto the trailer.



Short way for gentle harvesting: The length of the head and centre section of the loading elevator minimizes the drop heights into the trailer.





Technical data

	VARITRON 200/270
Measurements	
Length	From 11,700 mm (with standard wheels and basic equipment)
Width	3,290 mm
Height for road transport	3,990 mm
Weight	VARITRON 200: from 15,200 kg (with standard wheels and basic equipment) VARITRON 270: from 18,600 kg (with standard wheels and basic equipment)

	Basic equipment	Option
Haulm topper	–	KSA 75-2, hydraulically driven with variable speed control Haulm topper pressure relief
Intake	2 share blades, 2- or 3-piece 540, 580 or 620 mm intake width Row width 750 to 900 mm Pulled intake unit	Ridge pressure relief system, pre-set pressure TERRA-CONTROL System with extra relief wheel Digging share with shear-bolt protection against stones Vegetable digging unit Hydraulically driven disc couler Excenter agitator in the intake web
Long 1st main web	1,660 mm wide, 6.1 m ² , choice of 28, 32, 35, 40, 45 or 50 mm pitch Hydraulically driven agitator	Additional rotary agitator Hydraulic height adjustment of the rotary agitator Cleaning basket
Intake web with short 1st main web	–	Intake web 1,500 mm or 1,660 mm wide (2.9 m ²) hydraulically driven and speed adjustable, pitch: 32, 35, 40, 45 or 50 mm, 1 st main web 1,660 mm wide, 3.4 m ² , pitch: 28, 32, 35, 40, 45 or 50 mm Rotary agitator in 1 st main web Hydraulic height adjustment of the rotary agitator Cleaning basket
Haulm separation	Extracting roller against 1 st main web	Extracting unit comprising one soft PU-spiral roller running against extracting roller, Hydraulically driven with automatic over-pressure reverse system Hydraulic height adjustment of the 1 st extracting roller or 1 st extracting unit
2nd main web	1,660 mm wide, 4.9 m ² , Pitch: 28, 32, 35, 40 or 45 mm	Rotary agitator Hydraulic height adjustment of the rotary agitator Vulcanized bars
Bottom separator: front ring elevator	<u>Fine haulm elevator (FHE):</u> - 2 nd extracting roller against 2 nd main web - 3 rd main web as transfer web to the FHE, pitch: 32, 35 or 40 mm vulcanized - Fine haulm elevator web 1,660 mm wide, pitch: 40 or 45 mm, hydraulically driven, speed set from the operator terminal, angle adjustment hydraulically adjustable	Distributor rollers under fine haulm elevator (FHE)
Bottom separator: centre ring elevator	–	<u>Roller Separator (RS) with or without fine haulm elevator (FHE):</u> - 2 nd extracting unit against 2 nd main web - 9 axial-roller pairs hydraulically driven, safety drive direction reverse, hydraulic control of working angle Hydraulic height adjustment of the 2 nd extracting unit Automatic levelling Additional plain rollers of different diameter supplied loose TwinSep/Bypass-Kit (for Roller Separator)
	–	<u>VARIO RS with or without fine haulm elevator (FHE):</u> - RS unit with hydraulically adjustable roller spacing, with position display on the operator terminal
	–	<u>MULTISEP (MS) with or without fine haulm elevator (FHE):</u> - 2 nd haulm extracting unit against 2 nd main web - 4 MULTISEP roller pairs, hydraulically driven, automatic over-pressure reverse system, hydraulic direction reverse, hydraulically adjustable levelling angle, hydraulic adjustment of height and distance of the clod roller with position display on the operator terminal Hydraulic height adjustment of the 2 nd extracting unit Option: hydraulically drive for 2 nd extracting unit with automatic over-pressure reverse system Automatic levelling Shafts with different spiral segments supplied loose
Bottom separator: rear ring elevator	–	<u>Double-MULTISEP without fine haulm elevator (FHE):</u> - 2 nd haulm extracting unit against 2 nd main web - Two MULTISEP units (specification as above) in a row with separate adjustment of the hydraulic components
	–	<u>Roller Separator (RS) or VARIO RS followed by a MULTISEP (MS):</u> - 2 nd haulm extracting unit against 2 nd main web - Roller Separator or VARIO RS followed by a MULTISEP unit (specification as above)

VARITRON 270

Power has a name: VARITRON 270 with 7 tonne bunker

Full traction at the front:
narrow wheels to open up
the field. Wheel distances
75 or 90 cm (1).
Including powerful drive
of the front wheels



Full traction at the rear r/h-side:
narrow wheels to open up the field
for row width 75 or 90 cm (2)

For more attraction: the twin
wheels (option) 460/85 R42 (3).
Adequate to standard wheel size



Good visibility: The unique view
of the intake unit and intake web
allows efficient harvesting with
reduced operator fatigue (4).
Worthwhile options are the ridge
pressure relief system or the
award-winning TERRA-CONTROL.

Spread the load: The well-proven
rubber track option for rear
left-hand side of the machine
spreads the load over a large
area to reduce compaction (5).

Reduced main web angle.
The right-hand wheel can
be hydraulically moved 450 mm
further into the track to
suit row widths.

For optimum agility: The 70 degree
turning angle of the front wheels
plus the rear axle steering
ensures an optimum agility and
an inner turning angle with rubber
track for only 2.5 m (6).





7
Under control: simple operation of the harvester with the standard touch screen VISUAL-CONTROL VC 100. The chassis and engine operations are controlled from the GBT 2100. Alternatively a second VISUAL-CONTROL VC 100 can be specified (option) to operate the chassis and engine.



8
Pays itself: for strong conditions the robust haulm topper KSA 75-2 with cross conveyor to discharge the haulm to the side



9
Extra wheel – less work: with TERRA-CONTROL (option) an additional support wheel (front left-hand side) controls the digging depth.



13
Good combination: In addition to the fine haulm elevator, a hedgehog web (option) named N-separator can be added on the top to separate further haulm and trash.



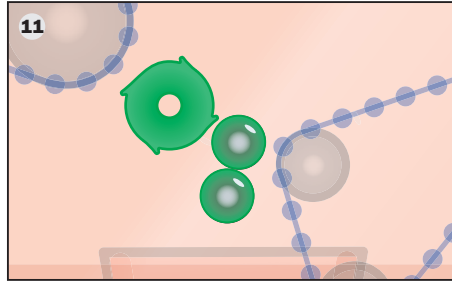
14
Patent solution for high output: The new powerful elevator construction has a 30% larger pocket volume than conventional elevator webs of the same width. Together with the patent pending active side finger combs, this ensures a smooth crop flow from the separator to the picking area.



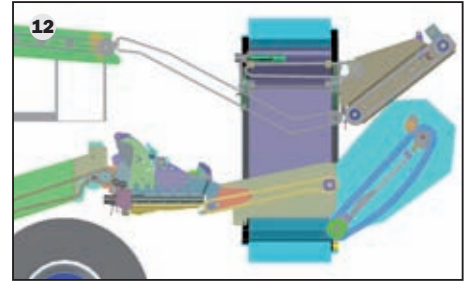
15
Well picked: The generous picking table offers the picking-crew a comfortable working place. It is possible to control main machine functions from the terminal at the picking table.



10
Controlled sieving: The extra intake web (option) increases the sieving capacity of the webs. Hydraulic speed control allows the webs to be set to their optimum for the harvest conditions.



11
Innovative solution for gentle haulm separation: The haulm roller of the extracting unit (option) runs against a "soft" PU-spiral roller rather than against "firm" web bars thus minimising crop damage at this point. A hydraulic height adjustment (option) is available if required.



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To increase the sieving and separation power an RS-system (option) with or without fine haulm elevator is available. The Roller Separator separates soil and clods from the crop before the fine haulm elevator extracts the haulm. For added control the VARIO RS (option) can be specified giving in-cab control of roller spacing.



16
Professional bunker filling: The bunker filling starts directly from the bunker floor. The automatic bunker filling (option) ensures constant minimum drop heights. At the same time the bunker floor is moved forward until totally filled.



17
Gentle handling in all areas: The bunker end is hydraulically adjustable in 3 sections and reduces the drop into the trailer. Thus ensuring a minimum drop into trailers, independent of the trailer height, and also allows unloading whilst harvesting.



SEPARATOR

More power with maximum gentle crop handling: the innovative separator

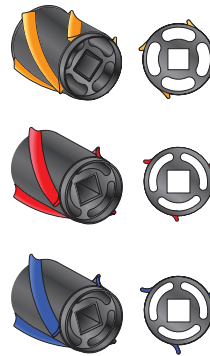


MULTISEP

For the universal use: standard 4-lip segment rollers with 8 mm high lips in the MULTISEP

For wet harvest conditions: 3-lip segment rollers with 10 mm high lips in the MULTISEP increase the soil separation of medium to large crop.

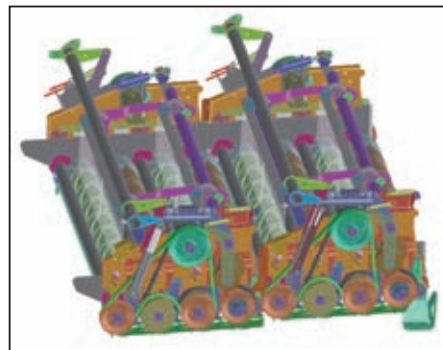
For extreme wet harvest conditions: 3-lip segment rollers with 20 mm high lips in the MULTISEP increase the soil separation of large crop.



The MULTISEP from Grimme ensures that with cloddy, sticky and soil with small stones good trash separation occurs: 4 roller pairs, each with a PU-segment roller and one plain rubber roller clean the crop. Steel plain rollers also available for the use in fields with very small or non-skin set crop or other vegetables



Double-MULTISEP



Double-MULTISEP

A powerful couple: The Double-MULTISEP with 4 roller pairs each allows an independent setting of the following settings from the operator terminal: hydraulic levelling adjustment, speed of the roller pairs, height and distance adjustment of the clod rollers, drive direction of the clod roller. Manual setting: reduced plain roller speed based on the spiral segment roller



Roller Separator



- 1 Steel spiral roller for dry soils with stones and hard clods
- 2 Rubber spiral roller (basic equipment) for universal use
- 3 Rubber plain roller \varnothing 90 mm
- 4 Rubber plain roller \varnothing 85 mm

- 5 Rubber plain roller \varnothing 80 mm
- 6 Rubber plain roller \varnothing 75 mm
- 7 Rubber plain roller \varnothing 70 mm
- 8 Steel plain roller for the use on dry soil



Double Separator Roller Separator and MULTISEP



VARIO RS

A powerful combination: Roller Separator for heavy and sticky soil followed by a MULTISEP to separate the left haulm and clods (A)

The VARIO RS (B) or TwinSep/Bypass-Kit is available as option of the Roller Separator.



Technical data

	VARITRON 200/270	
	Basic equipment	Option
Transfer	Version without fine haulm elevator (FHE) one short and one long transfer web for uniform filling of the ring elevator	–
VARITRON 200 Unloading elevator	Infinitely hydraulic drive Capacity 120 t/h Unloading width 3,500 mm Unloading height 4,000 mm	Cart elevator reversing kit to run to the left- or right-hand side with crop discharge funnel Box filling chute
VARITRON 270 Ring elevator	Transfer width 900 mm, new elevator web construction with 30% larger pocket volume than conventional Elevator webs with the same width, patent pending active side finger combs for a smooth crop flow (picture no. 14) Speed set from the operator terminal	Hydraulic control of speed to avoid overload
Top separator	–	N-separator, hedgehog web 1,100 mm wide, pitch: 40 or 45 mm Hydraulic adjustment of levelling and speed from the operator terminal
Picking table	1,100 mm wide picking web and platform right-hand side	Platform left-hand side Trash channel left or right-hand side with trash conveyor
Bunker	7 tonne bunker with 3 hydraulically adjustable bunker end sections	Final conveyor automatic Automatic bunker filling Box filling chute
Chassis/steering/ drive	Steering head front right-hand side, hydraulically adjustable to the side, steering angle $\pm 65^\circ$ Axle steering rear, steering angle $\pm 15^\circ$ Hydraulic side levelling Electronic anti-slip control Top speed on road 20, 25 or 30 km/h depending on the law of the respective country	Auto pilot steering Automatic self-centre steering rear Automatic levelling at the side Rubber track, steering angle $\pm 7^\circ$, low main web angle, 450 mm hydraulically adjustable track width rear tyre
Front tyres	1x900/60 R32	1 x 1050/50 R32 2 x 380/85 R46, narrow wheels for row width 75 cm or 90 cm
Tyres rear left-hand side	900/60 R32 for fine haulm elevator machines without separator 1050/50 R32 for fine haulm elevator machines with separator	635 mm wide rubber track, L = 2,970 mm, H = 1,100 mm 900 mm wide rubber track, L = 2,970 mm, H = 1,100 mm
Tyres rear right-hand side	1x460/85 R42	1 x 800/65 R32 1 x 900/60 R32 1 x 1050/50 R32 2 x 380/85 R46, narrow wheels for row width 75 cm or 90 cm 1 x twin wheels 460/85 R42
Engine	Mercedes Benz OM 906 LA, power 205 kW (280 HP) 6 cylinder in-line motor, capacity 6,370 cm ³ , turbo charged and inter-cooled, full electronic engine management Motor emission conforms to EUROMOT 3A-Norm Fuel tank capacity approximately 750 litres	Mercedes-Benz OM 926 LA, power 240 kW (326 HP) speed reduced drive up to 1,600 rpm with possibility to reduce the fuel consumption 6 cylinder in-line motor, capacity 7200 cm ³ Motor emission conforms to EUROMOT 3A-Norm
Cab	Driver cab with heating and air suspended driver's seat Simple operation via: 1 VC 100 Visual Control touch screen terminal to control the digging unit and 1 GBT 2100 terminal to operate the drive and engine settings. One-monitor with one camera to drive backwards and working light 6 cab-mounted working lights, 4 to the front and 2 to the back	Second VISUAL-CONTROL VC 100 terminal in lieu of GBT 2100 Comfort driver pack: · Compressor for service and maintenance · Air conditioning · Radio · Outside mirror (heated and electronically adjustable) Twin monitor (in lieu of single) with up to 8 cameras with working lights for each 4 extra working lights

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