

POTATO TECHNOLOGY
BEET TECHNOLOGY
VEGETABLE TECHNOLOGY

GRIMME
HARVESTING SUCCESS!

VARITRON 470

The new 4-row self-propelled harvester for a high-output potato harvest



VARITRON 470 – Variability in one machine

For more than 40 years, Grimme has been building self-propelled harvesters for the potato harvest. The new VARITRON 470 continues this tradition and sets new standards for performance, consumption and

variability. The result is a modular concept for harvesting in four rows. This concept allows different separators to be combined, matched to the individual harvesting conditions. Rubber tracks or large-volume tyres at the rear axle

provide for a low impact on the ground and traction under adverse conditions. The 490 HP Mercedes-Benz engine and the clearly laid out cabin are superior companions for long working days.



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Effective and gentle

Use of main webs

Trash can be effectively sieved across the full machine width of 2970 mm which ensures gentle crop handling. Active rotor and swinging agitators support the sieving performance under difficult digging conditions.

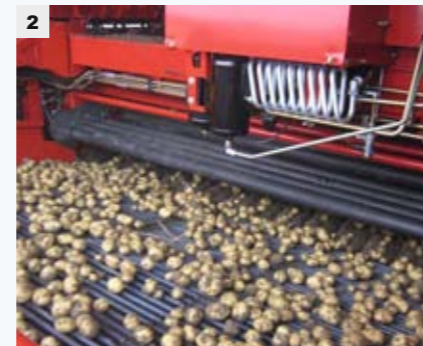


Heavy, sticky soils

Roller separator

(1) The axial rollers reliably carry out their work under heavy, sticky digging conditions.

(2) For the use under lighter conditions it is possible to lower rollers, which transport the potatoes across the roller separators.



Customised digging conditions

Variable separators

Highest performance at lowest impact on the harvest thanks to powerful separators and a drop-step optimised harvest flow.



Variable adjustment

MultiSep

Especially for changing digging conditions, the MultiSep is particularly well suited, also in combination with other separators. Versatile adjustment options (speed, direction of rotation, distance and height adjustment and levelling adjustment) turn this unit into a multifunctional separator.



Additional trash separation

Fine haulm elevators

Additional hedgehog webs can be installed to separate fine clods, loose soil and haulm.



Enhanced function

OPTIBAGS

The newly developed OPTIBAGS which are made of high-strength polyurethane extend the function range of the ring elevator. These bags make it possible to separate further trash such as soil.



Gentle crop transfer

Bunker filling

Filling of the bunker starts directly from the bunker bottom. To ensure constantly low drop steps, the filling web is successively raised by the final elevator automatic. The web is simultaneously pulled forward until the bunker is completely filled.



Maximum filling

The new unloading bunker

(1) In order to reduce the drop steps, the 7-ton bunker is able to plunge deeply into the trailer by means of three separately adjustable parts of the bunker head. To increase the acreage performance, it is possible to unload during digging.

(2) An absolute novelty is the unloading principle with the revolving bunker web that runs also along the side wall of the bunker.

(3) Once the transport vehicle is completely filled, the unloading process is stopped. The bunker floor is now retracted so that the bunker volume can once more be fully utilised.

(4) An additional effect is created by the potatoes that are already located inside the bunker. They form the basis for gentle crop transfer.

Increase in productivity

Optimum manoeuvrability

The steering angle at the front axle is 60°, at the rear axle up to 20° resulting in an inner turning radius of 3 m. Ideal preconditions for speedy turning manoeuvres.



Easy to trail

Trailed intake

The trailed intake combined with the axle movement supports an even harvest flow in the machine, even on slopes.



Secure traction

Large-dimensioned tyres

With the aid of the large tyres, the hydrostatically driven rear axle transmits maximum driving power onto the ground at any time. The hydraulic levelling function stabilises the machine on slopes.



Designed for low impact on the soil

Rubber tracks

1.5 m² footprint per track form the basis for low-impact driving that is gentle on the soil. Due to the lower construction height, the main web angles are reduced, thus permitting a more gentle cleaning process.



Reliable power transmission

Slip control

Even on wet fields, an adequate traction will lead to the desired result. The slip control prevents the wheels from spinning and ensures a permanent power transmission onto the ground.



Row end management

Parallel guided rubber tracks

To prevent soil-damaging turning and driving manoeuvres at row ends, the rubber tracks are steered in parallel.



Long working days

Large cabin

The cabin offers every conceivable comfort to enable you to cope with long harvesting days without fatiguing and while keeping up full productivity.



Comfortable operation

Control terminal CCI 200

Two ergonomically arranged touch screen terminals with touch-sensitive surface and classical function keys share the tasks "Machine control" and "Digging adjustments".



Full control of the workplace

Unobstructed view of the intake

With the excellent panoramic view of the intake unit combined with the video monitoring system, the driver has everything in view right from the start.



Modern drive line technology

Our drive line concept

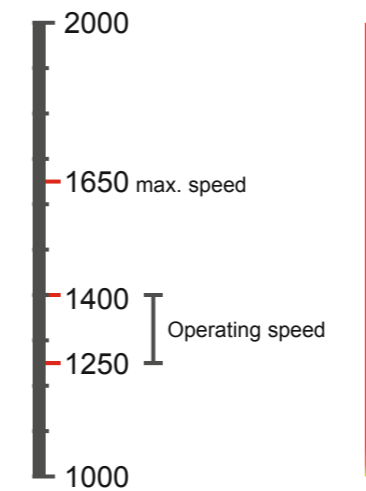
The sophisticated hydraulic system, in conjunction with the innovative control technology and a new generation of engines with SCR exhaust gas cleaning technology forms the basis for an economical consumption and powerful operation.



Saving fuel and saving the environment

Power requirement-related speed control

Automotive driving controls the engine speed in the field and during road travel between 1250 and 1650 rpm, depending on the machine's power requirement.



Turning night into day

Xenon headlights

To ensure farmers can be productive even in darkness, the machines are equipped with a first-class lighting system for a perfect all-around illumination.



Technical specifications

	VARITRON 470 Wheel	VARITRON 470 Rubber track
Length	13300 mm	13575 mm
Width	3497 mm	3497 mm
Height	3990 mm	3990 mm
Weight	Depending on the model from 25000 kg	Depending on the model from 27000 kg

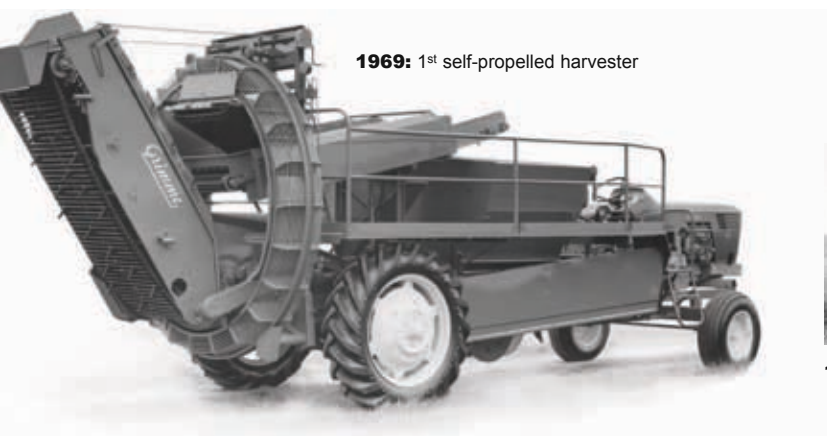
Accessories

	VARITRON 470 Wheel	VARITRON 470 Rubber track
Row width	75 cm	75 cm
Haulm topper	Front haulm topper with INLINE haulm discharge and discharge web. Automatic depth control by means of 2 sliding runners	Front haulm topper with INLINE haulm discharge and discharge web. Automatic depth control by means of 2 sliding runners
Intake	Disc coultter intake with TERRA-CONTROL depth control; 2- or 3-blade share Option: vegetable shares	Disc coultter intake with TERRA-CONTROL depth control; 2- or 3-blade share Option: vegetable shares
Intake web	2970 mm wide, pitch 28, 32, 35, 40, 45 or 50 mm Option: Support roller, rotor agitator, excenter agitator	2970 mm wide, pitch 28, 32, 35, 40, 45 or 50 mm Option: Support roller, rotor agitator, excenter agitator
1 st main web	Pitch optionally 28, 32, 35, 40, 45 or 50 mm with swinging agitator	Pitch optionally 28, 32, 35, 40, 45 or 50 mm with swinging agitator
1 st haulm separator	Extracting roller against main web Option: Hydraulic height adjustment	Hydraulically driven extracting unit Option: Hydraulic height adjustment
2 nd main web	Pitch optionally 28, 32, 35, 40, 45 or 50 mm vulcanised, rotor agitator	Pitch optionally 28, 32, 35, 40, 45 or 50 mm vulcanised, rotor agitator
1 st separator	Extracting roller against main web at roller separator, 2 nd extracting unit at MultiSep	Extracting roller against main web at roller separator, 2 nd extracting unit at MultiSep
1 nd separator	MultiSep 4 roller pairs Roller separator 28 rollers 3 rd main web	MultiSep 4 roller pairs Roller separator 28 rollers 3 rd main web
2 nd separator	Fine haulm elevator	Fine haulm elevator Option: 2 nd MultiSep Option: N-separator
Ring elevator	1200 mm wide Option: OPTIBAGS	1200 mm wide Option: OPTIBAGS
Bunker	7-ton unloading bunker	7-ton unloading bunker
Digging unit drives	Hydraulic, adjustable in an infinitely variable manner	Hydraulic, adjustable in an infinitely variable manner
Front tyres	2 x 270/95 R 54	2 x 270/95 R 54
Rear tyres	Rear axle with 2 x 900/60 R32 tyres	2 rubber tracks 800 mm wide, 2990 mm long
Levelling	Automatic levelling of rear axle	Automatic levelling of rear axle
Traction drive	Hydrostatic with electronic slip control	Hydrostatic with electronic slip control
Steering	Steering angle front: 60°; rear: 20° with automatic axle self-centre steering	Steering angle front: 60°; rear: 13° with automatic axle self-centre steering
Operation	2 x CCI 200 terminal	2 x CCI 200 terminal
Motor	Mercedes-Benz, OM 460, tier III B, 6 cylinder in-line engine, displacement 12820 cm ³ , with Ad-Blue technology	Mercedes-Benz, OM 460, tier III B, 6 cylinder in-line engine, displacement 12820 cm ³ , with Ad-Blue technology
Nominal rating	360 kW / 490 HP at rated speed 1650 rpm	360 kW / 490 HP at rated speed 1650 rpm
Speed	1250 rpm; automotive control	1250 rpm; automotive control
Fuel tank fill level	600 litre	800 litre



MILESTONES

Milestones of Grimme self-propelled harvester technology



1969: 1st self-propelled harvester



1974: DS 80 or DS 100



1985: DSL 1700



1998: SF 150-60



1999: SF 3000



2001: SF 1700 DLS/GBS



2001: TECTRAN 415, then still referred to as SF 300-15



2007: VARITRON 200/270



2008: VARITRON 220



2009: TECTRAN 410



2011: VARITRON 470

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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