

**GRIMME**  
HARVESTING SUCCESS!

# SE 150/170-60

2-row, offset trailed potato harvester  
with large bunker



# Welcome to the upper class: strong, stronger SE 150/170-60!

Absolutely innovative, robust and reliable – the SE 150/170-60 from Grimme. The 2-row, off-set trailed potato harvester for high output per hectare per day. The modular design tailors the machine to suit individual requirements. Simple operation of settings and for maintenance, designed for easy harvest in difficult conditions.

Good view to the right-hand side intake and with the well dimensioned picking table enable a simple operation. 2 main webs, one followed by the other, ensure highest separation and gentle crop handling: because the use of two webs avoids rolling of the crop and optimizes the separation on the 1<sup>st</sup> web. Following the 2<sup>nd</sup> main web

sieves off the rest of the soil, the deviner web separates the haulm and the crop flows gently onto the following separator – all in one working step! Low angled main webs, minimized drop heights and a soft bunker floor ensure gentle crop handling in the machine. A powerful program for the harvest: the SE 150/170-60!





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## Powerful: gentle harvesting starts at the intake



The off-set intake on the right-hand side of the machine for simplified handling of the machine. The pulled intake unit with big, spring loaded disc coulters and 2 haulm intake rollers ensures a smooth harvesting. Choice of intake width between 540, 580, 600 or 620 mm. The digging depth is controlled by the diablo rollers and can manually be adjusted. An automatic ridge pressure control or hydraulic ridge relief with pre-set pressure from the operator terminal is available as option. The pressure regulation avoids unnecessary blockings as clods in heavy and wet soils as well as crop damage with many stones. At the same time keeps it the ridge shape at light soils (1).



Good with much haulm: the 2<sup>nd</sup> disc coulters (option) (2)  
Controlled centre: benefit from the automatic centre steering (option) (3). Two sensors at the diablo roller frame steer the hydraulic drawbar.  
For reduced pressure: the hydraulic ridge pressure relief (option) (4)



Well taken in: the 2-piece share for heavy soils and the 3-piece share for medium to light soil. Another option, the stone protection for the share blades (5)  
Simple solution: manually adjusted share blades by means of a spindle (6) or hydraulic adjustment from the drivers cab (option) (7)



Three-times as good: the vegetable intakes either for onions, red beet or carrots (8-10)

Windrow intake for light soil with centre share and rubber roller or for heavy soils with rotor shaft

Vegetable intake: through typed share with support rollers. Special solutions are possible.

Carrot intake: large, distance adjustable support wheels, manual depth adjustment and a 1- or 2-row carrot share. Various row width and distances possible

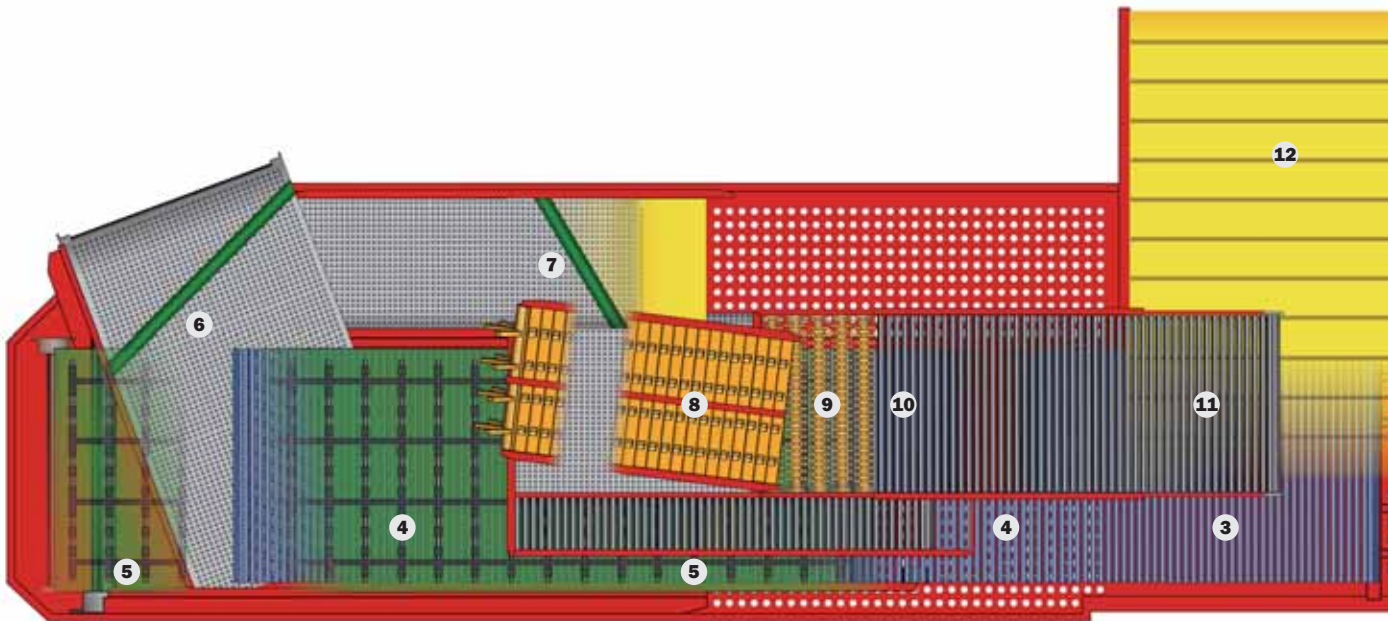
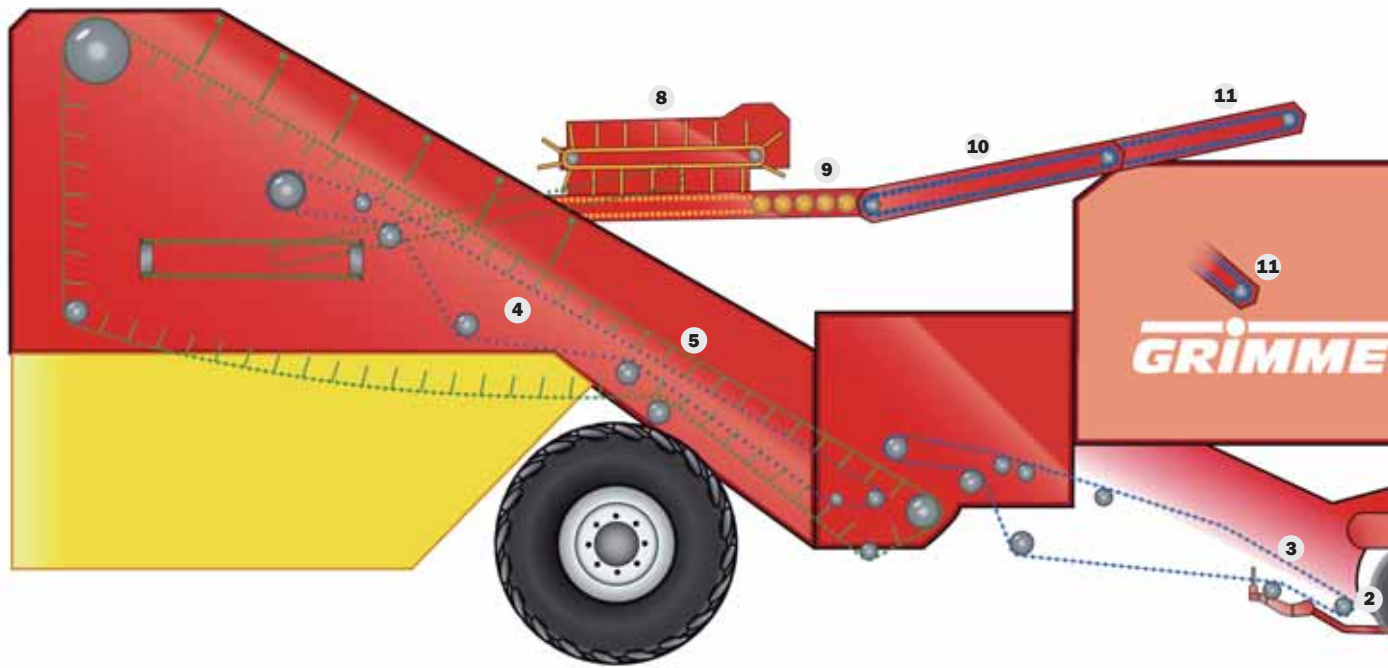
# Because individual solutions are ideal solutions: your Grimme option

The harvest conditions change harvest by harvest: changing weather conditions, various soils, variety of potatoes and many, many

other situations. – And how to achieve an optimum solution? With the Grimme options for the SE 150/170-60. A range of various settings

and options enable it to adapt to the requirement.

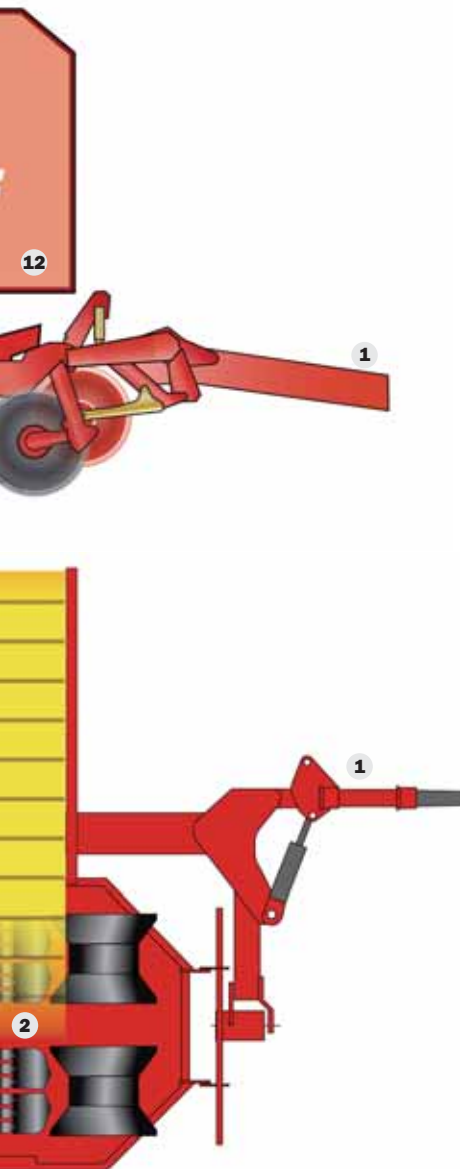
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- |                                  |  |  |                                     |
|----------------------------------|--|--|-------------------------------------|
| 1 Drawbar                        | 4 2 <sup>nd</sup> main web                 | 7 2 <sup>nd</sup> double extracting roller | 10 Picking web                      |
| 2 Intake                         | 5 Deviner web                              | 8 Separator                                | 11 Flexible bunker filling elevator |
| 3 1 <sup>st</sup> short main web | 6 1 <sup>st</sup> double extracting roller | 9 Pre-grading rollers (option)             | 12 Moving floor bunker              |

# ons!

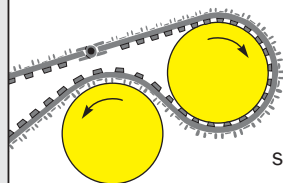
the harvester



## SIEVING SUPPORT

# Take the important and leave the unwanted – the sieving support

### 1<sup>st</sup> and 2<sup>nd</sup> main web (rubber roller drive)

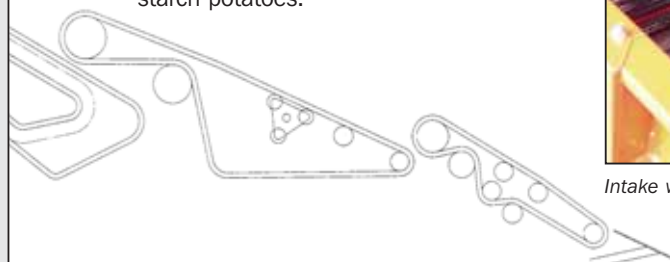


Ideal combination with a 1<sup>st</sup> short and a 2<sup>nd</sup> long main web: optimum intake of soil into the machine, smooth and even running of the main webs driven by the durable special rubber coated drive rollers. The drive under the bars is standard.



### Intake web (option)

The infinitely hydraulically driven intake web gives an additional drop in the web channel – to increase the output on heavy grounds or for starch potatoes.



Intake web

### Patent High cam belts

Full crop protection with high cams: the well gentle and damage free crop transport. The crop is carried like on hands and does not touch the metal.



High cams



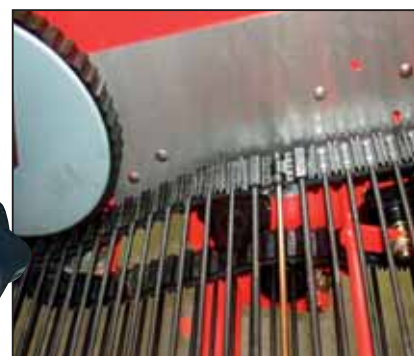
### Hydraulically driven swinging agitator (option)

For more separation on the 1<sup>st</sup> main web. The intensity is adjustable from the operator terminal.



### Triangular rollers in the main web (option)

Increased sieving with the triangular rollers (option). The stainless steel in the swing frame is for those who want less soil sticking to the side and at the same time increased gentle crop handling with less friction.



# Original Grimme know-how: the multi-function web. Increased sieving, separation and transport

**Patent** Patented multi-function web

Sieving, separation, transport: three functions in one working step with the multi-function web. The crop flows over a minimum drop from the 1<sup>st</sup> onto the 2<sup>nd</sup> main web. Following it is lifted up in pockets.

**Sieving** The 2<sup>nd</sup> main web effectively and gentle separates the soil and transfers the crop to the separator.

**Separation** The close deviner web runs over the 2<sup>nd</sup> main web, separates the haulm from the crop flow and discharge it onto the field. Up to 3 scraper rollers can increase the separation. The slip control is standard. Spring loaded scraper combs ensure the durability, 1 additional scraper comb is available (option).

**Transport** Gentle crop handling pockets arise in combination with the 2<sup>nd</sup> main web and deviner web. Those transport the crop in "portions" onto the 1<sup>st</sup> separator. That keeps the crop flow calm and avoids crop damage through transfer.



Optimum gentle crop handling: deviner web with soft polyurethane flights (distance 200 or 280 mm)

**Sieving**



**Separation**



**Transport**



Effective trash separation and gentle crop transfer at once

**1<sup>st</sup> and 2<sup>nd</sup> double scraper roller**

The effective separation of left haulm and smaller trash is carried out through the 1<sup>st</sup> and 2<sup>nd</sup> double scraper roller and the hedgehog webs, which are available in various pitches. The double scraper distance to the picking web is adjustable for an optimum adoption to the harvest conditions. The 1<sup>st</sup> double scraper roller is also hydraulically adjustable (option). For a quick adoption to changing soil conditions are the double scraper roller and hedgehog webs infinitely speed adjustable. Another feature: long durability with mutual roller cleaning without need of additional scraper.



1<sup>st</sup> double scraper roller



Double scraper roller (A), spiral rollers (option) (B) for increased separation



2<sup>nd</sup> double scraper roller

## Good separated is well picked!

### Type UB – for soils with clods but little stone content

The hedgehog web is either available with plates for light to medium soil as well with bars for heavy soil. Infinitely adjustable speed of the finger web and hedgehog web. The finger webs are independently hydraulically and speed adjustable.



Type UB: best separation on cloddy soil with little stone content

### **NEW** Type SB – for stony soils

Optimum adoption to the different soils with the hydraulically driven hedgehog and brush web. The innovation: a 2-step stone separator. The first step works as roll-brake system. The crop flows with a set speed on the first soft hedgehog web. Because of the different weight and rolling reaction of stones and crop rolls the crop further to the end. The stones slow down and stay mainly at the beginning of the web. Solution: an immense increased separation.



Type SB: best separation on stony soils with the innovative kinetic stone separator

### Type NB – for soils with little trash

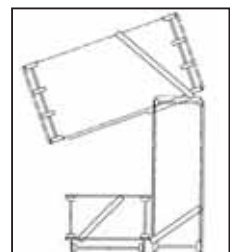
The extended, hydraulically driven picking web with infinitely speed adjustment set from the operator terminal at the picking table or from the driver cab. A manual levelling adjustment enables an adjustment to the crop and soil conditions. Triangular rollers under the picking web increase the sieving and spread the crop, the intensity is adjustable by the means of a hand lever. Additional is a rotor agitator available (option).



Type NB: best separation on soils with little clods and trash

### Type NB with 3<sup>rd</sup> hedgehog web and 3<sup>rd</sup> scraper roller for higher output on soils with fewer clods

An additional hedgehog web with scraper roller is added to the NB separator. That increase immense the output. The levelling of the whole separator is adjustable to improve the crop spread over the picking web.



Type NB with 3<sup>rd</sup> hedgehog web and 3<sup>rd</sup> scraper roller – for increased output on soils with fewer clods

### Slip control for type UB, SB and NB (option)

The slip control with load display on the operator terminal enables an optimum use of the harvester. If necessary runs the 1<sup>st</sup> hedgehog web automatically on full speed – for self-cleaning. Also is an acoustic signal send to the drivers cab – the driver can react directly.



Optimum output with slip control (option)



## Ensure good harvest output and good quality crop!



5 grader rollers separate steadily small potatoes in conjunction with the UB or SB separator (1).

5 grading rollers with infinitely distance adjustment from 0–40 mm in conjunction with the NB separator (2)

Drive direction with the crop flow for gentle transfer



Picking table with almost even picking area: Up to 6 pickers can work in a good ergonomically working position at the picking table (3).

Under control: The picker can control with the GBT 817 all important picking functions. The separator and picking web are with hydraulically infinitely speed adjustment. That ensures an optimum adoption between the crop and trash. The picker can stop the picking web with an emergency stop and send the driver an acoustic signal (4).



Well dumped: The cross conveyor under the picking web transports the trash so it does not run a 2<sup>nd</sup> time through the machine (5).

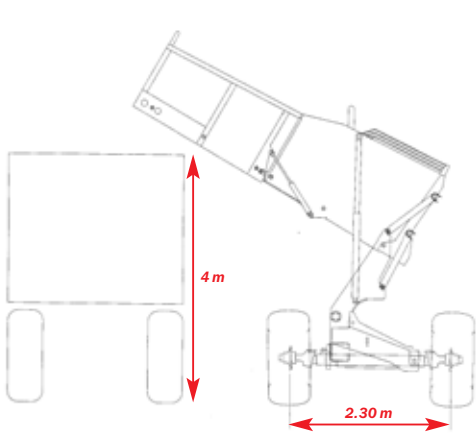
Stone box with cross conveyor: filling with trash chutes from the picking area and hydraulic operated unloading from the driver cab (option) (6)



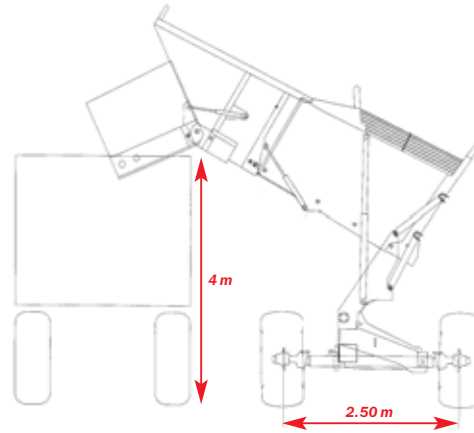
Minimum drop heights to fill the moving floor bunker (7/8) with hydraulically raised section of the final conveyor. Automatic height adjustment of the final conveyor is available (option): The final conveyor raises automatically while bunker filling to keep an even low drop height.

MOVING FLOOR BUNKER

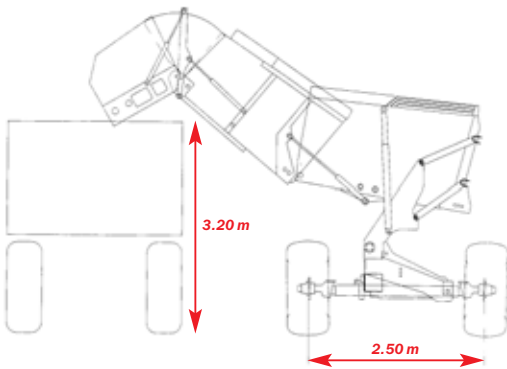
## High capacity including high know-how



6 tonne moving floor bunker (standard): possibly increase of the bunker capacity from 6 tonne to 6.3 tonne with the automatic bunker filling (option)



Option: 7.5 tonne large bunker with bunker head lowering – increases the output. Important: only in combination with the wider axle and ball-hitch drawbar. The machine width changes to 3.3 meter with the wider track width (please make sure the machine follows the country specific regulations).



Option: 7 tonne overloading bunker for practical unloading while still harvesting. Simple and fast filling of trailers with up to 3.20 meter height. The machine width changes to 3.3 meter with the wider track width (please make sure the machine follows the country specific regulations).





1



2

*Minimum drop: moving floor bunker with head end lowering with optimized drop height while filling the trailer (option) (1)*

*Unloading while digging: with the overloading bunker (2) for simple and fast filling of trailers with up to 3.20 meter height (option)*



3



4

*Soft drop: potato end filling chute with rubber baffles for gentle filling of trailers (option) (3)*

*Hydraulic ram to raise bunker end to clear of crop or optimum final filling of high trailers (option) (4)*



5



6

*Handy: the BIG BAG-filling device in combination with the potato chute and rubber baffle (option) (5)*

*Higher capacity: with the automatic bunker filling is a manual operation not necessary anymore, optimum reach of the bunker capacity (option) (6).*



7



8

*Shiny sides for gentler crop handling: The moving floor bunker with stainless steel sides prevents soil sticking to the sides in wet conditions (option) (7).*

*Optimum crop handling with soft bunker floor, wavy bunker floor shape enables fast emptying (8).*

*For all, with high goals: the large dimensioned bunker simply by pushing a button lifts hydraulically to a maximum unloading height of 4.20 meter. The special construction ensures an almost continuous same unloading width with changing unloading heights. The wavy bunker floor shape enables fast emptying. Two different speed settings enable a fast final emptying.*



9

*Thoroughly thought through: The motors of the moving floor bunker fitted to the inside not only work away reliably but also well protected against collision (9).*




ATTACHMENT AND DRIVE

## Good combination: strong drives and robust drawbar

Smooth running: The maintenance free drive of the 2<sup>nd</sup> main web and wide haulm web ensures a smooth running of the machine. The good view on the separator simplifies the work at the picking table (1).



Well coupled: the ball hitch drawbar (option). Standard is the coupling under the pto-shaft connection. All drawbars are height adjustable to adapt to the different tractor sizes.

-  Drawbar eye ø 40 mm
-  Hitch or Piton-Fix ø 50 mm
-  Ball bearing coupling ø 80 mm (option)

The hydraulic side adjustment of the drawbar and the centre running pto-shaft enable a smooth running of the drive unit and ensure therefore a long lifetime (2).



Always good grip – with the optimum tyres (3)



- 710/50-30.5 (option)
- 710/45-26.5 (option)
- 600/55-26.5 710/50-26.5 Mich.-Cargo Bib 600/55-26.5 (standard)

3-step gearbox: adoption of the machine to sensible crop – reduced start shock (4)



Heavy duty: for strong conditions the hydrostatic wheel drive (5)



Hydraulically axle steering (option): high agility – short turnings. Always well in balance: with the hydraulically levelling control (standard) or automatic levelling control (option) (6)



CAN-BUS-CONTROLLED MONITORING SYSTEM

## Your personal control centre

**Visual Protect**



Quicker reaction: the CAN-bus controlled monitoring system VISUAL-PROTECT detects critical situations in the machine through sensors. The monitor switches automatically to that camera where a problem arises. The driver sees directly the problem and can take action if necessary. VISUAL-PROTECT is available as option for all CAN-bus operated machines from Grimme (planting, harvesting, storing and sugar-beet technology).



- Slip control – 2<sup>nd</sup> main web
- Slip control – 1<sup>st</sup> hedgehog web



## Harvesting success – at the push of a button: the Grimme digital technology

For a maximum operator comfort: the digital controlled operator terminal Grimme SKE-S. Not only a comfort plus also maximum reliability. Also it is possible to control all machine functions from the drivers cab. The GBT 2100 (option) give a well overview of important parameter

as total output per hectare, working hours, daily output etc. With the integrated diagnostic system you indulge the high service friendliness. One of the additional functions is for example the setting of the “field start” and “field end” function – For maximum output with the SE 150/170-60!



*In view: the monitoring system with monitor and cameras – possibility to extend to a maximum of 8 cameras. With free settable order of the camera display on the monitor (option)*

*Under control: the operator terminal SKE-S controls all important machine functions from the drivers cab. The operator terminal GBT 817 is controlled from the pickers at the picking table for all important settings at the picking area.*



*The combination of the digital technology and the operator terminal GBT 2100 (option) enables the control of further settings from the drivers cab: e.g. infinitely distance adjustment of all 6 back holding combs (3 top, 3 bottom) at the wide deviner web, infinitely depth control of the digging shares, infinitely setting of the levelling or distance at the 1<sup>st</sup> and 2<sup>nd</sup> double scraper rollers or setting of the function “field start” and “field end”. The ergonomically positioning of the operator terminal and intake unit enables a good view on both at the same time.*

# **Gains more for you: the self-propelled potato harvester SF 150/170-60**





**GRIMME**

**GRIMME SF 170-60**

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## Technical data

SE 150/170-60		
<b>Measurement</b>		
<b>Length</b>	11,200 mm (with drawbar)	
<b>Width</b>	3,000 mm (6 tonne-bunker) or 3,300 mm (7 tonne- and 7.5 tonne-bunker)	
<b>Height</b>	3,700 mm (with standard wheels)	
<b>Weight (unladen)</b>	Total weight 9,350 kg, axle weight 7,650 kg, drawbar weight 1,700 kg (with basic equipment)	
	<b>Basic equipment</b>	<b>Options</b>
<b>Axle</b>	Hydraulic axle steering Hydraulic levelling	Axle centre steering, automatic levelling Hydraulic wheel drive
<b>Tyres</b>	600/55-26.5	710/50-30.5, 600/55-26.5 Michelin-Cargobib or 710/45-26.5
<b>Braking system</b>	Air brake	Hydraulic brakes
<b>Power transmission</b>	Main drive: low-maintenance gearbox with pto-shaft, PTO speed 540 rpm or 1,000 rpm	3-step gearbox
<b>Drawbar</b>	Drawbar eye, hitch	Ball hitch drawbar
<b>Intake</b>	Pulled crop intake unit, 4 pulled disc coulters, spring loaded, choice of 540 mm, 580 mm, 600 mm or 620 mm intake width, 2- or 3-piece shares, 2 pulled diablo roller, 2 haulm intake rollers, diameter 400 mm	Automatic self-centre row alignment, hydraulic share depth adjustment, stone protection for shares, automatic ridge pressure regulation, intake web with hydraulic speed control, 2 <sup>nd</sup> disc coulters right-hand side, rotor shaft for windrow intake, 2 haulm deflection skis
<b>1<sup>st</sup> Main web</b>	1 <sup>st</sup> main web channel width 1,500 mm: 1,450 mm wide, 2,750 mm long or 1 <sup>st</sup> main web channel width 1,700 mm: 1,650 mm wide, 2,750 mm long, each with choice of 28, 32, 35, 40, 45 and 50 mm web pitch	Stainless steel in swing frame, hydraulically driven and infinitely speed adjustable swinging agitator, 1,700 mm wide main web channel
<b>2<sup>nd</sup> Main web</b>	2 <sup>nd</sup> main web channel width 1,700 mm: 1,650 mm wide, 3,900 mm long, choice of 28, 32, 35, 40 and 44 mm web pitch	Slip control
<b>Haulm separation</b>	Scraper unit with rubber back-holding combs, deviner web 1,750 mm wide and 5,400 mm long	Hydraulically adjustable back-holding combs
<b>1<sup>st</sup> Separator</b>	Cross running hedgehog web with double scraper roller, levelling adjustment, 1,300 mm wide, 2,340 mm long	Slip control, hydraulically height adjustable double scraper roller, electrical speed control
<b>2<sup>nd</sup> Separator</b>	Type UB, NB: lengthwise running hedgehog web with double scraper roller, 730 mm wide, 2,380 mm long Type SB: transfer web, closed version with double scraper roller, 730 mm wide, 2,380 mm long	Electrical speed control
<b>3<sup>rd</sup> Separator</b>	Type UB: cross running hedgehog web, manual levelling, 1,300 mm wide, 1,450 mm long, two double finger webs with trash chute Type SB: 2 cross running hedgehog web, 650 mm wide and 2,350 mm or 1,450 mm long, with trash chute Type NB-hedgehog web: cross running hedgehog web, manual levelling adjustment, with double scraper roller, without trash chute	Type UB/SB: electrical speed control Type NB-hedgehog: 3 <sup>rd</sup> hedgehog web
<b>Picking table</b>	With driver warning device, UB/SB 1,100 mm wide, NB without hedgehog web 900 mm wide, NB with hedgehog web 1,100 mm wide, NB with grading and without hedgehog web 1,000 mm wide, trash chute (UB, SB) 340 mm wide, platform for at least 2x2 pickers (UB, SB), hydraulically driven picking web	Stone box with cross conveyor, pre-grading unit with hopper for small potatoes
<b>Moving floor bunker</b>	Maximum discharge height: 4,200 mm, capacity: 6,000 kg, driven with 2-step motor, infinitely adjustable	Capacity: 6.3 tonne incl. filling optimisation, bunker end box filling chute with rubber baffle, hydraulic ram to raise bunker end chute, automatic filling, 7.5 tonne bunker (machine width 3,300 mm), 7.0 tonne bunker with direct unloading (machine width 3,300 mm), bunker head lowering, BIG BAG with potato chute with rubber baffle, final elevator automatic
<b>Hydraulic system</b>	Electro magnetic controls	-
<b>Machine operation</b>	Digital control	GBT 2100 operator terminal, VISUAL-CONTROL VC 100-terminal, colour monitor with colour cameras, VISUAL-PROTECT

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