SF 150/170-60

2-row, self-propelled potato harvester
with large bunker
Gives you more: the self-propelled potato harvester SF 150/170-60!

Absolutely innovative, robust and reliable – the SF 150/170-60 from Grimme. The 2-row self-propelled potato harvester gives high harvesting output under different harvest conditions. The modular design tailors the machine to suit individual requirements. The extremely agile self-propelled harvester is home on small as well as on big fields. The powerful machine, 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. The comfortable driver’s cab gives enough space and a good view of the intake unit. 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. Relaxed harvesting for the driver and the machine.

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**INTAKE**

**Powerful and 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 large, spring loaded disc coulters and 2 haulm intake rollers ensure 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 in light soils (1).

Good with a lot of haulm: the 2nd disc coulter (option) (2)
Controlled centre: benefit from the autopilot for the automatic centre steering (option) (3).
For reduced pressure: the hydraulic ridge pressure relief (option) (4). Intuitive setting from the touch screen VC 100-terminal.

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 driver’s cab (option) (7).

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

Window 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 options

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 SF.150/170-60. A range of various settings and options enable it to adopt the harvesting to the requirement.
Take the important and leave the unwanted – the sieving support

**1st and 2nd main web (rubber roller drive)**

Ideal combination with a 1st short and a 2nd 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, independent to the web pitch. 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.

**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.

**Hydraulically driven swinging agitator (option)**

For more separation on the 1st 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 transportation**

**Patented multi-function web**

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

The 2nd main web effectively and gently separates the soil and transfers the crop to the separator.

The close deviner web runs over the 2nd main web, separates the haulm from the crop flow and discharges it back to the field. Up to 3 scraper rollers can increase the separation. The slip control is standard. Spring-loaded scraper combs ensure the durability.

Gentle crop handling pockets arise in combination with the 2nd main web and deviner web. Those transport the crop in “portions” onto the 1st separator. This keeps the crop flow calm and avoids crop damage through transfer.

1st and 2nd double scraper roller

The effective separation of left haulm and smaller trash is carried out through the 1st and 2nd 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 1st 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.
**SEPARATOR**

**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 as 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 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 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 with 3rd hedgehog web and 3rd scraper roller for higher output on soils with fewer clods**

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

**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 the 1st hedgehog web runs automatically at full speed – for self-cleaning.


**GRADING AND PICKING**

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 operate in a good ergonomically working position at the picking table (3). Under control: the pickers can control with the GBT 817 all the important picking functions. The separator and picking web are with hydraulically infinitely speed adjustment. This ensures an optimum adoption between the crop and trash. The pickers 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 2nd 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: the final conveyor raises automatically while bunker is 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 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 3.30 meter with the wider track width (please make sure the machine follows the country specific regulations).

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 3.30 meter with the wider track width (please make sure the machine follows the country specific regulations).
Handy: the BIG BAG-filling device in combination with the potato chute and rubber baffles (option) (5)

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

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

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

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

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).

Gives you more – also for small potatoes: pre-grading with bunker and unloading elevator (option) (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 (10).
**COMFORT-CAB**

**Hit the ground. See all around!**

For more power: the high comfort driver’s cab relieves the driver among others with the air suspended driver’s seat, air conditioning, adjustable drive unit and the large windows for a good visibility of the machine.

**NARROW WHEELS, HAULM TOPPER**

**Well chopped.**
**Well driven!**

Full traction: narrow wheels (1) to open up the fields with a row width 75 to 90 cm (option)

For better separating: The haulm topper with cross conveyor (option) (2) reduces the haulm share in the machine and ensures higher output.

For optimum agility:
the ± 68 degree turning angle of the front wheel (3) plus the rear axle steering with ± 12 degree turning angle (4). These ensure an optimum agility to open up the fields and speed up aligning for unloading.
Your personal control centre

Slip control – 2nd main web
Slip control – 1st hedgehog web

Your personal control centre

Modern agricultural machines with their high complexity ask high demands of the driver. With the VISUAL-CONTROL VC 100 Grimme manage to keep the connection between the driver and the complex control systems as simple and intuitive as possible. This makes it possible for the driver to get the optimum out of the SF 150/170-60. – And that in all harvest conditions. During the digging it is necessary to make several settings. Opposed to traditional terminals, is the setting at the VISUAL-CONTROL VC 100 intuitive. This ensures less distractions for the driver and increase the safety. Just get on the machine and start.

Under control: simple operation of the harvester with one standard or two (option) colour touch screens. With the DLG awarded VISUAL-CONTROL and “innovation of the year for contractors 2006” the VISUAL-CONTROL VC 100, awarded from several journalist from guiding agricultural magazines in Belgium, the Netherlands and Germany.

To get the maximum out of the SF 150/170-60: VISUAL-CONTROL

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).

The future data management system OPTIPLAN-PROFI (option); order processing and output analysis at the home office, simple and safe data transfer with the USB-stick. World innovation: data input at the machine with automatic data collation at the home office.
1000 times proven. The reliable potato harvester: SE 150/170-60
## Technical data

<table>
<thead>
<tr>
<th>SF 150/170-60</th>
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<tbody>
<tr>
<td><strong>Measurement</strong></td>
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<tr>
<td>Length 11,300 mm (with standard wheels)</td>
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<tr>
<td>Width 3,300 mm</td>
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<tr>
<td>Height 4,000 mm</td>
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<tr>
<td><strong>Weight (unladen)</strong></td>
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<tr>
<td>Total weight 18,900 kg (without options)</td>
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</table>

<table>
<thead>
<tr>
<th>Basic equipment</th>
<th>Option</th>
</tr>
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<tbody>
<tr>
<td><strong>Chassis/steering</strong></td>
<td>Front: Steering head, hydraulically adjustable to the side, steering angle ± 68°; Rear: axle steering, steering angle ± 12°; Hydraulically levelling, automatic levelling, automatic rear axle centre steering</td>
</tr>
<tr>
<td><strong>Drive</strong></td>
<td>Hydrostatic drive; electronic anti slip control</td>
</tr>
<tr>
<td><strong>Types</strong></td>
<td>Front: 620/75 R30 Rear lh-side: 800/55-30.5 Rear rh-side: 800/55-30.5</td>
</tr>
<tr>
<td><strong>Brakes</strong></td>
<td>Working brakes: hydrostatic; Parking brake: multi-disc brake</td>
</tr>
<tr>
<td><strong>Engine</strong></td>
<td>Mercedes-Benz OM 906 LA, power 205 kW (280 HP), 6 cylinder in-line motor, capacity 6,670 cm³, turbo charged and inter-cooled, full electronic engine management, motor emission conforms to EUROMOT 3A-norm, fuel tank capacity approximately 600 litres</td>
</tr>
<tr>
<td><strong>Cab</strong></td>
<td>Driver cab with heating and air suspended driver’s seat; Comfort driver pack with air conditioning, radio and outside mirror heating; Simple operation via: 1 VISUAL-CONTROL VC 100 touch screen terminal to control the digging unit and 1 GBT 2100 terminal to operate the drive and engine settings; Twin-monitor with four cameras and working lights; 5 cab-mounted working lights, 4 to the front and 1 to the back</td>
</tr>
<tr>
<td><strong>Intake</strong></td>
<td>Pulled crop intake unit, 4 pulled disc coulter, 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</td>
</tr>
<tr>
<td><strong>1st main web</strong></td>
<td>1st main web channel width 1,500 mm: 1,450 mm wide, 2,750 mm long or 2nd main web channel width 1,700 mm: 1,650 mm wide, 2,750 mm long, each with choice of 28, 32, 35, 40 or 45 mm web pitch; Hydraulically driven agitator with infinitely speed setting</td>
</tr>
<tr>
<td><strong>2nd web</strong></td>
<td>2nd web; 1,450 mm wide, 3,900 mm long, choice of 28, 32, 35, 40 or 44 mm web pitch</td>
</tr>
<tr>
<td><strong>Haulm separation</strong></td>
<td>Side separator with rubber back-holding combs, drivel web 1,750 mm wide and 5,400 mm long</td>
</tr>
<tr>
<td><strong>1st separator</strong></td>
<td>Cross running hedgehog web with double scraper roller, levelling adjustment, 1,300 mm wide, 2,340 mm long, slip control, electrical speed adjustment</td>
</tr>
<tr>
<td><strong>2nd separator</strong></td>
<td>Type UB; NB: length wise running hedgehog web with double scraper roller, 730 mm wide, 2,380 mm long, Type SB; transfer web, closed version with double roller, 730 mm wide, 1,300 mm long</td>
</tr>
<tr>
<td><strong>3rd separator</strong></td>
<td>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 webs, 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/NB; electrical speed adjustment</td>
</tr>
<tr>
<td><strong>Picking table</strong></td>
<td>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 2 x 2 pickers (UB, SB); hydraulically driven picking web</td>
</tr>
<tr>
<td><strong>Moving floor bunker</strong></td>
<td>Capacity: 6,000 kg; Drive: 2-step hydraulic motor, infinitely adjustable</td>
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<tr>
<td><strong>Hydraulic system</strong></td>
<td>Electrical control</td>
</tr>
<tr>
<td><strong>Machine steering</strong></td>
<td>GBT 2100 operator terminal; VISUAL CONTROL VC 100-terminal; colour monitor with colour cameras, VISUAL-PROTECT</td>
</tr>
<tr>
<td><strong>Haulm topper</strong></td>
<td>Hydraulically driven, with cross conveyor; hydraulic relief of the haulm topper for wet conditions</td>
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Your Grimme Partner for advice and service;

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Weight (unladen) 18,900 kg (without options)