



Spirit 7200 2-row offset bunker harvester

UNIQUE HAULM
SEPARATION
SYSTEM



KEEN &
GREEN

Extra haulm removal with Spirit 7200

The new Spirit 7200 complements the AVR Spirit family with a trailed, two-row offset potato harvester.

The Spirit 7200 is equipped with a unique, additional haulm separation system: an additional haulm roller just in front of the in-line pindle belt. A trash web under the haulm web ensures that potatoes that “dropped” late remain in the machine and that any haulm that does fall through the haulm web is removed.

■ Cleaning modules

After being picked up by the digging unit, the first sieving takes place on the digging web, which has a width of 1,650 mm. This is fitted with hydraulically powered eccentric vibrators. Then there is the combination of haulm web and sieving web – as these operate so close to one another, the drop height from the digging web to the sieving web has been kept to a minimum. A haulm roller is installed at the transition from the sieving web to the pindle belt for additional haulm separation. The haulm roller is easy to adjust in intensity by moving it farther under or away from the sieving web. A potato-friendly transition is ensured as the haulm roller is followed by a soft pindle belt.

On the in-line pindle belt, the potatoes are conveyed to the transversal pindle belt by a triple retaining roller. If desired, the transversal pindle belt can be placed at a greater or lesser angle. Height adjustment from the picking-off table offers the option of quickly adjusting the cleaning capacity.

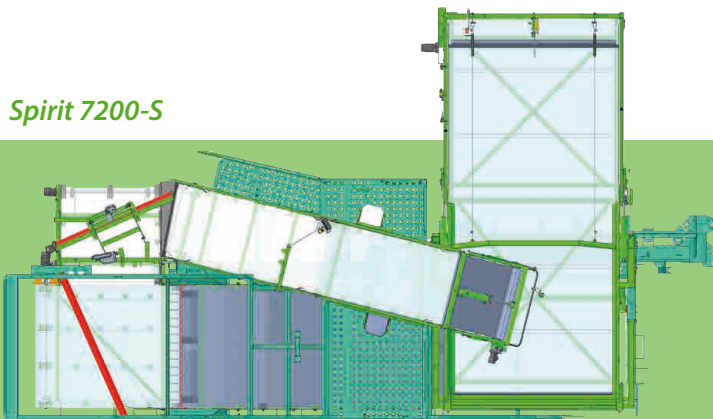
Different modules are available for the transversal pindle belt:

- The most straightforward variant is a shortened pindle belt with double retaining roller. The picking-off table, with space for six people, does not have a clod web. This machine has a fixed bunker and is also within three meters at full width.
- If stone and clod separation are needed, a three-row or four-row rotary comb is available for the transversal pindle belt. Potatoes are neatly distributed over the picking-off table for a final inspection; stones and clods arrive on the clod web, where a final inspection can also be carried out. The stones and clods are then removed to the ground or to a stone bunker; alternatively, a trash web is also available.

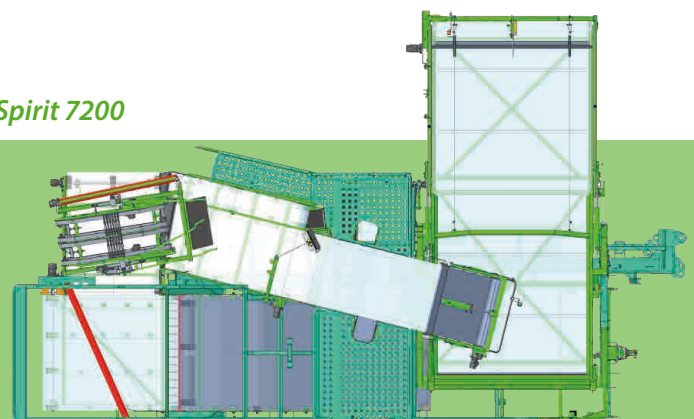
The potatoes are then conveyed into a large seven-ton bunker. The hydraulic bend in the picking-off table with automatic control provides for a minimal drop height into the bunker.

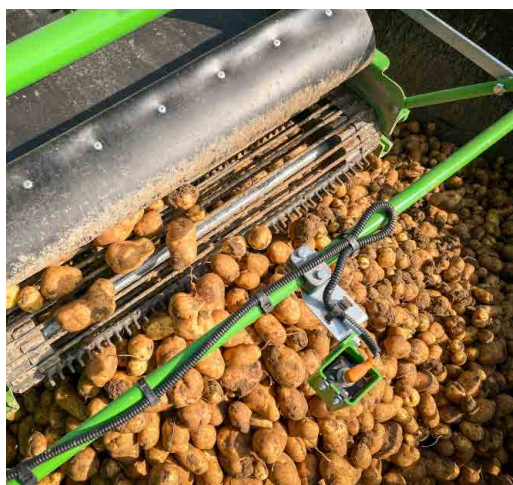


Spirit 7200-S



Spirit 7200





■ Digging unit

The Spirit 7200 is equipped with a quick-change kit as standard. This means that the user can change the digging unit in just a few minutes to allow a different crop to be harvested (e.g., an onion picking unit).

Mechanical and, as an option, hydraulic depth adjustment are available.

■ Haulm web/sieving web

Two rows of three haulm retainers ensure that the potatoes stay neatly inside the machine. Here, attention has been paid to ensuring that there is distance between the rows of retainers and that there is an efficient and robust mechanism in place to fold the frame upwards in the event of accumulations. The haulm and sieving webs are close to one another so that the drop height from the digging web to the sieving web is limited, something that is unique in the market.

At the rear of the machine, under the haulm web, is a conveyor that can remove haulm that falls late and that can return potatoes that fall late back into the machine.

■ Picking-off table

The picking-off table comfortably accommodates six people. For the best ergonomics, the table has been made as flat as possible.

All functions relating to cleaning at the rear of the machine can be operated easily with a clear keypad or mechanical handles.

■ Bunker

The fixed bunker is 9.6 m³ in size with a width of two meters and can hold up to seven tons (cf. reference to 7200). A shock absorber is also an option – which can optionally be folded mechanically or hydraulically and which lies neatly on top of the machine in transport position.





■ Tires

The Spirit 7200 runs smoothly thanks to the decision to opt for high wheels (30.5 rim). Different sizes are available (in some cases, dependent on the version):

- 650/65 R 30.5
- 850/50 R 30.5

Twin row-crop tires 380/85 R 38 are available, primarily to help prevent protrusion.

■ Operation

The machine is ISOBUS compatible, so it is compatible with the ISOBUS display in the tractor. Minimum requirements of terminal:

- touch interface
- resolution 480 x 480 pixels
- ISO VT level 3 (= AEF UT 2.0)

AVR offers two types of displays:

Mueller touch 800 and Mueller smart 570.

The 7200 has a range of automatic functions, including:

- Automatic level correction
- Automatic counterpressure control on the digging unit
- Automatic adjustment of the swan neck on the picking-off table
- Automatic bunker floor movement
- Inclination of the pintle belts
- Automatic row following, etc.

■ Road legal

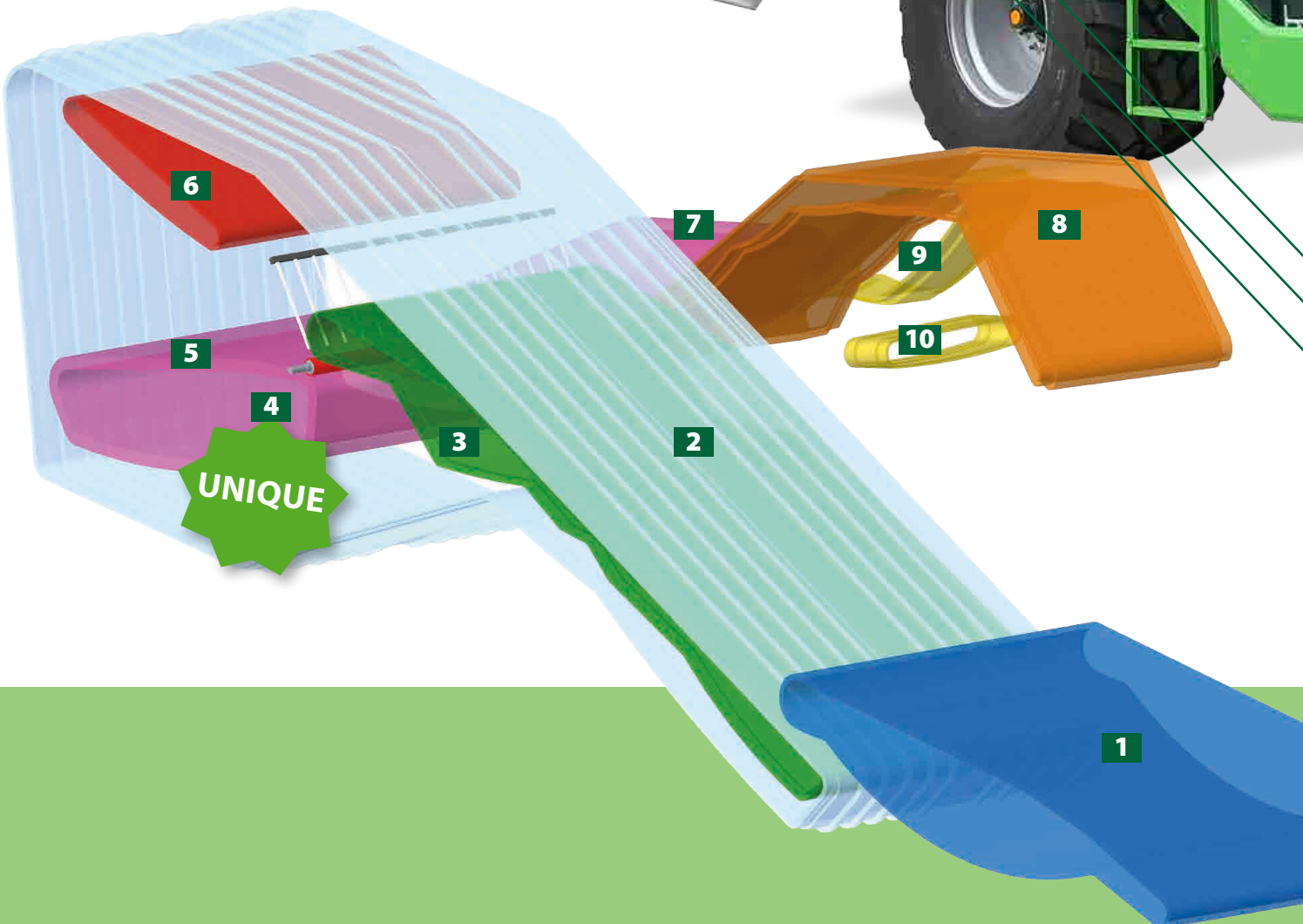
The Spirit 7200 satisfies all requirements to ensure that it is road legal.



■ Follow the potato flow

- 1 Digging web
- 2 Haulm web
- 3 Sieving web
- 4 Additional haulm roller between sieving web and in-line pindle belt
- 5 In-line pindle belt
- 6 Discharge belt returning potatoes that fell late / removing any haulm that is left
- 7 Transversal pindle belt
- 8 Picking-off table
- 9 Stone discharge belt to stone bunker
- 10 Trash web towards harvesting channel

Picking-off table for up to 6 people





AVR Connect compatible



Quick-change digging unit

ISOBUS control

Chassis on drawbar that hides all cables

Unique haulm separation system: additional haulm roller immediately in front of the in-line pintle belt

Additional trash web that can remove haulm that falls late and that can return potatoes that fall late back into the machine

High wheels: different sizes are possible, twin-row crop tires are also available





Precision farming: harvesting at a higher level

■ AVR Connect option

The Spirit 7200 has full internet connectivity. The web connectivity indicates that sensors at different locations on the harvester are capturing data from the field and forwarding it to your personal user platform, AVR Connect. From there, you can read off all data graphically so that you can plan work more efficiently, for example:



(Automatic) field management



Real-time position and route (on and off of the field)



Tracking alarm signals remotely, minimising machine downtime



Adjusting the overview, history, and settings of your Spirit remotely



Data exchange



Tracking key parameters



Remote diagnosis, limiting interventions



Geofencing



Optimising maintenance planning



Standard on the Spirit 7200 (3.3m)

■ Drawbar and wheels

- Drawbar with height adjustable towing eye (ø 50 mm)
- With hydraulic side adjustment
- PTO 6 splines 540 rpm
- Hydraulically driven braked axle
- Tire size: left and right 650/65 R 30.5
- Road lighting and signalization / rotating light

■ Digging unit

- Mechanically equipped as "quick-change"
- Trailed plastic diabolo
- Large haulm intake rollers (Ø 400 mm)
- Depth adjustment by means of rotating spindle
- Counterpressure control on digging unit (battery + manometer), manually adjustable
- One-piece share with height adjustment (580 mm between the discs)
- Intake via swinging digging unit: 1,650 mm canal width
- 2 hydraulically powered eccentric vibrators in digging web

■ Sieving webs / haulm web

- Mechanical drive for sieving webs and haulm web
- 2-speed mechanical drive
- Digging web with standard 40 mm ridge, DN, drive with pitch-dependent PUR drive wheels, double lock
- Sieving web step 36, DN, universal drive; double lock
- Haulm web (210 mm pitch) (HN70) with 2x3 rows of scrapers
- 2 height adjustable frames in respect of the haulm web, adjustable spring pressure on each row
- Discharge belt under haulm web for returning potatoes and removing haulm

■ Haulm roller

- Haulm roller between sieving web and in-line pintle belt
- Position in relation to the sieving web mechanically adjustable
- Mechanically driven (connected to second sieving web)
- Haulm guide unit with brushes



■ Cleaning unit

- Version with retaining rollers on second pintle belt (3.3 m)

■ Pintle belts

- 2 horizontal pintle belts
- In-line pintle belt N40 – V profile, endless, width 1,500 mm, hydraulically powered with retaining roller unit (3 rollers) (2 positions) in front of transversal pintle belt in transport direction. Mechanically adjustable from picking-off table.
- Transversal pintle belt N40 – U profile, endless, width 1,200 mm, length 1,500 mm, 3-row rotary comb, mechanically height adjustable from picking-off table. Hydraulically powered retaining roller with scraper.
- Pintle belt speed can be adjusted at picking-off table or from tractor
- Simultaneous hydraulic angle adjustment of both pintle belts

■ Picking-off table

- Picking-off platform with space for 4 people
- Extendable platform with space for 2 additional people at the discharge belt
- LED work lighting (2x: 1 aimed at the picking-off table and 1 at the transversal pintle belt)
- Picking-off table step 28 (rod 8 mm) (900 mm wide), pitch-dependent PUR drive between the rods
- Small size belt for clod disposal (300 mm wide)
- Adjustable speed, with emergency stop, horn on picking-off table
- Automatic swan neck picking-off table in bunker for minimal fall height
- Keypad for operation
- Speed variation for pintle belt, rotary comb, picking-off table, pintle belt inclination and picking-off table on/off, rotary comb speed
- 2 discharge canals at picking-off table

■ Bunker

- 9.6 m³; double bunker raising, 2x12 soft rubbered bunker rods, discharge height 4.10 m, bunker width 2.00 m
- 2 speeds for emptying (control via joystick)
- Bunker optimizer with hook, hydraulic unlocking (=rubber flap in bunker) (7 tons)





Hydraulic system

■ External hydraulic system originating from tractor hydraulics (easily adjustable oc/cc/ls)

- High pressure filter and manometer
- Electro-hydraulic valve block PVG16 with flows adjustable from tractor

Operation/drive of:

- Jack, hydraulic land leveling, steering wheels with automatic zero position
- Automatic drawbar control, angle adjustment for pintle belt module
- Raising/lowering/emptying bunker, picking-off table
- Hydraulic connections:
P 1/2" M - T 1/2" M - LS 3/8" M - Brake line F - Jack 1/2" M

■ Operation

- ISOBUS-compatible:
Minimum requirements of terminal:
 - touch interface
 - resolution 480 X 480 pixels
 - ISO VT level 3 (= AEF UT 2.0)
- AVR joystick on support arm + emergency stop always supplied with the machine
- Hectare counter, integrated in can-bus system
- AVR Connect hardware (DGPS antenna); telematics gateway; SIM card (2G)

■ Independent hydraulic system (2x LS pump)

Operation/drive of:

- In-line pintle belt, triple retaining roller above in-line pintle belt
- Transversal pintle belt, rotary comb above transversal pintle belt
- Retaining roller above transversal pintle belt; eccentric vibrators





Technical specifications

■ Technical specifications

SPIRIT	7200-S	7200
Dimensions (LxWxH) in m	10.6 x 2.9 x 4.0	10.6 x 3.2 x 4.0
Row distance in cm	75 - 80 - 85 - 90	75 - 80 - 85 - 90
Bunker capacity in m ³	± 8.6	± 9.3
Weight in kg	10150	10250
Discharge height in m	4.20	4.25
Required power	66 kW/90 hp	66 kW/90 hp

■ Some options:

- Double air pressure brakes
- Left double air 380/85 R 38; right 650/65 R 30.5 (total width 3.3 m)
- Hydraulic preparation kit for windrow intake / ACC digging unit
- Flap cleaner, mounted on drive shaft for digging web
- Müller touch 800 ISOBUS VT
- Stainless steel wearing plates in digging unit
- Retaining module electrical height adjustment kit
- Picking-off table with disc sorting unit, 4 rollers, share adjustment
- Trash web towards harvesting channel
- Stone box underneath picking-off table, with lid
- Shock absorber (hydr./mech.)
- Automatic bunker floor movement
- Hydraulic windrow intake for in-built quick-change system
- Boost on in-line pintle belt
- Cameras







Our KEEN & GREEN quality label indicates that our machines are equipped with techniques that promote durability and ease of use.

KEEN & GREEN

■ **KEEN**

AVR never stops innovating and designs smart machines that make your work life easier and allow you to maximize your profits.

■ **GREEN**

Our machines are not only called green because of their striking color, but also because of their durability. The machines consume as little fuel as possible, and their solid construction ensures a very long lifespan. This means you will have recovered the costs of your investment in no time.



AVR bv, with head office in Roeselare, Belgium, produces a comprehensive selection of sophisticated machines for the potato industry (and other bulbous and tuberous plants). This includes planting bed preparation, planting, ridging, hauling, harvesting and hangar storage. Our mission is to make sure that more marketable products end up in the hangar using less input. So as to be able to offer you optimal support, we invest for instance in an extensive dealer network and a strong service department. AVR employs about 200 employees internationally, has a network of more than 100 dealers and had a turnover of 73 million euros in 2020 .



www.avr.be

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