



# Puma 4.0 Self-propelled, 4-row harvester



**KEEN &  
GREEN**

## Meet the world leader in the 4-row self-propelled harvester range: the Puma 4.0.

*You can confidently rely on AVR's latest self-propelled harvester to help meet your current farming challenges. This heavy-duty, reliable and user-friendly machine will process up to 100 tonnes of potatoes per hour with all the correct settings. Even in wet weather conditions, this gentle giant will soldier on. Your Puma can now also be connected to the web. This will enable you to capture your machine data on the new AVR Connect platform to work even more efficiently after an initial assessment.*



### ■ The Most Powerful in its Class

The Puma 4.0 is fitted with a Stage V Volvo engine. The machine therefore meets the most stringent standards without in any way affecting what it is designed to do, i.e. harvesting.

The heavy-duty 12.8 litre Stage V Volvo engine achieves 469 HP, or 1 HP per 50 kg, which makes the Puma 4.0 the most powerful in its class. That is certainly noticeable in the field.





### ■ Easy operation

The Puma 4.0 is the ultimate in user-friendliness as it is operated with the aid of a well-designed touch screen, the AVR joystick and a speed dial button.

The new AVR operating panel is ultra-bright and therefore easily legible. It is capacitive and tactile, just like a smartphone. The fast processor ensures rapid response, which promises further opportunities for future automation/IOT applications. The screen has retained its well-known AVR intuitive look and feel.

The myriad of automatic functions, an optimal view of the digging unit and a large number of cameras mean that you can keep your full attention with the harvesting process.

### ■ Protecting the Soil Structure

The latest Puma is a heavy-duty machine, which despite its 23,500 kg still remains a lightweight in its class. The engine's position has been carefully designed so as to counterbalance the elevator. This optimal weight distribution guarantees an equal load on the tires and a minimum amount of track forming.

### ■ Approved for Road Use

The Puma 4.0 can be driven on the road with full peace of mind. We hold a CoP certificate that guarantees that all our self-propelled Puma machines are manufactured and tested in accordance with standard processes, and therefore comply with all the legal requirements in order to ensure it is approved for road use.

# Ready to Tackle any Harvesting Job

## ■ Design in the field

The Puma is extremely manoeuvrable given its compact lightweight construction and its enormous steering radius (50° at the front and 20° at the rear).

All the Puma parts are stored neatly behind easily opening doors. That is what gives the Puma its beautiful clean lines and looks.

All the parts are of a simple design, but particularly efficient in use. Just step in the spacious cab and you are ready to tackle any harvesting job.

## ■ Maximum intake

The harvesting channels are 1,450 mm wide for the model with 4x75 cm rows (or 1,550 mm for 4x90 cm). With the pulled non-sticking plastic diabolos, the pulled cutting discs and the large haulm intake rollers, the digging unit ensures an unflinching and very reliable potato intake.

The ridge pressure can be adjusted under all circumstances, which means the ridges remain intact and all potatoes are removed from the soil.

## ■ Haulm Topping... Neat, Neater, Neatest

The combination of transverse and angle flail blades and the specially shaped hood create a suction effect that makes the machine suitable for cutting any type of haulm.

The flail blade configuration has been specially designed to ensure excellent performance even in conditions of high vegetation and/or abundant and high haulm growth.

The oscillating axle suspension enables the haulm topper to closely follow the contours of the field to achieve the neatest possible result.



## ■ Option: Haulm Spreader

To remove the topped haulm from under the machine to avoid it from accumulating on the ridges, there is a haulm spreader available that spreads the topped haulm by the side of the haulm topper along the entire operating width of the machine.

For safety purposes, the system is fitted with a valve (hydraulically operated), which can be folded back if there is a tractor with a dumper trailer driving along the haulm topper, e.g. unloading on the move. The system can also be folded back to meet the legal width restrictions on the road.

## ■ KEEN & GREEN:

*The latest potato varieties exhibit greater haulm growth, and therefore require a more specialised haulm topping approach. The Puma haulm topper is perfectly equipped for this.*



#### ■ ACC option: for optimal harvesting under all conditions

When you're dealing with clay soil, for example, instead of the normal front-end you can opt for the All Conditions Control (ACC). This front-end enables you to dig up the potatoes without putting the slightest pressure on the ridges (diabolo-free, because the diabolos hover above the ridges). This can be a great advantage under difficult harvesting conditions. The diabolos do remain mounted in the front-end, however, in order to ensure good insertion in dry conditions. The ACC front-end is a single broad front-end, with 8 large (900 mm) driven disks. The depth is adjusted by two corner sensors, which monitor the movement of two skids.

The diabolos can be mounted far enough away from the ridge so as not to press on the ridge, but nevertheless to facilitate the insertion, to break the crust if necessary and to serve as mechanical protection. The diabolo can be hydraulically controlled from the cabin, to regulate the depth. In front of the share holder is a liftset to be able to harvest two rows. Two digging webs (1500mm each) run parallel to each other. This creates one wide open digging unit. Within the digging web, a triangular agitator in the digging web ensures even greater sieving capacity.

#### ■ KEEN & GREEN:

*This four-row model has two two-row digging units that can operate independently. This means that two-row harvesting is perfectly possible as well!*

# The Puma 4.0 Power You Need

## POWERFUL -

Powerful Stage V engine that will never fail you

## CLEAR VIEW -

Luxurious Claas cabin with automatic functions and excellent view of the harvesting process

## PRECISE -

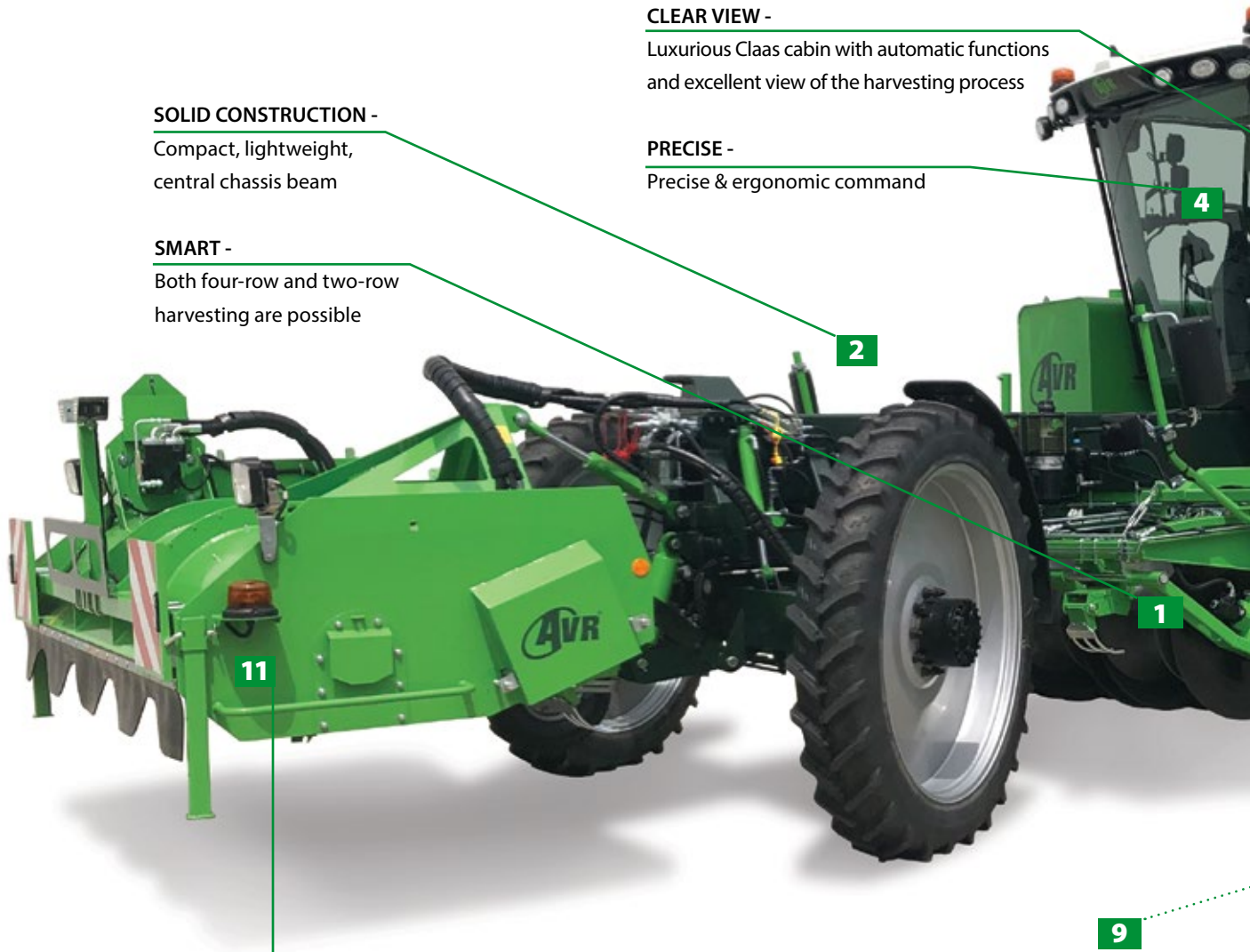
Precise & ergonomic command

## SOLID CONSTRUCTION -

Compact, lightweight, central chassis beam

## SMART -

Both four-row and two-row harvesting are possible



## INSTINCTIVE -

Oscillating topper, automatically following the ridges

## LIGHT FOOTPRINT -

Lower soil pressure because of large 'increased flexibility' tires





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**SOFT -**  
Potato-friendly,  
high capacity elevator

**FLEXIBLE -**  
Varioweb to be ready for  
all harvesting conditions

**GRAND -**  
Eight ton bunker for  
unloading while driving

**SUPPLE -**  
High wheel radius (50° in the  
front - 20° at the back).

The front wheels are equipped with 300/95 R52 tires, while the back wheels support two extra large 900/60 R38 'Very high Flexion Tyres'.



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# Tremendous Cleaning Power for a Beautiful End Product

*In order to efficiently remove soil and haulm, a large sieving capacity, an optimal haulm separation and a flexible cleaning module are crucial.*

## ■ Large sieving capacity

Two spacious sieving channels with digging web, sieving web and web with combi-rods offer a large sieving capacity. Via the rubberized rod web, the product flow reaches the conveyors that lead to the pintlebelt.

## ■ Continuous harvesting and unloading while driving

The eight ton bunker maximizes the machine's capacity. Continuous harvesting is possible: when the bunker is filled, you can unload it in the dumper while driving. Or stop unloading by disengaging the bunker floor and emptying the elevator web. In the meantime, you can simply continue harvesting. The elevator gives a massive boost in sieving capacity.

## ■ Potato-friendly elevator

The elevator is a rod belt that transports the potatoes upwards while ensuring extra sieving. The 1,200 mm wide elevator web has a 140 tons per hour capacity. The running fingers and PVC cloth flights ensure a gentle treatment.

## ■ Optimal haulm separation

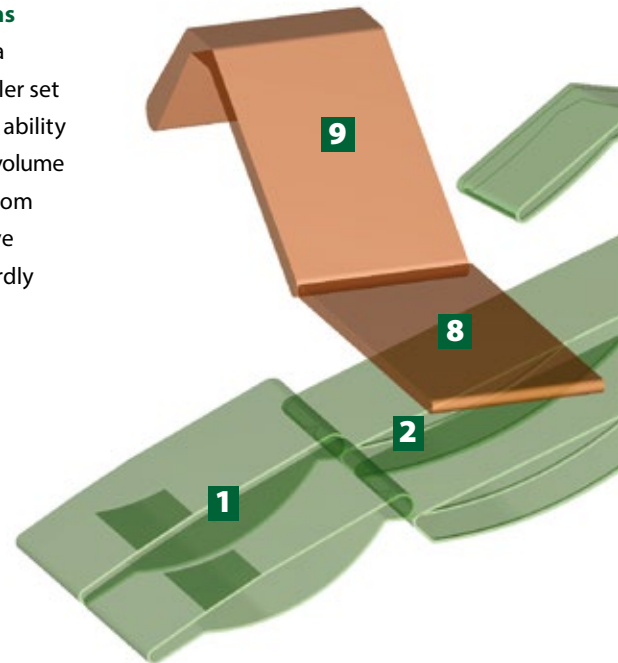
Two times two haulm rollers ensure an optimal haulm separation. The pintlebelt is equipped with an U-profile with haulm fingers for a better haulm separation.

## ■ Varioweb cleaning module, ready for all harvesting conditions

The patented Varioweb consists of a standing pintlebelt with an axial roller set underneath. A unique feature is the ability to continuously set the product flow volume that travels across the axial rollers from the cabin: from 100% when intensive cleaning is required to 0% when hardly any cleaning is required.

## ■ Follow the potato flow

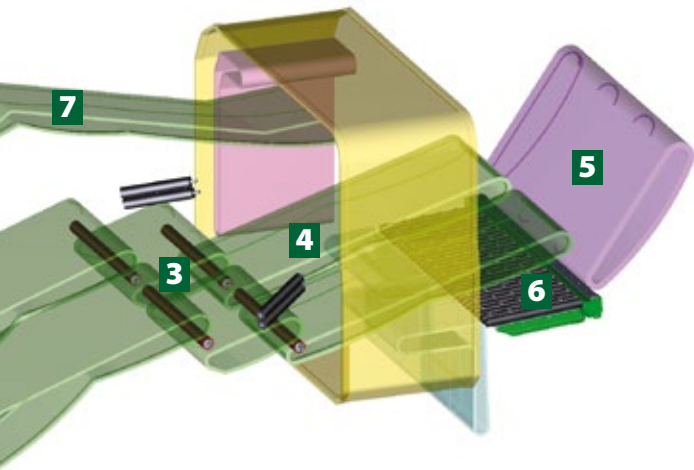
1. 2,400 mm digging web (x2): driven by means of pitch-dependent PUR drive wheels for an increased lifespan and potato-friendliness.
2. 3,700 mm sieving web (x2): long sieving web, pitchdependent PUR drive wheels with three eccentric vibrators. This web is followed by the first haulm roller.
3. 700 mm sieving web (x2): web with double profile rod (rubber rods with pintlebelt profile underneath the retaining rollers). This web is followed by the second haulm roller.
4. 1,100 mm full web (x2) for transport towards the Varioweb.
5. Varioweb (a combination of a pintlebelt and an axial roller set, in which the axial roller set can be slid continuously out of the product flow), cross roller set or trash web.
6. Elevator: heavy-duty rod web with active fingers and PVC cloth coated flights for a product-friendly potato transport.
7. Bunker filling belt towards bunker.
8. Bunker floor driven independently from elevator (8 ton bunker).
9. Elevator with three articulation points; rod web for a massive boost in sieving capacity.







## High-tech Harvesting



### ■ Option AVR Connect

The Puma 4.0 can be fully connected to the web. This web connectivity ensures that the sensors installed at specific locations on the harvester can capture the harvesting data from the field and send it online to your personal user platform, i.e. AVR Connect.

There you can read all the data presented in the form of graphs to plan your work even more efficiently, for example:

- (Automatic) field management
- Overview & history of the settings/parameters of your Puma
- Remote diagnostics
- Integrated yield measurement
- Real-time location & route (on & off field)
- Remote (software) update
- Data exchange with FMIS
- Log waiting times
- Geofencing
- Remote monitoring of alarm signals
- Monitoring of key parameters
- Trip management



### ■ QUOTE:

*Lieven De Pourcq 'As a farming contractor, I do tend to discuss the harvesting seasons with the people processing the potatoes. Then you do get to hear that they are satisfied with the quality of the potato harvest and with the end product I have brought in with my Puma.'*

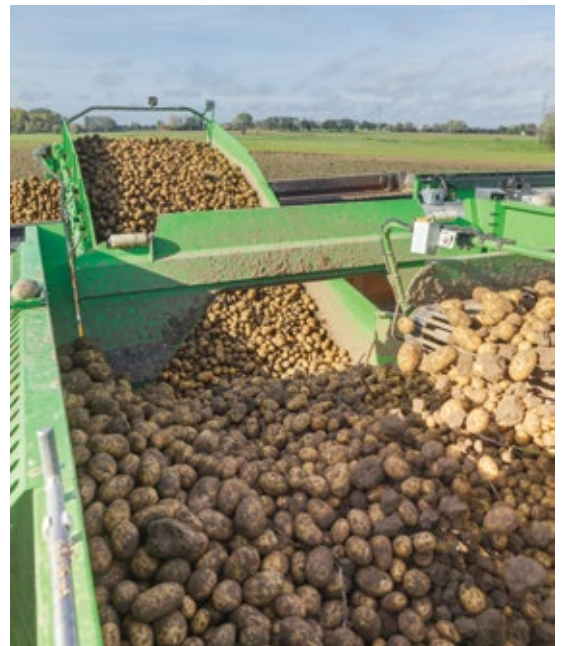
# Powerful Performance Gentle Potato Processing

## Standard equipment Puma 4.0:

- Haulm topper with lateral discharge
- Stage V motor (Volvo), 12,8 l, 345 kW / 469 pk
- Wheel radius front: 50° - back: 20°
- Tire sizes front: 2x 300/95 R52 - back: 2x 900/60 R38
- Side shift on front axle
- Automatic hydraulic level control
- Claas cabin with seat with air suspension, radio, heating, airco
- Two independent, oscillating digging units
- Electro-hydraulic counterpressure control
- Four pulled, plastic diabolos
- Eight pulled, spring-controlled discs
- Two haulm intake rollers
- Two short digging webs with PUR drive wheels
- Two long sieving webs (universal drive) with three eccentric vibrators
- Two rubberized sieving webs with double profile rod
- 2x2 haulm rollers
- Varioweb (28 axial rollers + pintlebelt)
- Elevator (1,200 mm) with rods, coated with thick star PVC
- Picking-off table (900 mm) with top that can be automatically lowered into the bunker
- Eight ton bunker with elevator (1,650 mm) for unloading while driving
- Truckspot signaling system
- High power LED rear lights

## Some options for the Puma 4.0:

- ACC digging unit
- Mud flaps
- Adjustable front axle (2.8 -> 3 m and 3 m -> 3.6 m)
- Universal share holders with stone protection
- Extra agitator in digging web
- Automatic inclination correction pintlebelt/varioweb
- Cross roller set or solely pintlebelt instead of Varioweb
- Electrically foldable and/or adjustable, heated mirrors
- Central lubrication
- Cameras and LED working lights
- Compressor
- Accessories for carrots or onions
- Electrical adjustment of haulm roller



## KEEN & GREEN:

Ensure an optimal use of your Puma 4.0!  
In an instant, the digging unit can be converted for harvesting carrots or picking up onions.



■ **KEEN & GREEN:**

*With 30% more front-wheel drive power and 15% more rear-wheel drive power the Puma 4.0 can continue harvesting where others would falter.*



*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 bvba, 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, haulming, 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 180 employees internationally, has a network of 100+ dealers and had a turnover of 52 million euros in 2017.



**Ask for more information, we'll be happy to help you:**

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