



# PUMA 4.0

SELF-PROPELLED, 4-ROW POTATO HARVESTER



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**WORLD LEADER IN THE FOUR-ROW SELF-PROPELLED HARVESTER RANGE**



To help you face your current farming challenges, you can confidently rely on AVR's self-propelled harvester. Meet the world leader in the four-row self-propelled range: the PUMA 4.0. A heavy-duty, reliable and easy-to-operate machine that is extremely potato-friendly. Even in wet weather conditions, this gentle giant will soldier on. Your Puma can also be connected to the web. This will enable you to capture your machine data on the AVR Connect platform to work even more efficiently.

### Easy operation

The Puma 4.0 is the ultimate in user-friendliness, as it is operated with the aid of a well-designed touchscreen, the AVR joystick and a quick-select rotating button. The AVR operating panel is ultra-bright and therefore easily legible in all circumstances. It is capacitive and tactile, just like a smartphone. The fast processor ensures rapid response, which promises further opportunities for future automation and IoT applications. The screen has retained its well-known intuitive AVR 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 Puma 4.0 is a heavy-duty machine that, 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.



The Puma 4.0 comes standard with AVR Connect: an online collection system for all your machine data, both on and off the field. Thanks to this online reporting tool, it is possible to analyze all machine activities. Increased insight into machine and agronomic data allows you to work more efficiently and make quicker adjustments where needed. The driver does not have to perform any additional operations. All data are automatically recorded during machine operation.

### How does AVR Connect work?

The AVR harvesters and planting machines are equipped with numerous technical and (optional) agronomic sensors. The telematics unit (with SIM card) collects all sensor data and sends it wirelessly via the Internet to AVR Connect. The AVR Connect system visualizes all information in a clear and understandable way. As part of the precision farming story, this allows you to easily and automatically keep track of what is happening in the field in your FMIS. This way, your planting and harvesting activities can be aligned even better.

With AVR Connect, you choose more knowledge and consequently a more effective use of your machine and resources.

- Applying precision farming techniques makes your work more efficient, leading to lower costs
- Statistics provide insight into improvement opportunities
- Easy access using your email address and password
- Personal, safe and user-friendly platform

### Precision farming is the future

Digitizing all available data and further developing precision farming applications (the right dosing quantity at the right moment and in the right place) is becoming increasingly important. This is precisely why we continue to invest in it. Existing modules will be expanded further and new options will be added. All the info on this can be found in the AVR Connect brochure.

### Gist of functionalities

- Integrated yield measurement
- Overview and history of machine settings
- Remote diagnostics to minimize service interventions and find solutions faster
- Remote alarm signals to minimize machine downtime
- Overview of current position and performance of all machines
- Data exchange with your Farm Management Information System
- Log waiting times
- Optimize maintenance planning
- Field management
- Real-time position & routes traveled (on and off the field)
- Remote (software) update
- Geofencing

# READY TO TACKLE ANY HARVESTING JOB



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



## 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 cabin 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 unerring 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 angled 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, an optional haulm spreader is available that distributes the topped haulm by the side of the harvester along the entire width of the previous working passage. For safety purposes, the system is fitted with a valve (hydraulically operated), which can be folded shut if there is a tractor with a dumper trailer driving along the haulm topper, e.g. when unloading on the road.

## Optional ACC digging unit

When you're dealing with clay soil, for example, instead of the normal digging unit, you can opt for the All Conditions Control (ACC) version. This digging unit 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 digging unit, however, in order to ensure a good intake in dry conditions. The ACC digging unit is a single broad digging unit, with 8 large (900 mm) driven discs. The depth is adjusted by two angle 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 intake, to break the crust if necessary and to serve as mechanical protection. The diabolos can be controlled hydraulically from the cabin to regulate the depth. In front of the share holder is a lift set to be able to harvest two rows. Two digging webs (1500 mm each) run parallel to each other. This creates one wide open digging unit. Within the digging web, a triangular agitator ensures even greater sieving capacity.

# TREMENDOUS CLEANING POWER, 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 a digging web, sieving web and web with double profile rods offer a large sieving capacity. Via the rubberized rod web, the product flow reaches the conveyors that lead to the pintle belt.

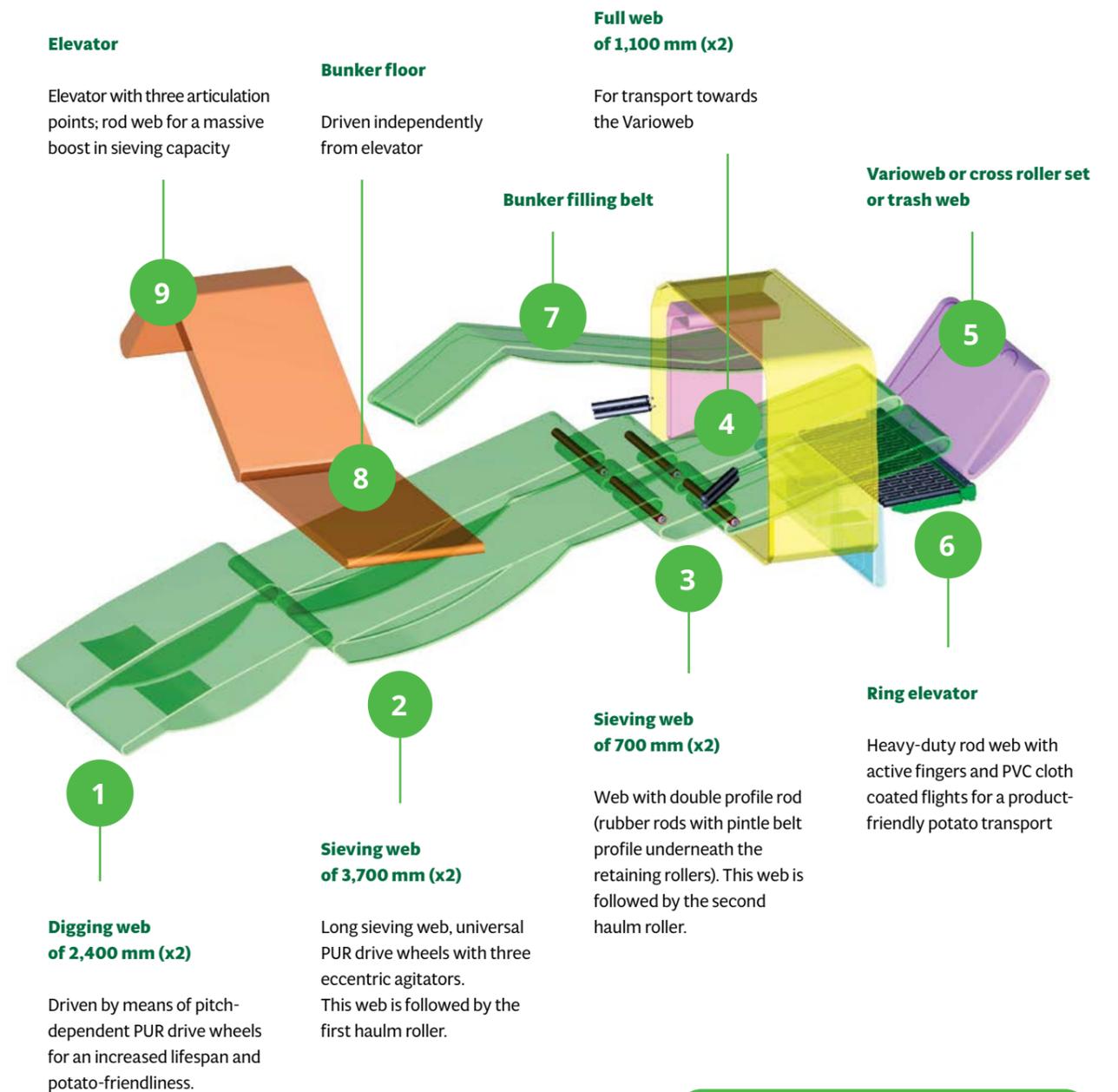
## Continuous harvesting and unloading while driving

With an eight-ton bunker, you get the maximum capacity out of your machine. Stop unloading by stopping the bunker floor and running the elevator belt empty. Meanwhile, you just continue harvesting. The bunker has a separately driven elevator that allows you to unload on the move. The elevator belt provides extra cleaning.

## Optimal haulm separation

The ring 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.

# FOLLOW THE POTATO FLOW



## Varioweb cleaning module

The patented Varioweb consists of a standing pintle belt with an axial roller set underneath. A unique feature is the ability to infinitely 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 needed. This is done by moving the axial unit forward or backward.



### COMFORT DRIVE

The Puma 4.0 with ACC digging unit is equipped with AVR Comfort Drive. Precise depth control: driver comfort, lower fuel consumption and even better harvesting quality!

The AVR Comfort Drive-software guarantees precise depth control of the ACC digging unit, which in turn ensures **driver comfort**.

- Even in specific situations such as spray paths or slopes, the control works excellently, **manual intervention is not necessary**.
- Even higher speeds pose no problem, the whole machine remains **remarkably stable** in all cases.

Precise control also improves **harvest quality**. Not harvesting too shallow protects the potato, while not harvesting too deeply determines the performance of the harvester. The less soil enters the harvester, the less has to be processed. This results in less strain on the machine, resulting in a higher harvesting speed, less wear and **less fuel consumption** per hectare.

# POWER YOU NEED



### Precise

Precise & ergonomic command



### Powerful

Powerful 12.8-liter Stage V Volvo engine that never lets you down. It produces 469 hp, or 1 hp per 50 kg, making the harvester the most powerful in its class. 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.



### Soft

Potato-friendly, high capacity elevator



### Flexible

Varioweb to be ready for all harvesting conditions



### Solid construction

Compact, lightweight, central chassis beam

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### Instinctive

Oscillating topper, automatically following the ridges

### Light footprint

Lower soil pressure because of large tires (900/60 R38 'Very high Flexion Tyres')

### Supple

High wheel radius: 50° in the front and 20° at the back (narrow 300/95 R52 tires)

### Smart

Possible to harvest four- or two-row or convert the digging unit for harvesting carrots or picking up onions.

### Clear view

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

### Grand

Eight ton bunker for unloading while driving

### Very wet?

Easily switch from wheels to tracks in very extreme conditions



**SOIL CULTIVATORS**



**POTATO PLANTERS**



**HAULM TOPPERS**



**HARVESTERS**



**CROP HANDLING**