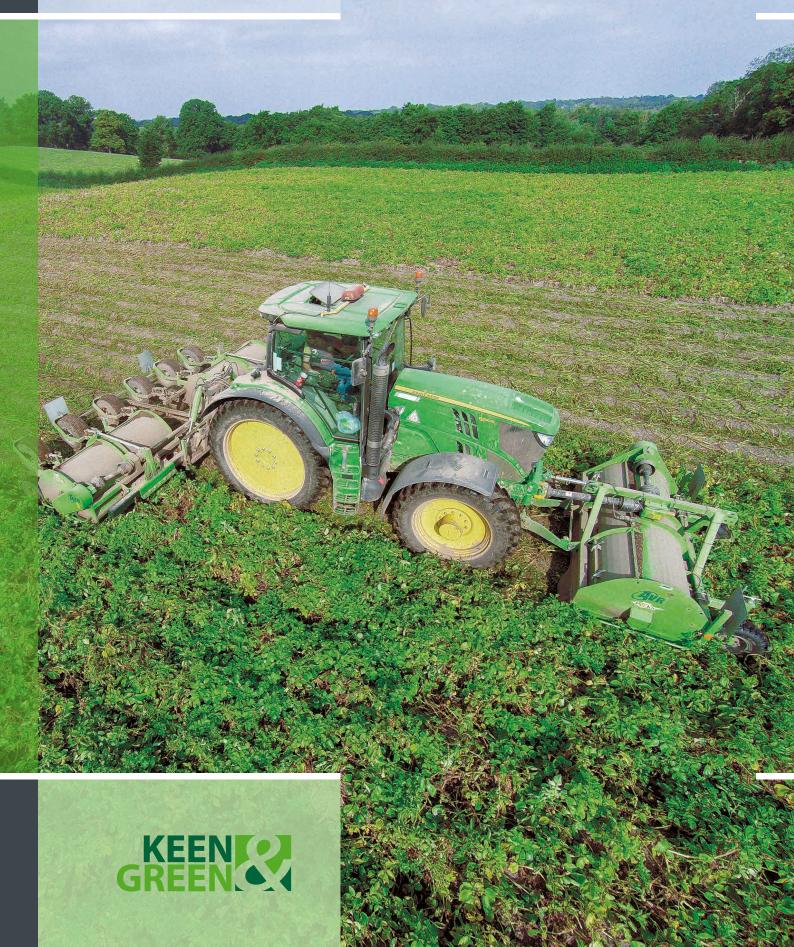


# Rafale Haulm topper



# The AVR Rafale: Results you can count on!

There is increased demand from both the government and consumers for alternative means of removing haulm from potato plants. Mechanical haulm toppers respond perfectly to the current trend of limiting the use of chemicals in agricultural applications. With an AVR haulm topper, you can be assured of efficient haulm removal! The most important goal when it comes to topping haulm is the destruction of the haulm by shredding it and subsequently disposing of it. The AVR Rafale has been developed to achieve this goal with the utmost precision, while simultaneously limiting fuel consumption. The improved design of the topper has increased its suction power which, in turn, improves the machine's topping capacity significantly.

### Perfect topping

The AVR Rafale is available in a wide range of operating widths and models. All toppers come with a three-point hitch at the front as well as the rear as a standard, enabling them to be mounted at either the front or rear of your tractor. The T-gearbox, featuring a continuous shaft, guarantees the necessary torque capacity. All machines come with a continuous shaft with a tube that is 10% thicker tube than in the previous model. The 4x90 cm version has a bearing in the middle of the rotor for increased stability. As a result, the topper is significantly more durable. The flail shaft has a rotational speed of 1320 RPM for superior suction and tremendous power. As a result, the haulm is fully shredded. Cutter bars are also included as a standard (except for in the SD model). This increases the capacity, especially when topping green haulm, by up to 55% in comparison to models without cutter bars.





## KEEN & GREEN:

Mechanical topping allows you to remove haulm in a much more
ecological way. Topping in combination with chemical treatment on
the remaining stem, is the most efficient way to stop the growing
process of potatoes at the right moment.







# Following the contour of the ridges precisely!

### Seed potatoes

Topping is an important link in the chain of the efficient and healthy production of potatoes. Proper topping is particularly important for seed potatoes as well as potatoes intended for consumption. The Rafale ensures that all the haulm is removed, leaving a stubble of stalks between 10 and 15 cm in height. These are the perfect conditions for the rapid deterioration of the plant and to promote the hardening of the tubers at the desired size. If the plants are desiccated by chemical means after the haulm has been topped, the remaining stubble comprises an essential starting point for the next phase.

#### Flail shaft

The sturdy, thick-walled flail shaft means business. The diameter has been increased by 10% (now 170mm). The flails have been fitted in a double spiral to ensure a balanced operation. This dramatically increases the machine's reliability.

All flails are independently mounted and follow the contour of the ridges precisely.

### The flails

The flails are one of the most important parts of a haulm topper. They are produced in one piece, and have been tempered to make them less susceptible to bending. The seed potato flails consist of two parts. Thanks to the differences in length and their unique shape, the flails follow the contour of the ridges precisely for an optimal topping result.

#### Rafale Construction:

- Transverse flails for topping directly on top of the ridge
- Transverse flails with a slanting edge for topping on the side of the ridge tops
- Angle flai
- Longitudinal flails with different lengths in the furrow



# KEEN & GREEN:

The same flail shaft also allows you to top an open field with a flat finish.

Of course, the other flails will need to be mounted as well for this.

The Rafale not only requires less power and makes less noise;
it also performs better!





### Seeding tunnels

Seeding tunnels are an excellent method for guiding the haulm into the furrow between the ridges in such a way that no haulm remnants are left on the ridge.

### Depth adjustment

Selecting the correct topping height is important; not only for optimum performance, but also for the durability of the flails. AVR therefore allows you to choose between two standard wheels with spindle adjustment or the option to use hydraulic wheels. The latter allows you to adjust the topping height quickly and easily from your tractor while working.

## The three-point hitch for front and rear mounting

The haulm topper's three-point hitch has a simple and sturdy design. The two lowest points are mounted in a slot, allowing them sufficient slack to enable the machine to compensate for small irregularities in the field. There are two versions available: one with a hole and one with a slot at the top. The double hitch means that the haulm topper can be mounted at either the front or rear of the tractor, making the Rafale very versatile.



# **Ergonomics and economics**



### ■ SD Type

The two-row model can be equipped with a side delivery option (SD). Topping at the front and harvesting at the rear offers huge benefits. The 40 cm wide delivery belt evacuates the haulm to the side, to prevent blocking in the digging unit of the harvester. An adjustable guide plate guides the haulm to the soil.

### **■** T-gearbox

The gearbox with continuous shaft is mounted in a central position on the haulm topper (2x75 and 4x75). A PTO shaft can be attached to both sides.

This means the AVR's haulm topper can easily be moved from the front to the rear. A PTO shaft runs from the central box to the side of the topper. A belt pulley on the side and five heavy-duty V-belts power the rotor. The tension in the belts can be easily adjusted.

# A rubber belt prevents soil from caking in the hood

A rubber belt can be installed under the topper's hood.

Its constant vibration prevents soil and

haulm from caking onto the topper.

This significantly reduces any chances of the machine becoming clogged. The rubber anti-caking belt will also significantly extend flail life.







### Cutter bars increase capacity

Cutter bars are a standard feature on the Rafale. These bars increase the topper's capacity for heavy green haulm by 55%.

### Optional diabolos or wheels

You can opt to mount diabolos or wheels behind the haulm topper.

These ensure the ridges are nicely pressed together after topping, to avoid green potatoes.

### **Standard version:**

- T-gearbox 1,000 RPM
- Type SD (side dispenser) 775 RPM
- T-gearbox for front and rear mounting
- PTO with freewheel clutch
- 2 angle flails per ridge
- Flail revolution 1,320 RPM
- Cutter bars (not on SD model)
- 40 cm wide delivery belt (on SD model)
- 2 adjustable spindles for depth adjustment wheels with large tires 24 x 7.7
- Double three-point hitch for front and rear mounting
- Side drive with V-belt
- 2 support legs

### **Options:**

- Gearbox with 540 or 750 RPM
- Hydraulic depth adjustment wheels
- Extra set of normal depth adjustment wheels
- Cutter bar profiles for SD model
- Rubber anti-caking belt (not for SD model)
- Seeding tunnels per ridge (not for SD model)
- Road transport kit
- Front and rear lighting
- Hinged flail for stony soil
- Flail set for endives, carrots, etc.
- Knife flail set for endives, carrots, chicory etc.
- Level field flail set

Technical Specifications:					
Model	Model	Working width (mm)	Number of flails	Weight (kg)	Min. power output kW/HP
2 x 75	2 row 75 cm	2,000	58	650	40 / 54
2 x 90	2 row 90 cm	2,000	58	650	40 / 54
4 x 75	4 row 75 cm	3,200	96	990	51 / 70
4 x 90	4 row 90 cm	3,200	112	1,075	66 / 90
6 x 75 F	6 row 75 cm	Rear: 2 x 2x75 + front 2x75 (2.0 m or 2.5 m)			
6 x 90 F	6 row 90 cm	Rear: 2 x 2x90 + front 2x90 (2.0 m or 2.5 m)			
8 x 75 F	8 row 75 cm	Rear: 2 x 2x75 + front 4x75 (3.0 m)			
SD 2x75	2 row 75 cm	1,800	58	825	50 / 68
SD 2x90	2 row 90 cm	2,000	58	825	50 / 68



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



### 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 130 employees internationally, has a network of 105 dealers and had a turnover of 52 million euros in 2016.



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

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