

Advantages of ROC mergers

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Regarding the advantages of paying more for our machine in comparison with a traditional rakes, I'm going to list below many of the advantages of our mergers.

First of all they are PROFESSIONAL / INDUSTRIAL MACHINES designed to work up to 2000/2500 hours per year, with extensive loads, too, so they are the ideal machines for very big farmers, dairy farms, for the main drying plants, Biomass and Biogas plants all around the world.

We work indeed with the main farmers and plants all over the world and we are currently selling in 35 countries, from Europe to Africa, from Australia to America and Asia.

We have also been selling a great share of our machinery in the West side of the USA, mainly in California and Arizona, where the farmers make a lot of cuts and where they even work for 10/11 months per year. Despite the hard conditions of the South West of the USA, all the farmers using our mergers are very happy and satisfied to work with ROC because of the very high quality of the mergers.

They represent a revolutionary raking system. The main difference compared to traditional rakes is represented by the pick-up system: our mergers lift the crop in order then to transport it on a conveyor belt, whereas traditional rakes drag the crop on the ground up to the windrow and this difference leads to:

- Less stripping of hay and higher quality. Owing to sun drying little alfalfa stalks, which support the leaves, become indeed extremely fragile. If you pick-up crop using traditional rotary-rakes and especially in the absence of dew, little stalks are more subject to breaking. This causes the loss of leaves and the consequent loss of important proteins for animal feeding. On the opposite side, by using ROC system the crop is lifted and put gently on the belt in order to be transported and deposited centrally without any damage.
- Moreover, the pickup system is manufactured in order not to pickup any stones and pebbles, and tests showed that there is a smaller quantity of earth and pebbles inside the windrow, which enables to reach an incomparable product quality.
- Lower product losses. In presence of wheel-tracks or holes, during crop dragging traditional rakes tend to leave on the ground a part of product. On the opposite side, with our revolutionary continuous merger the crop is lifted on a belt and it is not dragged on the ground as it usually happens with

traditional rakes.

- Less damages to fresh growth of crop. Under normal conditions, already after 2 or 3 days from harvesting some kinds of crop like alfalfa produce fresh growth made up of small stalks and some leaves. Under these conditions, rotary-rakes tend often to break the small stalks, causing a delay in growth and therefore in harvesting, which means at the end of the season a delay of some weeks in the case of 5 crop cuttings.

In addition to the different pick-up system, it's important to stress the differences in costs. In fact our mergers need a tractor with less power in comparison with other traditional rakes or mergers: for example for our RT 1000 a 90 hp tractor is absolutely sufficient and this enables to cut considerably the power consumption.

Our mergers give you also the possibility to gather together several swaths: for example with our RT 1000 it's possible to make 2, 3, 4 or 5 pick-ups, by picking up the previously swath, without any loss in crop quality, and being able to form one single swath every 40 m. It's also ideal to form swaths placed on an area where the crop has already been picked-up. For example, two of the tree belts can be driven into a direction whereas the third belt into the opposite direction and vice versa. This means getting the outmost performance from the balers or the forage harvesters during the best cuttings of the year, by reducing the working hours and consequently the consumption of the pick-up machines.

Furthermore, our mergers allow to pick-up fragile crops like alfalfa during day time and to avoid working by night, both costly and not welcomed by the workers, and to save the crop by dew.

Moreover our mergers are manufactured using top-quality materials: they are equipped with chromed axles and provided with both an independent mechanical suspension (spring suspension on the four tandem wheels placed under each pick up) and an independent hydropneumatic suspension (on the three hydraulic cylinders on each pick up, with oil and nitrogen.)

Furthermore, the belt of our mergers is manufactured in a modular way, so that every single part can be individually replaced, while the belt of the mergers is just one belt. Moreover, our belt is built in a more solid and long lasting rubber, whereas the belt of the other companies is made of nylon. This means that the maintenance costs of our machinery are very low and we are proud to say that thanks to this high technology and innovation, over the last 5 years we have been successfully able to keep the warranty claim percentage at 0,02% .

Continuous merger **ROC RT 730** represents the symbol of a revolutionary raking system. The ROC RT 730 is composed of 2 elements, has a variable working width from 5,95 m (19' 6") to 7,30 m (23' 11") thanks to a double hydraulic rocker arm system that allows to change the distance between the two pickups. When the pickups are one next to the other, it can download one belt on the right and one belt on the left, or both the belts on the right or on the left, whereas when the pickups are separated and far-between, it can download the crop between the two elements, or on both sides, or one in the middle and one on the left, or one in the middle and one on the right. This version can be folded up for transport reaching a transport width of 2,50 m (8' 2").

The main difference compared to traditional rakes is represented by the pick-up system: the ROC RT 730 lifts the crop in order then to transport it on a conveyor belt, whereas traditional rakes drag the crop on the ground up to the windrow. This difference leads to:

- **Less stripping of hay and higher quality.** Owing to sun drying little alfalfa stalks, which support leaves, become indeed extremely fragile. If you pick-up crop using traditional rotary-rakes and especially in the absence of dew, little stalks are more subject to breaking. This causes the loss of leaves and the consequent loss of important proteins for animal feeding. On the opposite, by using ROC system the crop is lifted and put gently on the belt in order to be transported and deposited centrally or laterally without any damage. Moreover, our tests shown that there is an almost total absence quantity of earth and pebbles inside the windrow, which enables to reach an incomparable product quality.
- **Lower product losses.** In presence of wheel-tracks or holes, during crop dragging traditional rakes tend to leave on the ground a part of product. On the opposite, with our revolutionary continuous merger the crop is lifted on a belt and it is not dragged on the ground as it usually happens with traditional rakes.
- **Less damages to fresh growth of crop.** Under normal conditions, already after 2 or 3 days from harvesting some kinds of crop like alfalfa produce fresh growth made up of small stalks and some leaves. Under these conditions, rotary-rakes tend often to break the small stalks, causing a delay in growth and therefore in harvesting, which means at the end of the season a delay of some weeks in the case of 5 crop cuttings.

The machine offers moreover the following further advantages:

- **No damp areas under the swath.** With most traditional rakes the crop is not entirely turned in the area where the swath is discharged. The forage lying on the soil become therefore damper and this can causes problems to the good storage of the bales. RT 730 overcomes such problem because the

machine is designed to have a pickup width of 6 m thanks to two pick up that lift all the crop which is then discharged on the side in the already cleaned area. This allows to have a faster and more even drying.

- **The chance to increase the working hours amount of the machine**, which moreover enables to reduce the number of machines at work. Compared to traditional rakes, thanks to its very soft way of handling the crop the merger series RT allows to extend considerably the working time, up to doubling the daily working hours in the most cases. This system has several advantages. Firstly, it allows to work using not only less mergers but also less tractors, reducing in this way the number of workers involved in operations of such a short length of time. A further advantage is represented by the chance of avoiding night work, more expensive and not welcomed by workers. By concentrating the work during daytime the product is dryer and evenner, which is a hardly achievable result if you rake a product wet by dew.
- **Small dimensions.** In comparison with traditional rakes of its same width, RT 730 is the only one on the market to be equipped with a suspension system on the rear wheels: once it is folded up (without disassembling anything) it has a width of 2,50 m and a height of 3,40 m and it doesn't overcome 4,70 m in length. This allows to travel without any limitation and authorization.

Continuous merger ROC RT 1000

Description of the innovative continuous merger ROC RT 1000

Continuous merger ROC RT 1000 represents the symbol of a revolutionary raking system. The main difference compared to traditional rakes is represented by the pick-up system: the ROC RT 1000 lifts the crop in order then to transport it on a conveyor belt, whereas traditional rakes drag the crop on the ground up to the windrow. This difference leads to:

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In addition to the different pick-up system, it's important to stress the differences in costs. In fact only one 100 horse power tractor is needed to form a swath every 10 m, which enables to cut considerably the power consumption. It also allow to low considerably the costs with the latest crop cuttings, whose tonnage per hectare is less than two tons. You don't have to depend on the machine width, it's possible to make 2, 3, 4 or 5 pick-up, by picking up the previously swath, without any loss in crop quality, and being able to form one single swath every 40 m. It's also ideal to form swaths placed on an area where the crop has already been picked-up. For example two of the tree belts can be driven into a direction whereas the third belt into the opposite direction and viceversa.

This means getting the outmost performance from the press during the best cuttings of the year, by reducing the working hours and consequently the consumption of the pick-up machines.

Furthermore, the RT 1000 allows to pick-up fragile crops like alfalfa during day time, to avoid working by night, both costly and not welcomed by the workers, and to save the crop by dew.

Source: ROC s.r.l.