# Rotary rakes with 2 rotors



Side-delivery and centre swath rakes



# Centre swath rakes - 3-point mounted



R655 DS - 3-point mounted centre swath rake.



**Swinging rotor suspension** - The rotors are suspended in a cardanic way. This results in good adaptability to the ground.

#### Features:

- Variable working width
- Swinging rotor suspension
- ASL model Drive R 655 ASL with auto rear steering

#### **Benefits**

- Easy to maneovre in hilly areas
- Can get into the smallest corner

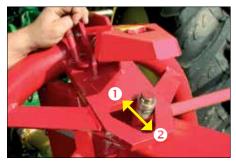
#### Options:

- 3D-bogie axle
- 4-wheel tandem axle
- Also possible with rear axle

The 655-series consists of centre swath rakes which give you the possibility of high capacity even with smaller tractors. The rakes are easy to manoeuvre and can be adjusted according to the conditions. With the choice between a trailed or suspended version, you can have a rake which matches any tractor you have.

#### 3-point suspended

R 655 DS is a 3-point mounted centre rake. The headstock is articulating in order to follow field boundaries independently of the fixed 3-point headstock. When lifting, the rake swings automatically into the centre position. The system can be locked for transport.



3-point suspended and articulated headstock



With the progressive active steering even the tightest turns can be made safely.



**4-wheel tandem axle** (option)
For hilly ground it is possible to equip the rake with a 4-wheel tandem axle. This ensures smooth working.

## Centre swath rakes - Trailed



R+760 - trailed centre swath rake (working width 6.5-7.6 m).



The R+ rotor is equipped with solid shafts in the tine arm and has maintenance-free ball bearings at both ends. Furthermore the fixing of the arms on the rotor housing is made with reinforced flanges so that even strong power can be resisted. All in all a strong and powerful rotor with low maintenance requirements.

#### Features:

- R+ roto
- Adjustable working height and width
- Auto rear axle steering
- Detachable tine arms

#### Options:

- Strong and heavy duty rake
- Can be used in many conditions
- Easy to drive under narrow conditions, and follow the tractor when turning on the headland
- Tranport height under 4 mtr.
- Electrical kit for seperat lifting of rotor

For working widths of more than 6.5 meter, you need a high capacity rake with drive chassis. The R+ 760 and R+ 820 rakes are equipped with the best technology for grass in all conditions. The rakes have big working widths and high capacity, and still the ground pressure is low. With the auto rear steering even tightest turns can be made safely, and you save time during headland turns.

Rotor unit designed with 3-wheel multitouch chassis. The rotor units are constructed with a 3-wheel multi-touch chassis that is suspended in a cardanic way. In addition the front wheel of the chassis is suspended in a pivoting way. These features ensure perfect adaptability to the ground. It is also possible to adjust the rotor unit in several ways.



R+ 760 in transport position. The transport height is under 4 m.



Adjustment of working depth. Simply carried out by manual remote handle – infinite adjustment.



All centre swath rakes have variable working width. On R+ 760 you can remove the canvas and use the hole to get an even smaller working width. This could be relevant when working in alfalfa.

# Side delivery rakes with Multi Link frame



R+ 1410 S - a side delivery rake with Multi Link frame



Lifting on headlands or for transport is controlled hydraulically from the tractor. When the tines are lifted up it gives a 45 cm clearance from the ground. This makes it easy to pass swaths on the headland, and makes it fast to change from transport postion and to working position.

#### Features:

- R+ rotor
- Variable working witch
- Continous adjustment of working width
- Closed gearbox
- Multi-Link frame
- Hydraulic rotor lifting
- Tangential tine arms
- Automatic steering for sharp bends
- 3 functions:
  - Raking into one single swath
  - Raking into two single swaths
  - Turning of two single swaths

### High manoeuvrability and safety on slopes

The Multi Link frame ensures the machine easy adaption to the ground. The lateral inclination of the rotor can be modified for both rotors separately.

R+ 1410 is not only for use on flat fields, but also on slopes and even on ridge and furrow by means of its construction where no other side delivery rake succeeds. Most important is the low centre of gravity and the multi Link suspension of the rotors. With R+ 1410 you work safely everywhere.

#### Adjustable from the driver's seat

With a hydraulic handle it is possible to steer the rear rotor from the driver's seat and thus adjust the working width continuously during operation. In line working creates the smallest working width of 3.60 m. Fully offset a working width of 6.35 m is achieved.



#### Variable working width

With the hydraulik handle it is possible to change the working width during operation. The variable working width makes it very easy to avoid collisions with hedges, stones etc.



#### Two single swaths

It is also possible to make 2 single swaths/ night swaths, depending on wishes. A second swath board is optional.

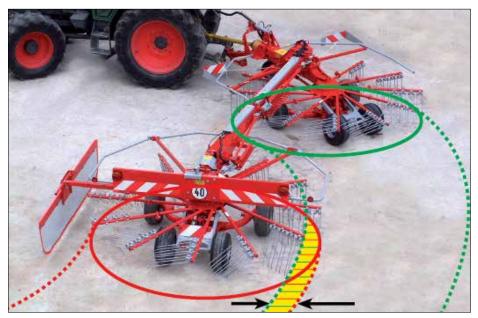


#### One single swath

With this system for side raking it is possible to reach high performance and make a big swath even with small tractors. Working width for single swaths is 3.60 m up to 6.35 m.



R+ 1410 SB - a side delivery rake with Multi Link frame



R+ 1410 SB with automatic steering for sharp bends. The best result is obtained with two overlapping rotors.

### Automatic steering for sharp bends

When working in fields with sharp bends and headland turns, the R +1410 SB is the correct machine. R+ 1410 SB regulates the movement of the rake behind the tractor with automatic steering. With sharp bends you normally have to steer the rear rotor hydraulically to avoid crop between the rotors. With R+ 1410 SB this is not necessary. The machine uses the automatic steering to automatically equalize the distance between the rotors.

The rear rotor can be equipped with the optional tandem double wheel. High volume wheels 18/8.5-8 ensure highest degree of safety for all 4 wheels under most difficult conditions. The tandem double wheel is standard on the front rotor. Tandem double wheel is necessary when using Cardanic.



**Tine arm transport carrier**Storage of tine arms for safe transport without impediment of rearward view.



Hydraulic lifting of the rotors
Lifting on headlands or for transport is
controlled hydraulically from the tractor.
When the tines are lifted up it gives a 45 cm
clearance from the ground.

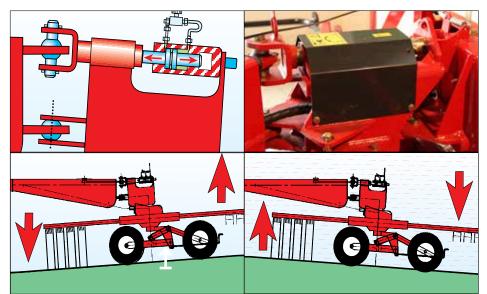


Continuous adjustment of working depth Optimal raking can be obtained under different conditions without waste and contamination of the crop.

# Options for R+ 1410



R+ 1410 S



Cardanic for the rear rotor (option)

With this equipment the rear rotor can move in all directions which means that it follows the ground contours. This is most important on hilly ground. The intensity of efficiency is adjusted hydraulically. Tandem double wheels are necessary when using Cardanic.

### Options:

- Tandem double wheels
- Support wheel
- Twin tandem wheels
- Cardanic for the rear rotor
- Second swath board
- Drawbar for link arms
- Extra canvas for 2 single swaths

### Tandem double wheels (option)

The front rotor can be equipped with the optional tandem double wheel. High volume wheels 18/8.5-8 ensure highest degree of safety for all 4 wheels under most difficult conditions. The tandem double wheel can also be supplied for the front rotor. Tandem double wheel is necessary when using Cardanic.

### Twin tandem wheels (option)

With twin tandem wheels there are virtually no limits to where you can operate. This is advantageous in wet fields and on slopes. The machine follows the tractor in a perfect way.

#### Support wheel (option)

Constant working depth can be reached by means of the additional support wheel for the front rotor.



**Tandem double wheels** (option) standard rear axle



Twin tandem wheels (option)



Support wheel (option)

# Side delivery rakes



S 1810 Pro



The Pro-series with larger intervention.

#### Features:

- R+ rotor unit
- Auto steering rear axle
- Quick lifting of the rotor units

#### **Benefits**

- Low daily maintaince,
- Easy to manoeuvre in narrow/ difficult conditions

#### Options

- Hydraulic successive lift of the rotor
- Extra canvas for 2 single swaths
- Additional pendel wheels under rotor (2 units needed)

### Quick lifting for headland turns

All the rakes have quick lifting for headland turns. This gives a 45 cm clearence to the ground, which makes headland turns easy and ensures fast beginning of the next swath.

#### **Pro-series**

The tine arms of the Pro-series have a larger intervention (400 mm). The cam track housing is sealed and shielded from dust. This ensures extra strength for heavy use of the rake. The Pro-series has a pratical handle which makes it easy to adjust the inclination of the pitch.



A practical handle to adjust the inclination.



Quick lifting for headland turns

All the rakes have quick lifting for headland turns. This gives a 50 cm clearence to the ground, which makes headland turns easy and ensures fast beginning of the next swath.



Two separate swaths (Option)

For producing 2 separate swaths the R+ 1610 S can be equipped with a second canvas for the front rotor. This canvas is automatically lifted and lowered by means of the hydraulics concurrently with the lowering and raising of the rotors.

# Technical data

	R 655 DS	Drive 655 ASL	R+ 1410	R+ 1410 SB
Type of rake	Central delivery	Central delivery	Side delivery	Side delivery
Working width	6.15-6.55 m	6.15-6.55 m	3.6-6.35 m	3.6-6.35 m
Number of swaths	1	1	1 or 2	1 or 2
Rotor diameter	2.9 m	2.9 m	3.0 m	3.0 m
Tine arms per rotor / double tines per tine arm	10/4	10/4	12/4	12/4
MIN-trans detachable tine arms	Yes	Yes	Yes	Yes
Tangential tine arm control	Yes	Yes	Yes	Yes
Type of suspension	3-point	Trailed	Trailed	Trailed
Covered cam track	-	-	Yes	Yes
Closed transmission with semi-fluid lubrication	-	-	Yes	Yes
3rd wheel at 3-pt headstock optional	Option	-	Option	Option
Advanced wide-track axle	Yes	Yes	Yes	Yes
3-D tandem bogie axle	Option	Option	-	-
4-wheel bogie axle	Option	Option	-	-
Tandem double wheel	-	-	Option	Option
Drive chassis	-	Yes	-	-
Transport width	3.0 m	2.95 m	2.2-3.0 m	2.2-3.0 m
Active steering of the frame	-	Yes	-	Yes
Central cardanic suspention	-	-	Option	Option
Tyres: rotors	16/6.5-6	16/6.5-6	18/8.5-8	18/8.5-8
Tyres: chassis	-	10/80-12	-	-
Tyres: chassis, alternative	-	-	-	-
PTO	540 RPM	540 RPM	540 RPM	540 RPM
Hydraulic control	1SA	1SA	1SA + 1DA	1SA + 1DA
Tractor, min	44 kW/60 HP	30 kW/40 HP	30 kW/40 HP	30 kW/40 HP
Weight	857 kg	1140 kg	1335 kg	1490 kg

	R+ 760	R+ 820	R+ 1610 S	\$ 1810 Pro
Type of rake	Central delivery	Central delivery	Side delivery	Side delivery
Working width	6.5-7.6 m	7.4-8.0 m	6.3 m	7.9 m
Number of swaths	1	1	1 or 2	1
Rotor diameter	3.2 m	3,5 m	3.2 m	3.8 m
Tine arms per rotor / double tines per tine arm	12/4	12/4	12/4	13/4
MIN-trans detachable tine arms	Yes	Yes	Yes	Yes
Tangential tine arm control	Yes	Yes	Yes	Yes
Type of suspension	Trailed	Trailed	Trailed	Trailed
Covered cam track	Yes	Yes	Yes	Yes
Closed transmission with semi-fluid lubrication	-	-	-	Yes
3 wheel multi-touch chassis	Yes	Yes	Yes	Yes
Drive chassis	Yes	Yes	Yes	Yes
Transport width	2.95 m	2.92 m	2.82 m	2.82 m
Transport height without/with rake arms	3.50/4.00 m	3.59/4.00 m	3.40/4.00 m	3.45/4.36 m
Active steering of the frame	Yes	Yes	Yes	Yes
Central cardanic suspension	Yes	Yes	Yes	Yes
Tyres: rotors	16x6.5-8	16/6.5-10	16/9.5-8	16/9.5-8
Tyres: chassis	10.0/75-15.3 8PR	10.0/75-15.3 8PR	10.0/75-15.3 8PR	10.0/75-15.3 8PR
Tyres: chassis, alternative	13.0/55-16	13.0/55-16	13.0/55-16	13.0/55-16
PTO (RPM)	540 RPM	540 RPM	540 RPM	540 RPM
Hydraulic control	1SA	1SA	1SA	1SA
Tractor, min	30 kW/40 HP	40 kW/55 HP	40 kW/55 HP	44 kW/60 HP
Weight	1930 kg	2010 kg	2090 kg	2220 kg

Some photos may show products with additional equipment. See price list for current standard and additional equipment. We reserve the right to change the construction and specification details without notice. Printer's errors excepted.

