

LELY WELGER

Variable-chamber balers



www.lely.com

innovators in agriculture



Ensure a rapid start of the fermentation process



CUTTING

Cut the grass your animals need.



DRYING

Rapid wilting retains the quality.



COLLECTING

Ash is ballast for animals.

Feed efficiency and our wide range



Insights on compacting

Ensure a rapid start of the fermentation process.

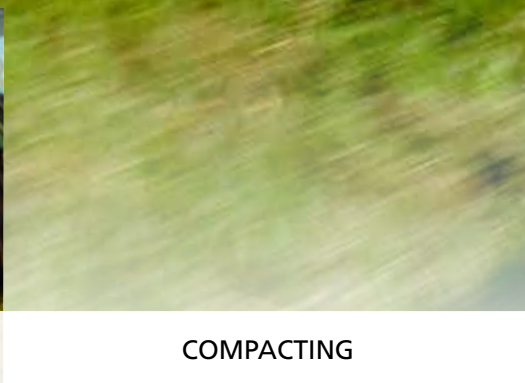
Higher density saves labour, costs and space.

Consistent high density bales ensures quality feed.



CHOPPING

Chop for efficient rumination.



COMPACTING



SEALING

Keep oxygen out and quality in.

of forage machines



Wide pick-up for maximum output

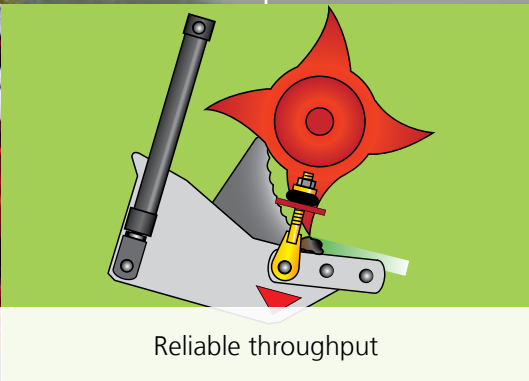
It's a pleasure opening
each new bale

The 2.25 m camless pick-up easily picks up wide swaths, even on sharp bends. The five tine bars ensure excellent crop pick-up as well as smooth crop intake, eliminating any loss of crop.



Good chopping provides many benefits

A timely change of blades ensures an effective chopping action. Thanks to the Xtracut system, both knife banks can be engaged from the tractor seat, ensuring consistently high output.



Reliable throughput

Output is decided by the space that is available for the crop to flow into the machine. Blockages are avoided due to the Hydroflexcontrol system.



High bale density thanks to the Constant Pressure System

High bale density reduces major costs such as binding material (net/twine), wrapping film and transport. That ensures consistent bale density right from the inner through to the outer layers of the bale.



High capacity, low maintenance

With shorter harvest windows for gathering the best quality feed, you need the best output available. The new Hybrid 2 camless pick-up is the starting point for optimal output. The newly-designed shape of the guide plate ensures the best crop flow. With even better crop flow blockages are less likely to occur. With no cam track, the pick-up consists of fewer moving parts. It is more reliable, less sensitive to wear, quiet and maintenance-friendly.



Camless pick-up – new tines

The tines are the most crucial part of a pick-up and therefore a completely new tine has been developed for the camless pick-up:

- The angle of the tine has been adjusted to ensure the cleanest possible crop pick-up under all conditions.
- The longer tine is more flexible and features improved adaptation possibilities.
- The tine is made of 5.60mm thick material, favouring tine life. Due to the larger coil, the tine remains flexible.
- Improved tine fixation prevents tine breakage as the tension within the material is more evenly spread.

Closer to the rotor – improved crop throughput

Due to its compact design the pick-up is positioned closer to the rotor. This ensures an improved crop flow to the bale chamber, well-shaped uniform bales and increased baling output.

More tine bars – cleaner pick-up

Due to the additional space created through the absence of a cam track, five tine bars are now fitted to the pick-up. Along with the 64mm interspacing of the tines, this allows an optimal pick-up capacity resulting in an even better and cleaner pick-up of the crop.

Wear-resistant thanks to non-steered tines

Since the camless pick-up does not have a cam track, the pick-up unit consists of fewer moving parts. This is more reliable, less sensitive to wear, quiet and maintenance friendly. The result is clear to see: lower maintenance costs and a higher trade-in value!

Crop press roller – for efficient crop flow

The crop press roller assists the pick-up when handling a smaller crop volume, ensuring efficient flow through its rotation. The roller also improves bale shape by levelling out large quantities of crop without creating lumps. This guarantees an even crop flow without blockages.



Wider, cleaner crop collection

As the generic size of swaths from rakes and combines increases, pick-ups must follow suit. To ensure the best crop collection for every swath size, Lely Welger offers three pick-up widths. The standard pick-up has a width of 2.25m (DIN 1.86m). Lely Welger is also offering a 2.00 (Din 1.60) and the new, 2.40m (DIN 2.11m) pick up which is suitable for use with wide swaths from rakes and combines. It is the widest pick-up for round balers on the market.

Xtracut – extra output and additional comfort

To ensure optimum performance when chopping, Lely Welger has designed the Xtracut¹⁷ and Xtracut²⁵ chopping units with selectable knife banks. From the E-link control box in the cab the operator can choose various knife bank selections when baling different crops, which is ideal for contractors. When the baler is equipped with a BCE control box, the groups are selected manually on the machine.



Chop lengths that can be easily adjusted

Both Xtracut versions have two sets of knife banks that are hydraulically protected. On the Xtracut¹⁷ you have an option of not chopping, or of having 8, 9 or 17 knives engaged. With the Xtracut²⁵ you have a choice of no chopping, or of having 12, 13 or 25 knives engaged. For the Xtracut²⁵ this means a chopping length of 45mm when all knives are engaged, or 90mm when using 12 knives.



Proper chopping action

Consistently sharp knives ensure a proper chopping action and prevent excessive fuel consumption. The Xtracut option offers flexibility to the operator using one of the two banks of knives. When necessary the second knife bank can be engaged in one simple operation from the tractor cab, ensuring continuing high output with a new sharp set of knives.



1

Chopping silage improves your results in many ways

Lely Welger offers many options when choosing a chopping system for your baler. Initially this may seem like an additional investment, but chopping the crop will help improve the quality of your forage and thereby your results in so many ways that you would actually need a reason not to choose one.

2

Chopping for higher-density bales

Chopping crops during the baling process gives you the chance to react to changing dry matter content for perfect compression. This ensures that heavy dense bales are produced leading to a reduction in handling, transport and twine/net-tying costs.

3

Chopping to improve feed intake

Dry grass that has been cut well will ferment much better due to the sugars in the crop being readily available. This results in top-quality silage, which has a positive effect on taste and also on the roughage intake of our cows.

4

Chopping saves time through easier distribution at feeding time

Chopping the crop will avoid the build-up of material and prevent blockages on moving parts of diet feeders, forage boxes and straw choppers. Shorter material is also easier and faster to distribute. If you use straw to increase the structural effectiveness of your ration, it is important that it has the right particle length and is easily mixable.



High throughput Feed rotor

This feed rotor offers a good and even crop flow for farmers and contractors who do not wish to chop their crop.

With this system you are enabled to make heavy bales with the lowest power requirement.

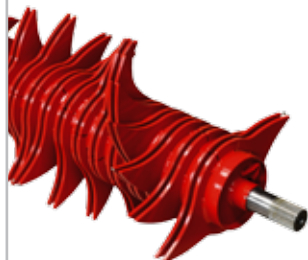
Available for Lely Welger RP 160 V Classic, 160 V, 160 V Xtra and RP 545.



Easy chopping action MasterCut 13

The comprehensive range of state-of-the-art chopping units starts with the MasterCut 13 – consistent crop chopping is achieved by 13 extra-long knives that reach deep into the ring of the rotor. Crops can be chopped to a bare minimum of 90mm. The two-star rotor guarantees an impressive throughput and assures optimum output, even for the heaviest of crops.

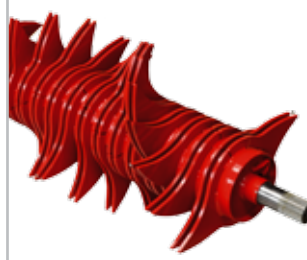
Available for Lely Welger RP 160 V, RP 545 and RPC 445 Tornado.



High throughput and ease of operation Xtracut 17

The 17 knives of this chopping unit are divided into two groups of eight and nine knives, which can be selected by the operator from the tractor cab. Chop length can be reduced from 135mm to 67.5mm. The large chopping rotor has an exceptionally open construction, ensuring that the spirally-configured tines can achieve a good grip on the crop. Throughput to the bale chamber is massive, due to this rotor construction, ensuring high output when baling high-volume crops.

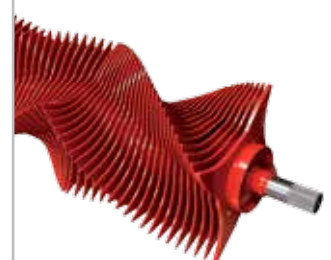
Available for Lely Welger RP 160 V Xtra and RP 545.



Maximum comfort and optimum chopping facilities Xtracut 25

The Xtracut²⁵ chopping system, with selectable knife banks, was specifically designed for this model. The rotor has a tremendous grip on the crop, due to the large number of tines (four on each ring), ensuring year-round silage operations. This high-grade rotor guarantees non-stop performance and superior chopping quality in all crop types and weather conditions. The 25 knives can be split into different groups, allowing various possibilities in chopping-length. Cutting-length can be set between 45 and 90mm. The operator can easily select the knife banks through the E-link handset in the tractor cab.

Available for Lely Welger RP 160 V Xtra, RP 545 and RPC 445 Tornado.



Hydroflexcontrol – a unique advantage

Quite often, time for harvesting is limited and sometimes operators overstep a baler's limits in terms of overload capacity. These limits are determined by the space the crop has to flow through in the machine, which is decisive for output. With balers, the space underneath the rotor is the critical factor. The Hydroflexcontrol anti-blockage system increases this room in the case of a peak load, whilst at the same time reducing downtime as a result of an incorrect forward speed or resolving a blockage.

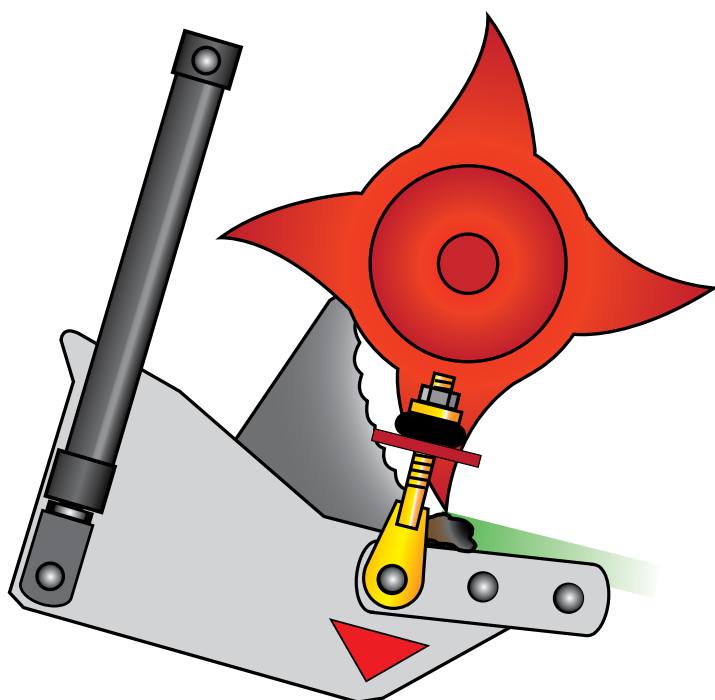


Flexcontrol + Hydroflex = increased baling output with less downtime

The two functions that are hidden in the name Hydroflexcontrol relate to the Hydroflex floor which is underneath the rotor. The flex part avoids blockages; the hydro part solves blockages as and when they may occur. All Lely Welger balers can be fitted with the Hydroflexcontrol system.

The flexible floor deals with peak loads

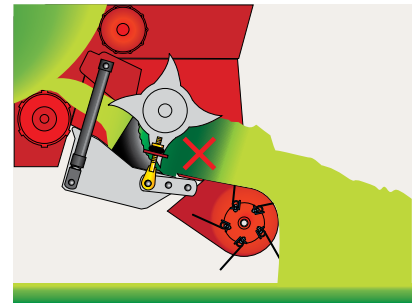
Flexcontrol is situated under the rotor where the feed passage is at its narrowest. It allows movement of the front part of the feed chamber floor which can flex up and down via a rubber or a spring suspension unit – hence the word 'flex'. If a small foreign object or a wet lump of material is picked up



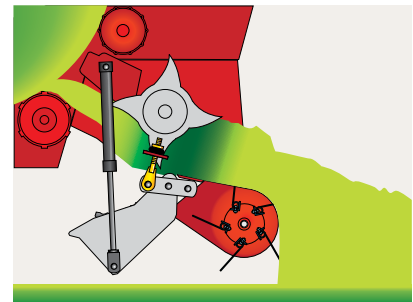
from the swath, this flexing action will smooth out the crop flow reducing the risk of blockages in the feed area and avoids damage and wear.

Dealing with blockages from the tractor cab

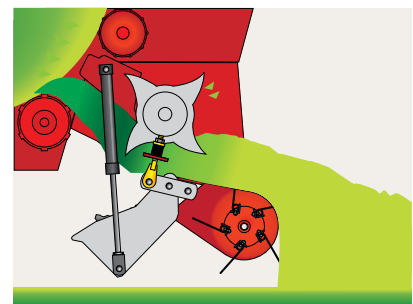
The second feature is the hydraulic stage, whereby the rear of the feed table floor can be lowered hydraulically from the tractor seat to clear the rotor of any blockage. When lowering the feed table floor, the fact that all knives are also withdrawn ensures that the blockage has passed into the bale chamber without any crop wastage before the operator re-engages the machine.



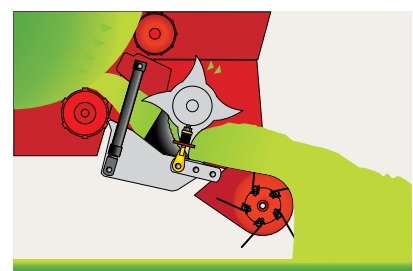
STEP 1
Blockage.



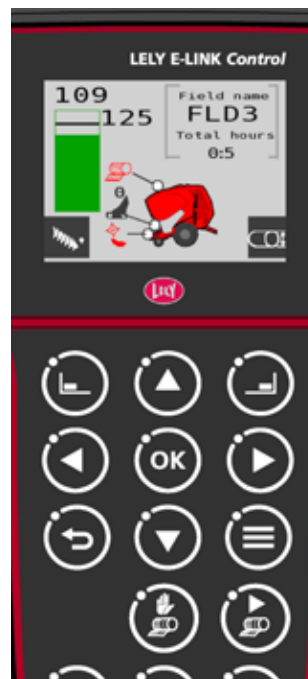
STEP 2
Feed table floor opens completely and knives are withdrawn.



STEP 3
Drive is engaged and blockage passes into the bale chamber.



STEP 4
Feed table floor is closed, proceed with baling!



BCE for RP 545

Standard on the RP 545 is the BCE control unit. This simple control unit is easy to use with just three buttons. As soon as the pre-set bale diameter has been reached, the BCE sends a signal to the operator, after which, tying (net, combi or twine) is started either automatically or manually. The BCE control unit also shows the number of bales per day, as well as the total number of bales.

Easy manual adjustment

The settings for bale size, bale density and net length are easily adjusted on the machine. Clear visible indicators show the density and the increasing bale size. A light indicates whether the tail gate is locked or not.

Specifications

- > Field counter
- > Total bale counter
- > Selection between Net and twine-tying
- > Automatic or manual binding

E-link Control for RP 160 V (Classic)

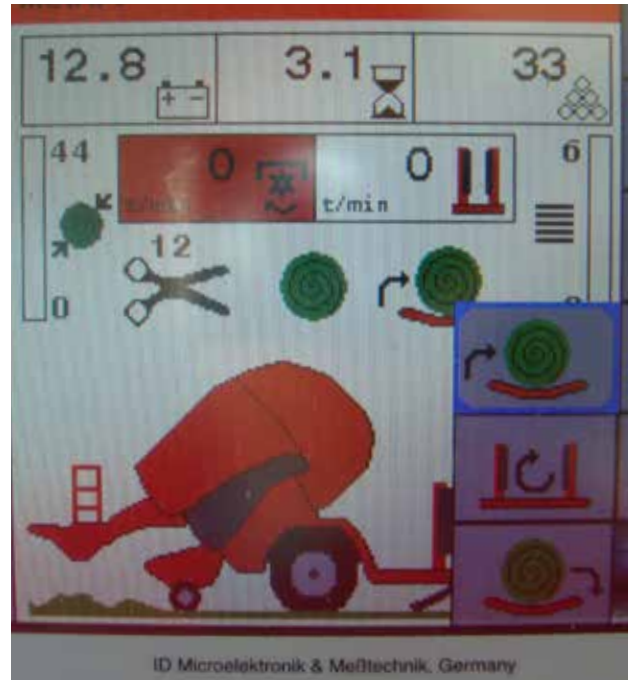
New to the RP 160 V (Classic) range is the E-Link Control unit. This new control unit gives the driver a good view of the status of the baler. The new HD screen provides a clear overview of baler processes.

Easy Adjustment

All adjustments and settings can be made from the tractor cab. Clear button controls will guide you through the settings.

Specifications

- > Knife selection
- > Bale pressure adjustment
- > Bale size adjustment (only variable balers)
- > Net layer adjustment
- > Net start/stop/pause
- > Visual bale chamber filling
- > Softcore bale On/Off
- > Bale counter
- > Total bale counter
- > Customer settings
- > Sensor and actuator settings



E-Link Pro

More comfort with ISOBUS electronics. The new E-link Pro is more user-friendly. The bright display is clear and offers a lot of space for useful information about the baler. The system is based on ISOBUS, so any tractor can be easily connected, allowing you to use its control panel. For the RP 545 the display also shows a status bar for left and right filling of the bale chamber, leaving no excuse for a poorly shaped bale.

More comfort with ISOBUS electronics

All field and customer statistics can easily be set with the Field Wizard – a simple guide for gathering important data about number of bales, or hours worked per field or customer. You will be able to export the data to your own computer using the USB connector.

Specifications

- > ISOBUS
- > Knife selection
- > Bale pressure adjustment
- > Bale size adjustment (only variable balers)
- > Net layer adjustment
- > Net start/stop/pause
- > Visual bale chamber filling
- > Softcore bale On/Off
- > Bale counter
- > Total bale counter
- > Bale counter per field
- > Customer settings
- > Sensor and actuator settings.
- > Time counter
- > Error history
- > Optional Camera

Pro Link for Tornado

Everything on display – everything under control. The Lely Welger RPC 445 Tornado comes with the easy-to-operate Pro-Link Baler control as standard. This electronic control unit keeps the tractor driver informed about all operator functions of the machine. In addition, it allows easy pre-selection of hydraulic functions or adjustment of the different operating parameters, such as bale density, net length, film-layers and the selection of knife banks. Information, such as bale count and time, can be stored individually.

Expert vision

Standard on the Pro-link baler control are 2 cameras at the back of the machine which show the bale transfer and wrapping process. The Pro-Link terminal automatically shows the camera in full screen, as the wrapping process starts.

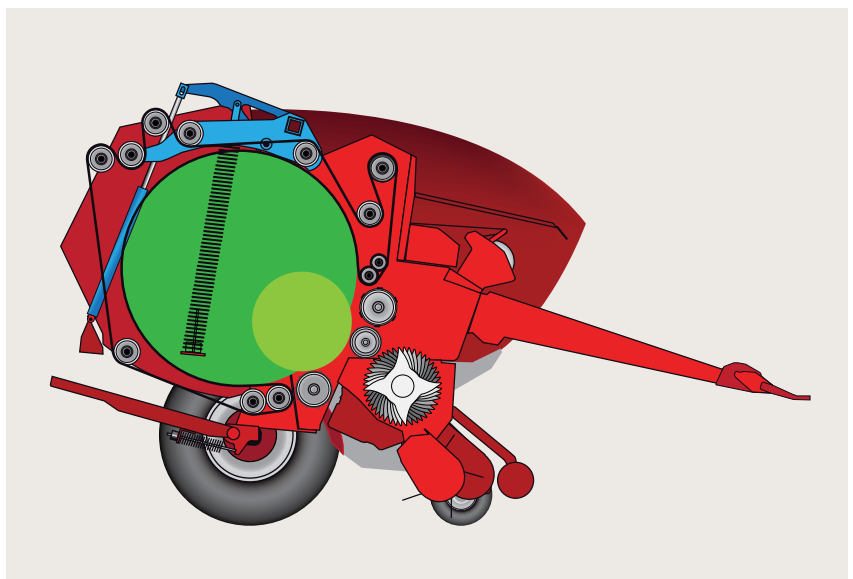
Specifications

- > Knife selection
- > Bale pressure adjustment
- > Bale size adjustment (only variable balers)
- > Net layer adjustment
- > Net start/stop/pause
- > Visual bale chamber filling
- > Softcore bale On/Off
- > Bale counter
- > Total bale counter
- > Customer settings
- > Operation and monitoring of permanent roller greasing system
- > Sensor and actuator settings



The bale chamber makes the difference

The bale chamber is the heart of the machine and is key for the output of nice shaped and high dense bales. Lely Welger balers are renowned for their well shaped high density bales. The strong endless belts and new baler geometry bring the Lely Welger balers to the next level.



The strongest belts

Four endless belts, made of layers of synthetic material plus rubber layers, ensure optimum grip on the crop and, due to their unrivalled tensile strength, can exert an impressive pressure on the bale. Two core inserts made of special synthetic material allow particularly high tensile loads. These layers are securely manufactured with a large overlap, and are independent of each other. No joiner, no problems!

The best bale chamber geometry

The bale is always in the middle of the bale chamber. The tail gate even moves slightly to ensure a perfect bale shape.

The fastest bale start

The bale chamber is fitted with two rollers above the feed system, ensuring that a new bale is quickly formed. The large CPS springs ensure flexibility of the belts enabling a quick start while at the same time; ensuring that pressure is exerted on the crop right from the core of the bale.

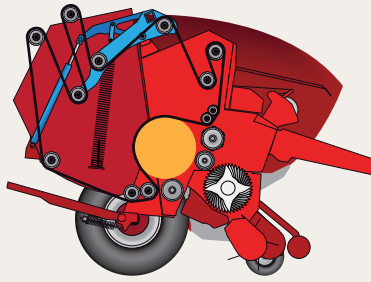
Eco-friendly chain lubrication

Narrow swaths and wet crops present the biggest challenge to the baler drive line. With that in mind, the standard automatic chain lubrication system ensures that all drive chains are constantly lubricated, guaranteeing a long life. The amount of oil can be set for each chain and is applied directly onto the chain with brushes.

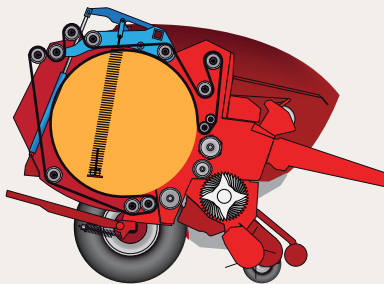
CPS – consistent density through increasing pressure

Correct bale density control is paramount in ensuring optimum performance of the baler from the start of the bale to its outer layers. Therefore, all Lely Welger variable-chamber balers feature the Constant Pressure System. This system increases the pressure when the surface of the bale grows, so density remains consistent through the entire baling process. Due to the balance between mechanics and hydraulics, cost price per bale is kept to a minimum.





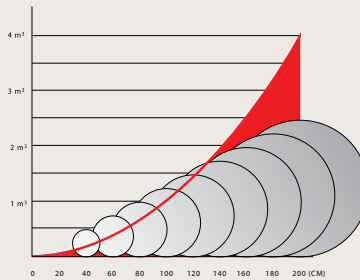
STEP 1
Tension on the belts by large springs. Easy bale formation at a high forward speed. Good start because of the spring tension on the belts.



STEP 2
After the initial bale formation by the springs, tension on the belts is taken over by the hydraulic system. Two rams connected to a self-contained hydraulic system will increase the tension on the belts and keep that tension consistent throughout the whole bale diameter. The carefully designed geometry results in a constant bale density.

BALE DENSITY ADJUSTMENT

The pressure that the hydraulic system transfers to the bale is controlled through the E-link control handset in the tractor cab.



VOLUME

Volume increase is greatest on the outer layers of the bale. The graph below shows how important it is that a density control performs best in that precise area.

Full speed right from the start

When starting a new bale, the operator can start at full speed. This is due to the fact that the four belts of the baler pick up the crop material effortlessly, right from the start of the baling process. The two big springs that form part of the CPS system ensure correct bale density right from the core. This benefits bale formation and ensures a properly structured bale core, which is very important for the end product. The big springs have a great capacity for adaptation, which provides space for the belts; they can easily absorb the major left-hand – right-hand differences in bale diameter.

A high density on the outer layers of the bale increases the bale weight exponentially

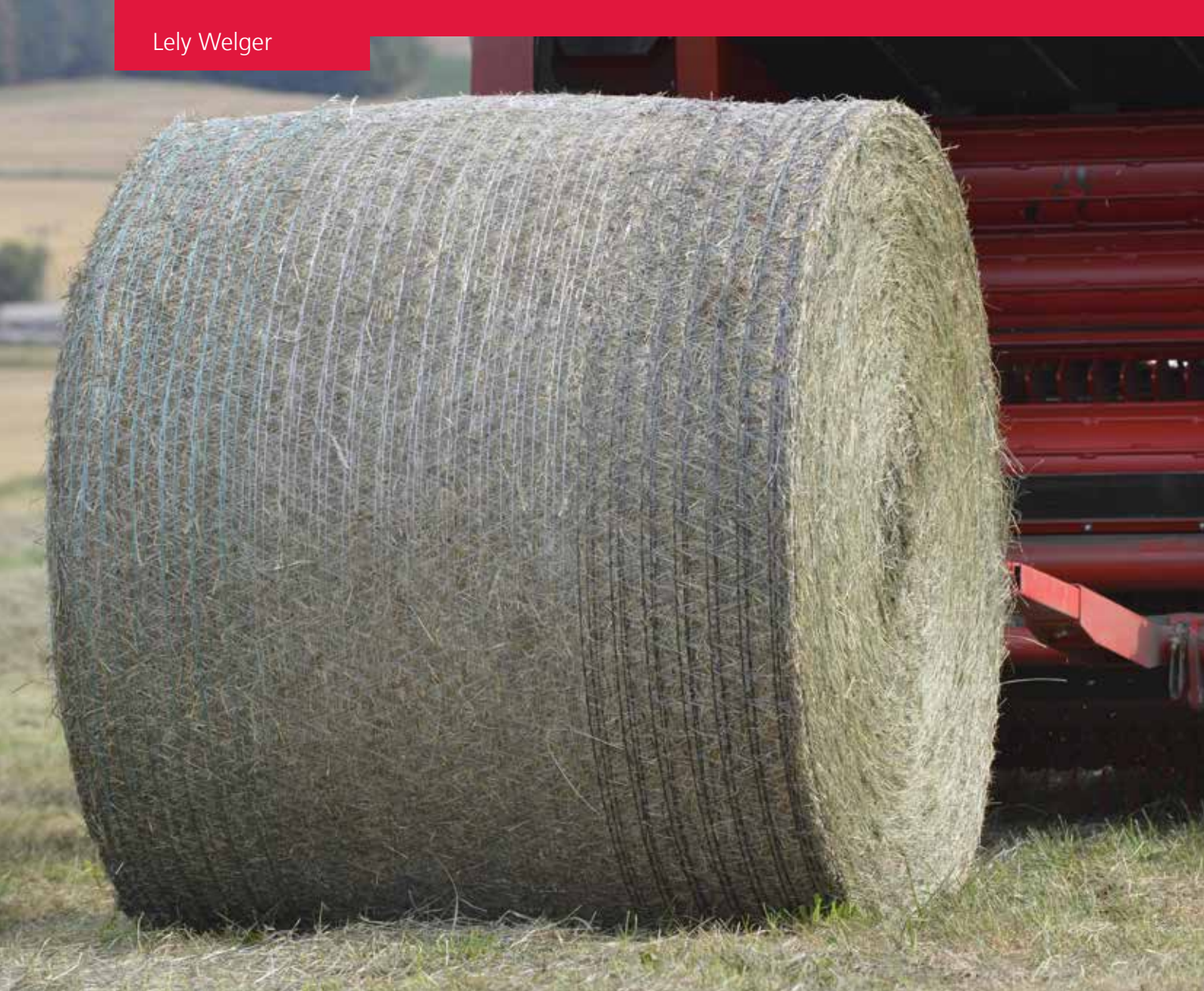
After the core of the bale has been formed, the hydraulic system is activated. Hydraulics react more gradually to changes than a mechanical system and can be controlled better. The hydraulic system keeps building up pressure until the pre-set density is achieved. The unique design of the belt tension device and the position of the CPS rams ensure that the tension on the belts increases proportionally to bale circumference. Thus, the CPS ensures a constant density achieving maximum filling.

Quality in the right place

The use of well-engineered building blocks, put together for maximum density and lowest wear, is a well-known characteristic of Lely Welger balers.

Faster tail gate operation with the Mechanical tailgate locking system

To ensure minimum differences in terms of bale diameter, two mechanical hooks secure the tail gate once it is fully closed and ensure that it remains so throughout the baling process. This locking is linked to the two single-acting rams of the tail gate; these rams can open and close the tail gate far more quickly than double-acting rams on a baler with a hydraulic locking system.



Effective tying saves costs and time

Making a perfect bale is one thing – preserving it for a longer period of time is a different matter. A variety of methods for storing, preserving and feeding bales necessitates a flexible tying system. Correct use of tying material limits costs and reduces the time required for tying bales, which in turn increases output per hour.



Varionet – for perfect bale coverage every time

We do not just accept high-density bales, they should also look good. The Lely Welger Varionet net wrapping system works perfectly with all standard net widths. Thanks to exhaustive testing, the well-proven tensioning system and a special net-spreading device, the net wrap is evenly applied across the bale. Wide net wrap will even reach over the edges of the bale. This means that not only do the bales look great, they are also completely protected against bad weather conditions and crop losses. This process also eliminates any unnecessary air pockets, thereby improving feed quality.

Varionet wrapping with Easy Load Net System (ELS)

The well-proven net-wrapping system now has the added feature of ELS which allows easier loading of the net roll from ground level from the left-hand side of the machine. After loading, the new net roll is simply tipped backwards with the storage container, lifted into the operating position via the spindle and then locked into position. A spare net roll can also be stored on the machine frame ready for use. It could not be any easier and will save you time and effort.

Variotwin – secure – fast – economically viable

The unique feature of this twine-tying system is the variable speed control. This device allows for an increased number of twine rotations at the bale edges, enabling the bale to be tied quickly and ensuring that the ends do not fall apart. In this way even the lightest of crops can be tied quickly and securely in a cost-effective manner.



CURVED SPREADING
The curved spreading tube conveys the net material up to and just around the edges of the bale.





Skilled!

You work with our machines in the great outdoors. New challenges are presented to machines every day. It is for this reason that our dealers are skilled and geared up to respond rapidly. They hold stock of all essential parts and have the expertise to keep the machines performing optimally. We ensure that your Forage Harvesting goes smoothly.





Technical specifications

Lely Welger
RP 160 V Classic



Lely Welger
RP 160 V (Xtra)



Lely Welger
RP 545



Lely Welger
RPC 445 Tornado



Lely Welger**RP 160 V Classic**

Bale chamber diameter (m)	0.90 – 1.60
Bale chamber width (m)	1.23
Bale chamber volume (m ³)	2.50
Pick-up width (m)	2.00 – 2.25
Pick-up rake width (m)	1.60 – 1.86
Chopping system (blades)	0

A new generation of variable non-chopper round balers with a very basic configuration. With bale diameters from 0.90m – 1.60m, these balers meet the high demands of today's users in terms of bale density and capacity.

Lely Welger**RP 160 V (Xtra)**

Bale chamber diameter (m)	0.90 – 1.60
Bale chamber width (m)	1.23
Bale chamber volume (m ³)	2.50
Pick-up width (m)	2.25 – 2.40
Pick-up rake width (m)	1.86 – 2.11
Chopping system (blades)	0 – 13 – 17 – 25

The most advanced variable round baler in the market place, with bale diameters varying from 0.90m – 1.60m and the best tensioning system, crop intake and chopping systems. These balers ensure high throughput and a constant density throughout the whole bale.

Lely Welger**RP 545 Basic**

Bale chamber diameter (m)	1.00 – 2.00
Bale chamber width (m)	1.23
Bale chamber volume (m ³)	3.90
Pick-up width (m)	2.25
Pick-up rake width (m)	1.86
Chopping system (blades)	0 – 13 – 17 – 25

This series of balers will let you make round bales from 1.10m to 2m – the largest in the world. The Constant Pressure System ensures consistent density and the different intake systems are renowned for their large capacity.

Lely Welger**RPC 445 Tornado**

Bale chamber diameter (m)	0.90 – 1.60
Bale chamber width (m)	1.23
Bale chamber volume (m ³)	2.50
Pick-up width (m)	2.25
Pick-up rake width (m)	1.86
Chopping system (blades)	13 – 25

With the Lely Welger RPC 445 Tornado, Lely now has the first fully variable baler/wrapper combination in the market place. In addition to a variable baling chamber, the automatic wrapping system is variable as well. The time the Tornado takes to wrap a bale is so short that the output of the variable round baler can be maximised.



Lely Welger **RP 160 V Classic**

Variable chamber balers are used in varying circumstances and the demands made on these machines differs widely. The new Lely Welger RP 160 V Classic features perfect specifications for use in silage, hay and straw. The feeding rotor provides a fast and voluminous throughput. The single side driveline has a low power requirement. This results in an hungry machine for use with smaller tractors. The best indication of the outstanding quality and sustainability of these balers can be found in the name... Lely Welger!



ADS – extra power for heavy crops

To be able to convey additional power to the belts, the RP 160 V models are fitted with the ADS (Additional Drive System) feature. The additional drive makes the baler more suited to silage operations. With the single driveline, the baler has a low power requirement with an high output.

Wide pick-up – large swaths

The Lely Welger RP 160 V Classic model comes with a 1.80m (DIN 1.60m) – or a 2.25m (DIN 1.86m) – wide Hybrid 2 camless pick-up, with five tine bars. Pick up capacity is huge; the long, 5.60mm thick tines have large coils and are, therefore, ideal for lifting the crop from stubble. Wide swaths can be picked up easily, because of the width of the pick-up, even on sharp turns. The pick-up suspension is adjustable and in combination with the height chains, flexible tines and pick-up wheels, excellent ground contour following, and the cleanest possible forage are ensured. An optional pendulum kit is available, for increased ground contour following in hilly terrain.



Good crop intake – optimum results

An even and constant crop flow is of paramount importance to good output and bale shape. With balers that have a wide pick-up, a good feed system makes all the difference between a smooth, continued operation and a 'jerking and jolting' feeding of the crop. Due to the two transport augers, the crop that is collected on the outside of the pick-up is effortlessly transported to the 1.25m wide entrance of the baler. Thus, the outer layers of the bale are even and compact.

CPS – best bales, highest speed

For round balers, the start of the bale is crucial in terms of bale shape and output. The mechanical part of the CPS ensures flexibility for the belts, making starting a bale smooth and easy. In crops such as hay and straw, this ensures a huge increase in output.

Lely Welger **RP 160 V (Xtra)** The star in variable baling

Density, capacity and durability have been the priorities when creating this baler generation. These properties characterise our wide range of round balers perfectly! Whether operating in hay, straw or wet silage, the new Lely Welger RP 160 V (Xtra) model offers you the highest density, capacity and the longest lifetime.



Powersplit – split power drive concept

Obviously, machines with a massive throughput need a drive system that is able to withstand the consequent high loads. The rugged Powersplit transmission (with oil bath) equally divides the amount of power required by the rotor and the bale chamber. Thanks to the Powersplit transmission, all shafts immediately rotate in the correct direction so that so that additional transmissions are not required while power loss remains restricted at the same time.

Wide pick-up – large swaths

The Lely Welger RP 160 V (Xtra) model comes with a 2.25m (DIN 1.86m) – or a 2.40m (DIN 2.11m) – wide Hybrid 2 camless pick-up, with five tine bars. Pick up capacity is huge; the long, 5.60mm thick tines have large coils and are, therefore, ideal for lifting the crop from stubble. Wide swaths can be picked up easily, because of the width of the pick-up, even on sharp turns. The pick-up suspension is adjustable and in combination with the height chains, flexible tines and pick-up wheels, excellent ground contour following, and the cleanest possible forage are ensured. An optional pendulum kit is available, for increased ground contour following in hilly terrain.



The benefits of an efficient chopping unit include

- > Lower costs per bale, due to increased bale density.
- > Improved forage intake, due to improved preservation and feed quality.
- > Time saving, because of easier processing of the feed.

The additional investment in a chopping system is always worthwhile. The Lely Welger RP 160 V (Xtra) range, therefore, comprises three cutting configurations, with 0, 13, 17 or 25 knives.





Lely Welger **RP 545**

Lely offers one of Europe's largest, variable-chamber round balers. To meet the trend for ever-increasing power and efficiency for crop harvesting, we have developed a round baler of unique quality for producing even larger bales. The available models offer a wide range of possibilities to meet the demands of all farmers and contractors.



Lely Welger RP545 – a totally renewed front

The Lely Welger RP 545 features a renewed Powersplit drive. The rugged housing now connects the drawbar to the main frame. An extensive pattern of holes in the casting provides ample opportunities for adjusting the redesigned drawbar to the upper or lower linkage. The front of the baler also features a safer standing platform. The machine now features one single standing platform with a banister on either side.

Huge bale chamber – enormous capacity

With a diameter of 2m and a width of 1.23m the resulting volume of nearly 4m³ means bales with weights of up to 600 kg with wheat straw can be produced. This is double that of some other balers. This reduces baling costs: it considerably reduces the number of bales, standing time is minimal and net consumption is reduced. Finally, field clearing time is also dramatically reduced.

Hybrid 2 cam less pick-up

The Lely Welger RP545 features the Hybrid 2, 2.25m wide pick-up without a cam track. The revolution speed of the five tine bar pick-up, augers and rotor have been adjusted, to ensure perfect pick-up and crop flow. Since the pick-up does not have a cam track, the number of rotating parts is minimal, making the Lely Welger RP 545 even more reliable and maintenance free.

Constant Pressure System – highest possible bale density

The bale chamber is designed so that the specific area pressure on the bale surface is constant from 1m to the set bale diameter up to 2m. This is achieved by increasing the belt tension with respect to the increase in bale chamber diameter. Therefore a high compression of the baled crop is achieved throughout the bale diameter.

More durable technology

The Lely Welger RP 545 has 50mm double roller Profi bearings in the tensioning system, which makes the baler more durable than ever before. All rollers and shafts which are part of the bale chamber will be fitted with greaseable bearings.





Lely Welger **RPC 445 Tornado**

A variable chamber provides the opportunity to produce bales with different diameters with great ease. Consequently, you can always produce bales with optimum efficiency, or respond to customer requirements. Obviously, you require the same flexibility from the wrapping system. After all, the film should cover the heart of the bale and the number of rotations should be consistent with the bale diameter and the required number of film layers. Thus, all bales are perfectly wrapped, costs for film are correct and wrapping times are minimal. The Lely Welger RPC 445 Tornado is the first baler/wrapper that meets this full set of requirements. The Tornado operates amazingly fast and automatically adjusts the entire wrapping process to the bale diameter.



The Tornado wrapping system

The set-up of this baler/wrapper springs from the idea of designing a wrapping system that is so fast that bales with a diameter of between 0.90m – 1.60m can be perfectly wrapped.

Powersplit – split power drive concept

Machines with a massive throughput need a drive system that is able to withstand the consequent high loads. The rugged Powersplit transmission (with oil bath) equally divides the amount of power required by the rotor and the bale chamber. Thanks to the Powersplit transmission, all shafts immediately rotate in the correct direction. Additional transmissions are not required, whilst power loss remains restricted.



A well-known baler with a new feeding system

The heart of this baler/wrapper – the familiar 4-series variable balers – has proved its outstanding bale density, output and reliability for many years. On that score, there is absolutely no doubt that the new 800mm cutting rotor adds a new dimension to its reputation. The generous set-up of the rotor – with six tines on each ring – features the Xtracut²⁵ chopping unit.

New Hybrid 2 cam less pick-up

The Tornado features the new Hybrid 2, 2.25m wide pick-up without a cam track . The revolution speed of the five tine bar pick-up, augers and rotor have been adjusted to ensure perfect pick-up and crop flow. As the pick up has no cam track, the number of rotating parts is minimal, making it more reliable and maintenance free.

Hydroflexcontrol, 'off course'!

Every Lely Welger baler with a chopper rotor can be fitted with the Hydroflexcontrol feeding channel floor. The rubber blocks ensure that the floor can flex downwards underneath the rotor so that a stone or crop lump can pass through. Should a blockage occur, the floor can be pivoted downwards so that the problem can be easily sorted.

Tail gate open, tail gate closed and off you go

If you want to be really fast, you need to utilise every split second, just like a 100m sprinter. This is exactly what the wrapping system does. The machine's quick bale transfer is a perfect example of optimum time saving; the baler being positioned higher, the bale – steered by the bale guidance – is transferred smoothly onto the wrapping table. As a result the tail gate can be closed immediately. At the same time, the ring wrapper makes optimum use of the space behind the tail gate. The fact is that the Tornado is already wrapping even before the tail gate is closed.





Fast and steady bale transfer

The major gain in speed is in the bale transfer; even with difficult angles, the bale will smoothly roll onto the wrapping table. The transfer between the baler and the wrapping table is smooth and accurate, even on steep slopes.



Automatically adjusted to any bale

The essential factors for automatic operation of the wrapper are bale diameter and the required number of film layers. Therefore, the bale diameter is measured during net tying and passed on to the wrapping system, which immediately adjusts the correct height of the wrapping ring. Thereafter, the control box calculates the number of rotations that are needed to provide the bale with the required number of film layers.

Easy variation and the utmost versatility mean that if the last bale in the field does not reach the required bale diameter, or, quite the opposite, is slightly bigger, that there is no problem. The Tornado wrapping system measures every bale, so that the wrapper adjusts to the correct settings at the moment of net tying. This is the ultimate in flexibility!



Correct rpm quickly reached

Time saving during the wrapping process contributes greatly to the short cycle time of this baler/wrapper. Due to the smooth drive of the ring wrapper, the film rollers can be quickly adjusted to correct rpm rates. The film clamps also play an important part. Thanks to the re-engineered construction, only a small opening is required to release the film, and consequently the wrapper does not have to slow down needlessly.





Baling without wrapping

The wrapper can be switched off when baling hay or straw. The completed bale can be transferred via the table to the ground, or retained until a second bale is formed so that two bales can be deposited together.

Smooth drive – little maintenance

The ring is driven by rubber drive rollers, while two other rollers ensure that the position is maintained as well as tensioning the ring. Also, the ring is supported by rubber rollers so that the entire assembly operates very smoothly and is noise free. The brake device consists of brake shoes that are pressed against the wrapping ring.

Film clamps – large reach, smooth operation

Because of the varying film height, the film clamps need to have a very large reach. Therefore, the two step film clamps have an exceptionally wide opening through two steps. The locking method ensures maximum grip on the film so that it is properly cut and held in position.

Exceptionally compact in transport

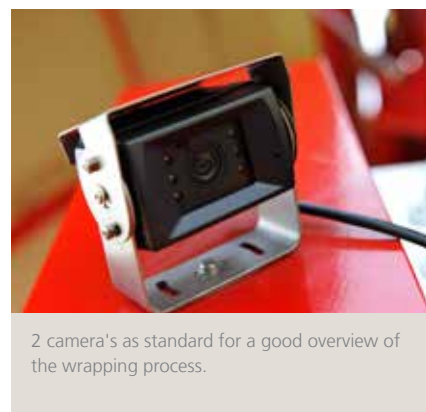
Up to now, roads with hedges, narrow bridges and gates have always remained an obstacle for many agricultural machines. This new baler/wrapper combination has been designed so that its transport width remains restricted to a mere 2.80m with a length of only 5.75m! In combination with wide wheels, the upshot is an outstandingly manoeuvrable, stable and versatile machine.



Easy manual controls at the rear of the machine, the wrapper.



Optional Bale tipper.



2 camera's as standard for a good overview of the wrapping process.



The large tyres ensure minimum ground compaction/ damage, and also give good stability both in the field and in road transport.



Simple film-break sensor; in the case of a broken film, the bale can be wrapped with the remaining one, or the ring will stop and the broken film can be repaired – programmed from the handset.



A consistent overlap during the bale rotation being monitored by the sensor-roller.



Technical Specifications

Lely Welger	RP 160 V Classic	RP 160 V (Xtra)	RP 545	RPC 445 Tornado
Bale chamber	four endless belts	four endless belts	four endless belts	four endless belts
Bale chamber diameter (m)	0.90 – 1.60	0.90 – 1.60	1.10 – 2.00	0.90 – 1.60
Bale chamber width (m)	1.23	1.23	1.23	1.23
Bale chamber volume (m ³)	2.50	2.50	4	2.50
Transport length (m)	5.05	5.05	5.25	5.75
Transport width (m)	2.30	2.30	2.40	2.80
Transport height (m)	2.77	2.77	3.15	3.45
Weight (kg)	3450	3900	4490	6100
Pick-up width (m)	2.00 – 2.25	2.25 – 2.40	2.25	2.25
Pick-up rake width (m)	1.60 – 1.86	1.86 – 2.11	1.86	1.86
Pick-up tine bars	5	5	5	5
Pick-up tine spacing (mm)	64	64	64	64
Pick-up type	camless	camless	camless	camless
PTO speed (rpm)	540	540	540	540
Power requirements (kW/Hp)	52/70	60/80	81/110	97/130
Hydraulic requirements	2 x SA	2 x SA (1 x DA)	2 x SA (1 x DA)	1 x DA, 1 x press (40 l/min), 1 x free return / 1 x DA + LS
Load-sensing preparation	X	X	X	S
Automatic chain lubrication	S	S	S	S
Knife system	O	0 – 13 – 17 – 25	0 – 13 – 17 – 25	13 – 25
E-Link Control	O	O	O	X
Elink Pro Control	O	O	O	X
ISOBUS Control	O	O	O	X
Prolink Control	X	X	X	S
Bale discharge ramp	O	O	O	Bale Tipper optional
Pick-up swivel wheels	O	O	O	S
Hydraulic Brakes	O	O	O	O
Air Brakes	O	O	O	O
Film holders (mm)	X	X	X	2 x 750
Extra film rolls	X	X	X	14
Film-break sensor	X	X	X	S
Wrapping cycle time for 6 film layers (seconds)	X	X	X	45
Camera	X	X	X	S

S = Standard / O = Optional / X = Not available on this machine



Passionate about farming

Lely has a long and deep history of recognizing the needs of modern farmers. Our products are developed with the cow as starting point. We strive to let her excel and as such, we supply products to farmers and contractors ranging from forage harvesting, to feeding, housing, caring, milking and energy sourcing. In addition we boast specific knowledge and experience in facilitating farmers to get the best out of their equipment. As such our in-depth knowledge of the complete farm cycle – from grass to glass – is unrivalled in the agricultural business.

We are committed to a sustainable, profitable and enjoyable future in farming.

Lely really cares for the environment.

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