LELY WELGER

High Density Balers

The perfect technology
for baling hay and straw

www.lely.com

innovators in agriculture

SMARTER, FASTER, STRONGER!

Smarter, faster, stronger!

These are three powerful terms describing precisely why Lely machines differentiate themselves so clearly from those of their rivals. The innovative methods of our design engineers ensure surprisingly simple solutions which make our comprehensive range of machines even more efficient. Long service life and ease of operation play an important role here. That's why we at Lely are justified in saying "we're the innovators in the field of agriculture".

Smarter

The packers and knotters must run in perfect synchronisation with the ram. Whilst competitive balers use chains to drive these components, Lely balers have torsion shafts and angular gears. The timing of the packers, knotters and ram, which is set in production, cannot move; whereas on other brands every time a chain is adjusted the timing is altered.

Exceptionally high reliability with the minimum of maintenance are the advantages of this clever construction.

Faster

High forward speed without unnecessary interruptions is a requirement for maximum performance. Competitive balers are protected against overload via shear bolts. Should an overload occur on these machines, the shear bolt has to be replaced and the intake area has to be cleared.

Lely AP 730 / 830 balers, on the other hand, are fitted with fully automatic overload protection. Should a blockage happen, the driver simply makes a temporary stop, and the machine resets itself automatically.

Stronger

Every baler is only as strong as its knotter. Lely Welger high density balers has the most efficient, reliable knotter system in the market today.

The knotter system works using self stripping knots (the bale pulls the twine from the knotter) - a stripper arm, which is often prone to damage, is not required. The unique Welger conical twine holder accepts all standard quality twines and adapts automatically to all twine thicknesses.

The knotter makes a double loop knot with roughly 30 % higher breaking strain. In addition, there are no short pieces of twine left on the bale which could be fed to stock.

Quality fodder for higher profits

The quality and quantity of fodder determines to a great extent how healthily and efficiently milk and meat can be produced. By producing nourishing and appetising feed from one's own fodder you avoid having to purchase expensive additives and concentrates. This is beneficial for the animals, for manure management and – perhaps the most importantly – the farm's profits.

Lely guides you to toward perfect fodder in five steps

LELY SPLENDIMO

Mowing is decisive for further processing of fodder

The choices that you make for mowing – time of mowing, with or without conditioner, regular or wide swath – have a direct impact on the further processing of fodder. Proper adjustments as well as the correct mowing pattern are crucial to the condition of the turf as well as limiting any delay in re-growth and favouring the quality of the first cut of grass.

LELY LOTUS

Tedding for fast and even drying

Especially when having to deal with heavier cuts of grass, timely tedding is important to ensure fast and even drying. Suffi cient output combined with a proper turning action limits the wilting period and, hence, the fi eld period as well as any delay in re-growth. Properly tedded fodder is free from the turf and is raked together more easily. Proper ground contours as well as correct machine adjustments avoid crop contamination.

LELY HIBISCUS

Clean fodder in the right swath

A cam rake should allow fast operations as well as the possibility to lay down an effective swath with the correct shape and width. After all, a good swath is decisive for the output and cutting action of the baler, forage harvester or pick-up loader wagon. Ground assimilation, stability as well as adjustments ensure a clean raking job eliminating any fodder contamination due to soil or dried-up manure.

LELY WELGER

Proper density provides many benefits

Big packs and round bales ensure a substantial improvement of fodder quality because the compaction process starts right away. Transport of the heavy packs is more fl exible. Heavy tractors for processing the fodder are not required. Since the crop is cut by means of the advanced cutting mechanisms of the balers, there is more effective compaction while the fermentation process starts sooner and the crop can be processed more easily later on.

LELY ATTIS

Quick preservation ensures optimum fodder

Wrapping fi nishes the process that you have started with baling. Immediate packing of the bale in a fi lm – be it in a combined or individual working pass – ensures immediate airtight sealing of the bale so that the fermentation process sets in as soon as possible. The bale is not opened until the time when you actually need the fodder. Heating and decay are eliminated and tasty fodder is ensured.

Lely Welger AP 530-830

Our experiences, gained in over one hundred years of business and knowledge of the most modern production technologies, are used for every single one of our balers. Tried and tested technology, stable constructions and professional processing lead to machines which cannot be beaten in terms of reliability and value for money.

Main drive with overload protection
Two friction clutches; one in front and one behind the flywheel protect the universal joint and the tractor as well as the baler drive. On the AP 530 and the AP 630, an additional shear bolt protects the drive should an unforeseen blockage occur. On the AP 730 / 830, this function is fully automated with an auto-reset clutch.

Pick-up tine bars fitted with ball bearings
In contrast to many other manufacturers, Lely uses strong, maintenance free ball bearings for the tine bars. This high specification construction quickly pays off in terms of the service life.

The double tines, made out of particularly high-quality spring steel also have special tine support plates. This feature also substantially increases the lifetime of the tine.

Chainless drive
The packers and knotters must run in perfect synchronisation with the ram. Whilst competitive balers use chains to drive these components, Lely balers are fitted with torsion shafts and angular gears.

The timing of the packers, knotters and ram, which is set in production, cannot move, whereas on other makes every time a chain is adjusted the timing is altered.

Tried and tested concept – tried and tested technology

The ingenious concept of a chainless drive in connection with automatic overload protection makes the Lely Welger high density balers the most reliable crop harvesters. Their high throughput performance, easy operation and not least the low degree of maintenance required give these machines unrivalled economic capability.

Lely: high-quality products through innovative and durable design

The companies in the Lely Group are dedicated to Offering a range of products that are well matched to the needs of modern cattle farmers and contractors. Innovation has always been the driving force upon which the Lely organisation was founded.

Always seeking improvement

A team of highly qualified and enthusiastic designers are constantly active, developing new products as well as refining existing equipment. In doing so, they can make use of the most advanced equipment and software.

Reliability due to extensive testing

Prototypes are built and carefully monitored during nationally and internationally recognised testing procedures. Durability testing takes place on a bumpy track or on the drop-testing jig to discover potential weak points or to test the durability.

Quality first and foremost

During production, the quality control of all the materials applied is crucial.

Check on the correct dimensions or material quality are constantly performed on all incoming components, even for parts suppliers.

Proper back-up

Correct operation and service are in practice just as important as a good design and precise fabrication! Lely therefore invests a great deal in frequent customer visits and much (international) training to instruct dealers and end users.

Quick and correct parts supply

Due to ongoing automation of our parts supply infrastructure we ensure fast supply of spare parts just at the time when you expect us to.


LELY
innovators in agriculture

Lely Welger

AP 530

AP 630

AP 730

AP 830

AP 530

This machine is fitted with automatic safety features and is both simple and easy to operate.

TECHNICAL SPECIFICATIONS

WELGER	AP 530
Channel dimensions	36 x 48 cm
Bale length	0.50 m – 1.20 m
Twine box capacity	8
Pick-up working width (DIN 11220)	1.62 m
Weight	1700 kg
Width	2.52 m

AP 630

Above-average bale densities as well as the comprehensive standard equipment such as a hydraulic pick-up lift and a pick-up guide wheel turn this baler into a real high performance machine.

TECHNICAL SPECIFICATIONS

WELGER	AP 630
Channel dimensions	36 x 49 cm
Bale length	0.50 m – 1.20 m
Twine box capacity	14
Pick-up working width (DIN 11220)	1.74 m
Weight	1870 kg
Width	2.65 m

AP 730

This machine's chassis is especially constructed for high performance combined with high bale densities. Naturally, this baler is fitted with fully automatic overload protection in all areas.

TECHNICAL SPECIFICATIONS

WELGER	AP 730
Channel dimensions	36 x 49 cm
Bale length	0.50 m – 1.20 m
Twine box capacity	14
Pick-up working width (DIN 11220)	1.74 m
Weight	2110 kg
Width	2.65 m

AP 830

With more than a two metre wide pick-up and in connection with the triple cross feed packer system, this machine has a performance capability unrivalled in this kind of baler. Both feed suppliers as well as owners of large combines appreciate the high bale density and perfect bale shape.

TECHNICAL SPECIFICATIONS

WELGER	AP 830
Channel dimensions	36 x 49 cm
Bale length	0.50 m - 1,20 m
Twine box capacity	18
Pick-up working width (DIN 11220)	1.99 m
Weight	2210 kg
Width	2.95 m

Secure synchronised chainless drive

In order to guarantee the accurate timing of all components over the entire lifetime of a baler, the packers and knotters are driven entirely via torsionally rigid shafts and gears. From the main hypoid gearbox, the drive is transmitted via a drive shaft and angular gear to the packer, knotter and needle drive. No chains or belts are used; even the pick-up is driven with a shaft. This increases reliability as well as minimising the amount of maintenance work required. Complex work with tensioning and lubricating chains / belts is a thing of the past.

Efficient Packer Feed

The Packer Feed consists of two (AP 830 has 3) self deflecting packers which prevent blockage caused by foreign objects or damage to the machine.

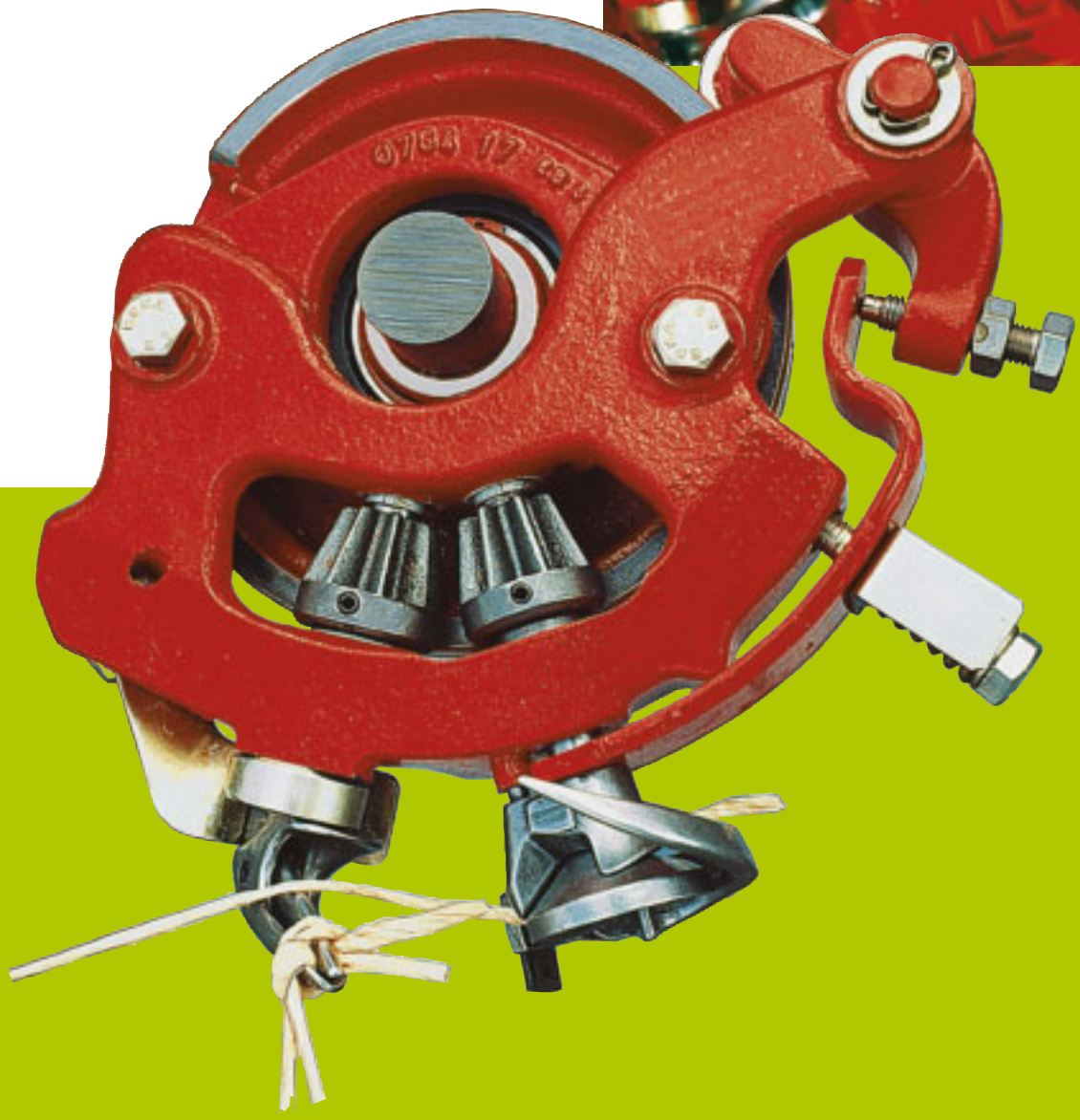
The self deflecting packers, which do not require the normal shear bolt, in the case of an overload the packers can deflect and then automatically reposition themselves ready for operation. After several ram strokes, the blockage will be cleared. The benefits are clear due to the use of a patented hydro packer, a further development of the tried and tested self deflecting packers.

Automatic needle drive

A double clutch ensures that the synchronised timing process is accurate in normal operation of the baler. Should the machine be reversed, the needles will be driven out of the bale chamber. This device is fully automatic and makes complicated ram stop devices unnecessary.

Compact knotter

Our experience gathered from making more than 100,000 balers has been implemented in this area, too. Just to name one of many remarkable benefits: the bearings of the knotter device are completely maintenance-free. Sealed for life bearings make lubrication devices, which are often used in this area and which are subject to malfunctions, unnecessary.



Equipment for professionals

The easy opening and large guards which make all areas accessible are advantageous during maintenance and repair work. To supplement the already high specification of the standard machines, there is a range of accessories available. An example of this is the hydraulic drawbar device, which allows the driver to move the machine easily from transport to working position.

Bale thrower P 23
The bale thrower P23, available for all Lely Welger high density balers, is an accessory available for farms where just one employee brings in the bales. The thrower, driven via its own hydraulic system, allows maximum use of the baler's performance, as it is no longer restricted by the speed of a manual worker during loading. Using a Bowden cable control, the throwing range can be adjusted easily.

This can be calculated according to the bale weight as well as the position of the trailer. The bale thrower can be adjusted using the specialised hydraulically operated drawbar device. This achieves even loading of the trailer even under poor conditions, i.e. side winds or steeply sloping fields. In a few easy steps, you are able to convert to normal field ejection.

Advantages:

- Field clearance by just one person
- Optimum loading of the transport trailer via the thrower range control
- The side pivot device allows optimum trailer loading even in strong side winds or on steep slopes
- Can also be converted to normal field ejection

Foldable bale chute

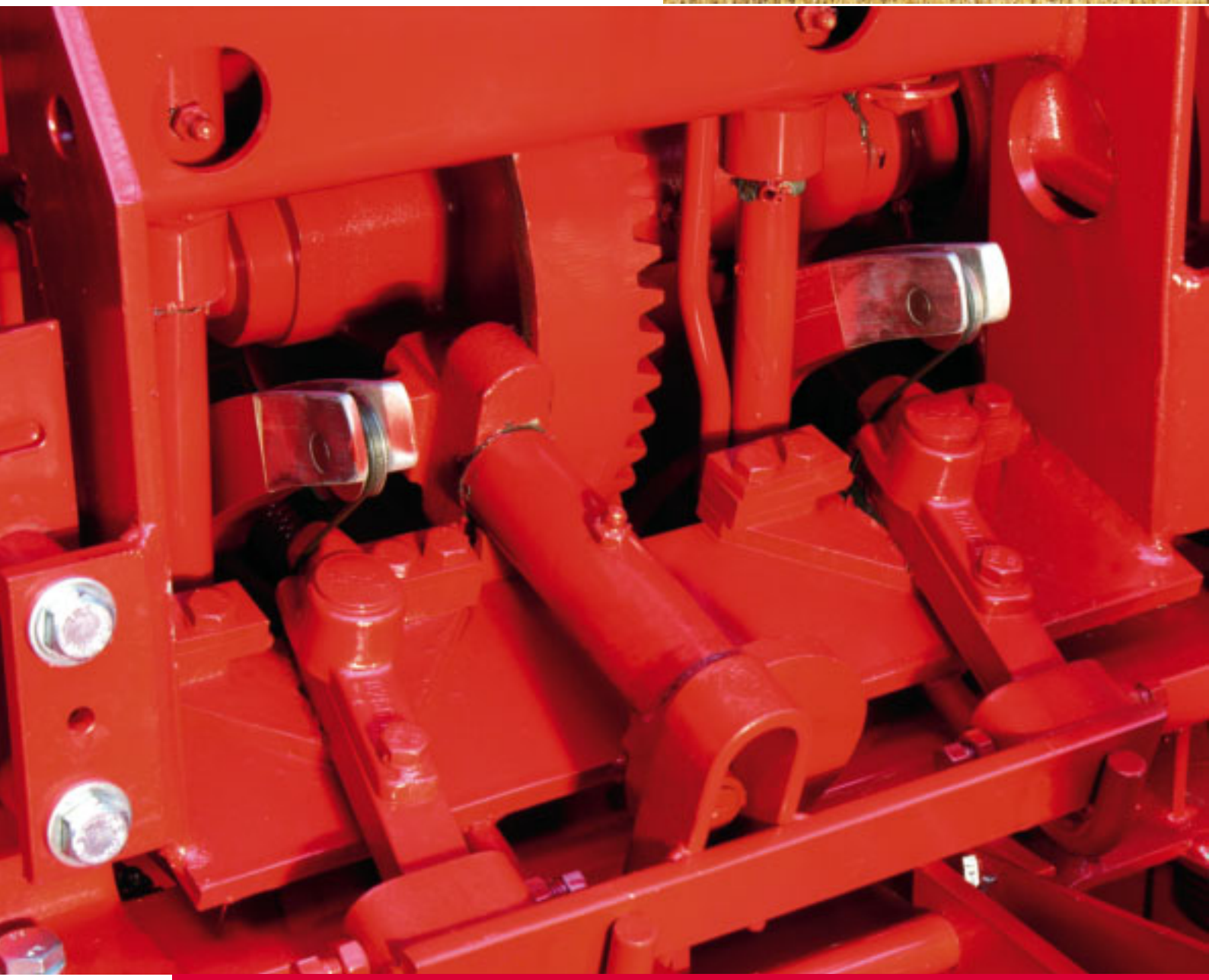
The bale chute and the trailer hitch allow swift clearance of fields. Due to the bale chute being easily foldable, the machine can be converted quickly from its compact transport size to field ejection.

This is aided by the hydraulically operated drawbar device installed on the AP 730 and the AP 830 as standard equipment, meaning that the machine can be moved quickly and easily from transport to working position.

The knotter - robust and reliable

All AP machines in this range are available with the option of a wire-tying system. This system is well known the same as the twine unit by its sturdiness and functional reliability.

The use of wire as a tying material is also advantageous when the bales are used, as the steel wire can be magnetically removed.



Technical specifications

LELY WELGER	AP 530	AP 630	AP 730	AP 830
Channel dimensions (Width x Height)	36 x 48 cm	36 x 49 cm	36 x 49 cm	36 x 49 cm
Bale length	0.50 m – 1.20 m			
Bale weight	12 - 35 kg (dependent on bale length and bale density)			
Tying material sisal / running length	125 - 200 m/kg			
Tying material plastic / running length	250 - 400 m/kg			
Tying material consumption per 100 bales	504 m (for a medium bale length of 0.8 m)			
Twine box capacity	8	14	14	18
PTO shaft	540 rpm			
Number of ram strokes	100/min	90/min	90/min	90/min
Packers in the cross feed	2	2	2	3
Pick-up working width (DIN 11220)	1.62 m	1.74 m	1.74 m	1.99 m
Pick-up rake width	1.42 m	1.54 m	1.54 m	1.79 m
Tine rows	5	5	5	5
Tines per row	21	25	25	29
Spacing between tines	71 mm	64 mm	64 mm	64 mm
Weight	1700 kg	1870 kg	2110 kg	2210 kg
Transport length	4.65 m	5.30 m	5.60 m	5.60 m
Transport width	2.52 m	2.65 m	2.65 m	2.95 m
Height (without loading chute)	1.63 m	1.67 m	1.67 m	1.67 m
Tyres left	10.0/75-15.3	10.0/75-15.3	11.0/80-15.3	11.0/80-15.3
Tyres right	7.00-12	7.00-12	8.00-12	8.00-12
Track width	2.24 m	2.35 m	2.35 m	2.60 m

Equipment: ● = Standard; o = Optional; – = Not available				
Roller ram	●	●	●	●
Maintenance-free compact knotter (twine-tying)	●	●	●	●
Shaft drive	●	●	●	●
Automatic overload protection	●	●	●	●
Pick-up lifting device	●	●	●	●
Twine knotter	●	●	●	●
Bale counter	●	●	●	●
Drawbar with adjustable height set-down support/towing ring 30 mm Ø'af	●	●	●	●
Bale guide plate	●	●	●	●
Tyres 8.00-12. 11,5/80-15.3	o	o	–	–
Tyres 10.00-12. 15/55-17	–	o	o	o
Universal joint	●	●	–	–
Universal joint with free-wheel	o	o	●	●
WW-universal joint both side, with free-wheel	o	o	o	o
Trailer hitch device	o	o	o	o
Foldable loading chute	o	o	o	o
Bale thrower P23 with hydraulic drive	o	o	o	o
Side pivot device P23 with electrical adjusting motor	o	o	o	o
Pick-up head plate	o	o	o	o
Pick-up guide wheel	o	●	●	●
Hydraulic pick-up lifting device	o	●	●	●
Lighting system*	o	o	o	o
Wire knotter	o	o	o	o

* This is part of the standard equipment in the Federal Republic of Germany. Subject to change without prior notice.

60 years of unstoppable agricultural progress

At the beginning of the previous century, Cornelis and Arij Van der Lely were already busy, as children with their Meccano kit, giving expression to their ideas for making physical labour in the agricultural sector easier. With the invention of the tedder, Lely made its mark as an agricultural company in 1948. Developments took shape in rapid succession. Around 1958, Lely started the development and production of the unique fertiliser spreader. In 1965, Lely marketed the uniquely shaped Lely Lotus hook tines. Lely's real breakthrough came with the development of the Lelyterra rotor head harrow in 1968. This development also signalled the company's internationalisation. In 1983, mower technology received an enormous boost thanks to the introduction of the modular cutter bar. The milking robot introduced in 1992 is undoubtedly the 20th century's most important invention for dairy farmers.

Under the inspirational management of the second Van der Lely generation, too, the company is constantly looking for methods that can improve dairy farmers' lives both fi nancially and socially. In addition to the introduction of rakes and tedders with maximum working widths, the development of increasingly robotised barn equipment fi ts in with this aim. And … this 60th anniversary bodes well for the years to come.







Lely 60 years - Welger 110 years
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