



Square baler

QUADRANT  
4000

**CLAAS**





# Forward thinking – QUADRANT 4000.

QUADRANT 4000

## The success model.

The QUADRANT 1150 was launched 17 years ago to cater for farms seeking to achieve maximum forage protection. Fast-forward to 2014, and CLAAS is now launching the follow-up model to this highly successful baler. For farms in low mountain regions with smaller tractors, and in particular for those with horses, this packer tine machine is the QUADRANT par excellence.

## Perfect dimensions every time.

Maximum baling pressure ensures that wilted silage, straw and hay are shaped precisely. Both the baling density and the bale length can be adjusted as required.

## Bales of the highest quality.

The QUADRANT 4000 impresses with its consistent crop intake and high compaction, and also firmly tied square bales, thanks to the CLAAS high-performance knotter. The QUADRANT 4000 also ensures top forage quality. With its packer tine technology, the stalks remain at their original length. The leafy material is preserved and thus retained perfectly intact, delivering outstanding forage quality. With minimal dust formation during the baling process, the QUADRANT 4000 is the ideal baler for all horse-keepers. Additionally, portioning of rations for horses is extremely simple, thanks to the bale wads – one wad corresponds to about a day's ration.

## New: CEMIS 700.

The control terminal offers not only a convenient user interface and colour touch screen, but also a large display area and very high resolution. The terminal is compatible with both ISOBUS and various camera systems. The job counter with 20 storage spaces collects valuable data on the number of bales and operating hours.





The very best technology in a new design.



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Practical solutions.

QUADRANT 4000 balers have proven their worth as a sound investment for many farms and contracting businesses, particularly those keeping horses.

The optimal rectangular bale shape offers numerous practical benefits. Wilted silage, straw and hay are shaped precisely and with maximum bale density. Both the bale density and bale length can be adjusted as required.





With its well-engineered packer tine technology, the QUADRANT 4000 bales forage that is ideal for ruminants, and especially for horses.

And most importantly, the feed rake system does not damage the stalks, enabling the QUADRANT 4000 to produce dust-free bales.

The 80 x 50-cm bale format also facilitates easy bale handling in barn and stable environments.





# Maximum intake capacity.



## Thorough crop clearance.

With its wide pick-up, the QUADRANT 4000 is designed for enormous intake capacities. Guide wheels ensure the pick-up follows the ground contour with razor-sharp precision. The pick-up crop guard ensures the crop enters the machine cleanly and is transported to the feed rake efficiently when working in short-cut crops. The wide-angle drive shaft provides smooth running and effective power transfer.

The QUADRANT 4000 performs consistently, even in small fields and when the swath is not straight, giving you meticulous field clearance and a clean crop every time.



## Perfect quality every time.

The pick-up, which has a working width of 2.00 metres, is the key to performance and reliability. CLAAS engineers have devoted particular attention to developing a pick-up of outstanding quality and function. Four rows of tines, perfectly spaced for thorough raking, guarantee superior results in the field. The twin spring steel tines are bolted firmly to four rugged U-shaped tine arms to withstand continuous and extreme loading and provide easy servicing. Stub augers on either side of the wide pick-up mechanism funnel the crop to the appropriate width for entering the baling chamber, producing firm bales highly compacted at the edges for excellent stability during transportation and storage.



## Perfect suspension.

Shock absorbers and suspension springs prevent the pick-up from bouncing, even when travelling over undulating terrain at speed.



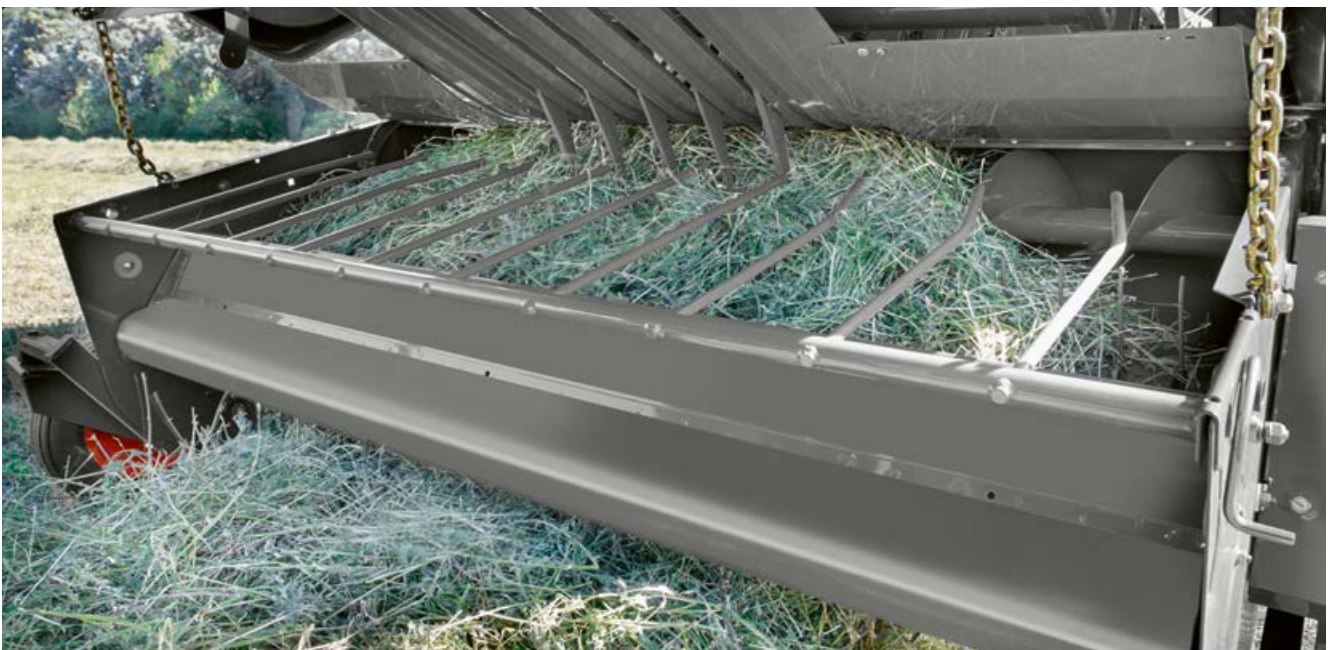
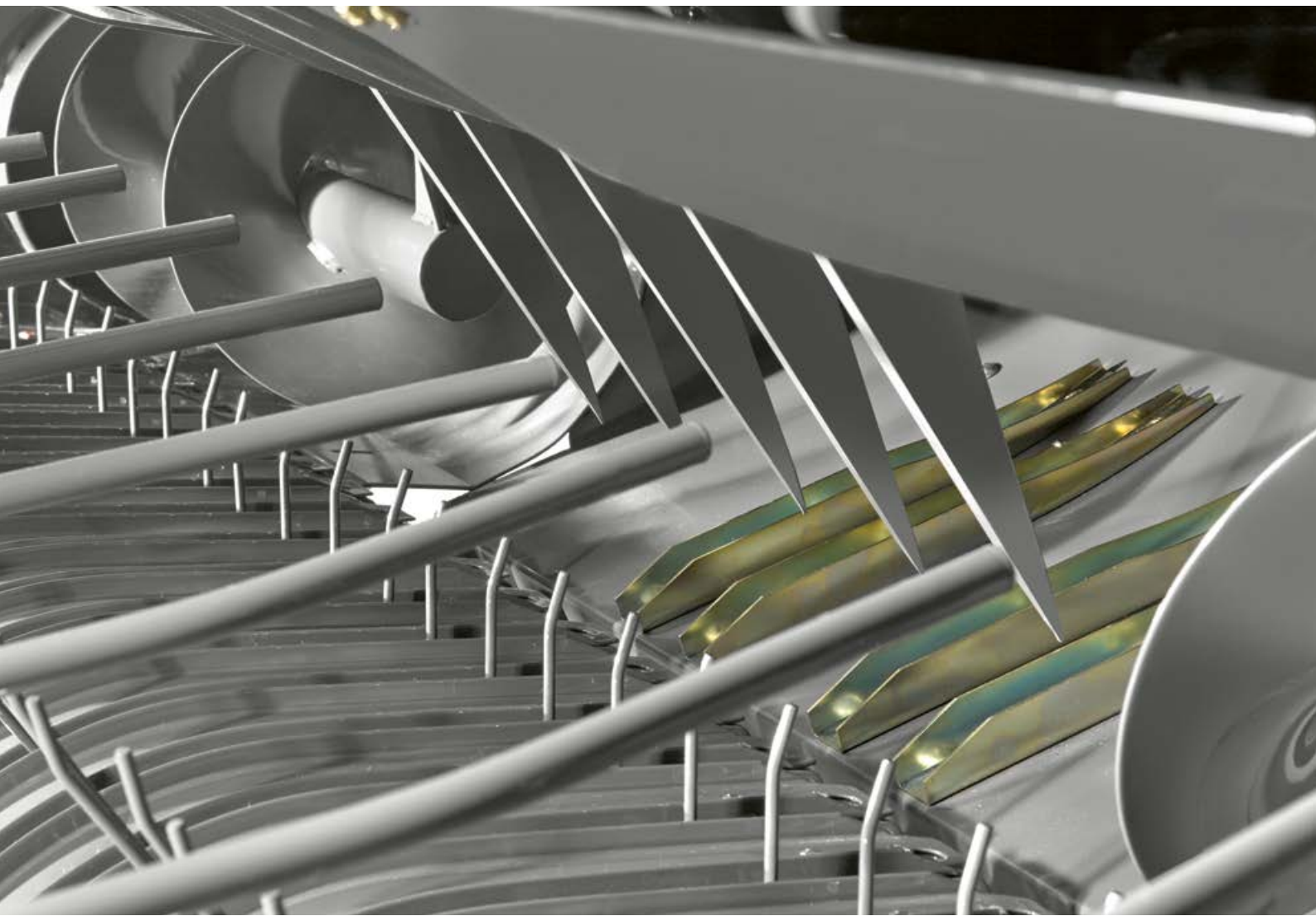
## The optimal height for any swath size.

Whether the QUADRANT is hitch-mounted or pulled by drawbar, the choice is yours. The bolted heavy-duty drawbar enables adjustment to all tractor sizes and trailer variants, and the hydraulic jack facilitates secure hitching to the tractor.





Dust-free without cutting.



Maximum forage protection.

The packer tines convey the harvested crop towards the bale chamber at a rate of 122 packer tine strokes per minute. The typical two-phase CLAAS-style feed rake with five tines is located directly behind the pick-up and, thanks to the short channel, ensures maximum forage protection in hay and leafy crops such as alfalfa. The harvested crop is conveyed vertically and without twisting. Despite the high baling density, optimal aeration of the bale is achieved, thanks to the homogeneous structure of the thin slices produced.

Maximum forage quality.

When it comes to horse keeping, especially high forage quality is required. Preservation of the leafy protein-containing mass is essential, and is achieved in the gentle baling process of the QUADRANT 4000. Also important – the forage stays virtually dust-free, thanks to gentle handling.





## Clear layout.

The QUADRANT 4000 is renowned for its simple yet effective design, with each and every facet and component clearly and neatly arranged for ease of accessibility and servicing, ensuring your valuable time is spent baling and not on tiresome maintenance work. The straight driveline operates dependably with low wear and high operational reliability. The robust central transmission unit channels power efficiently to the individual components.

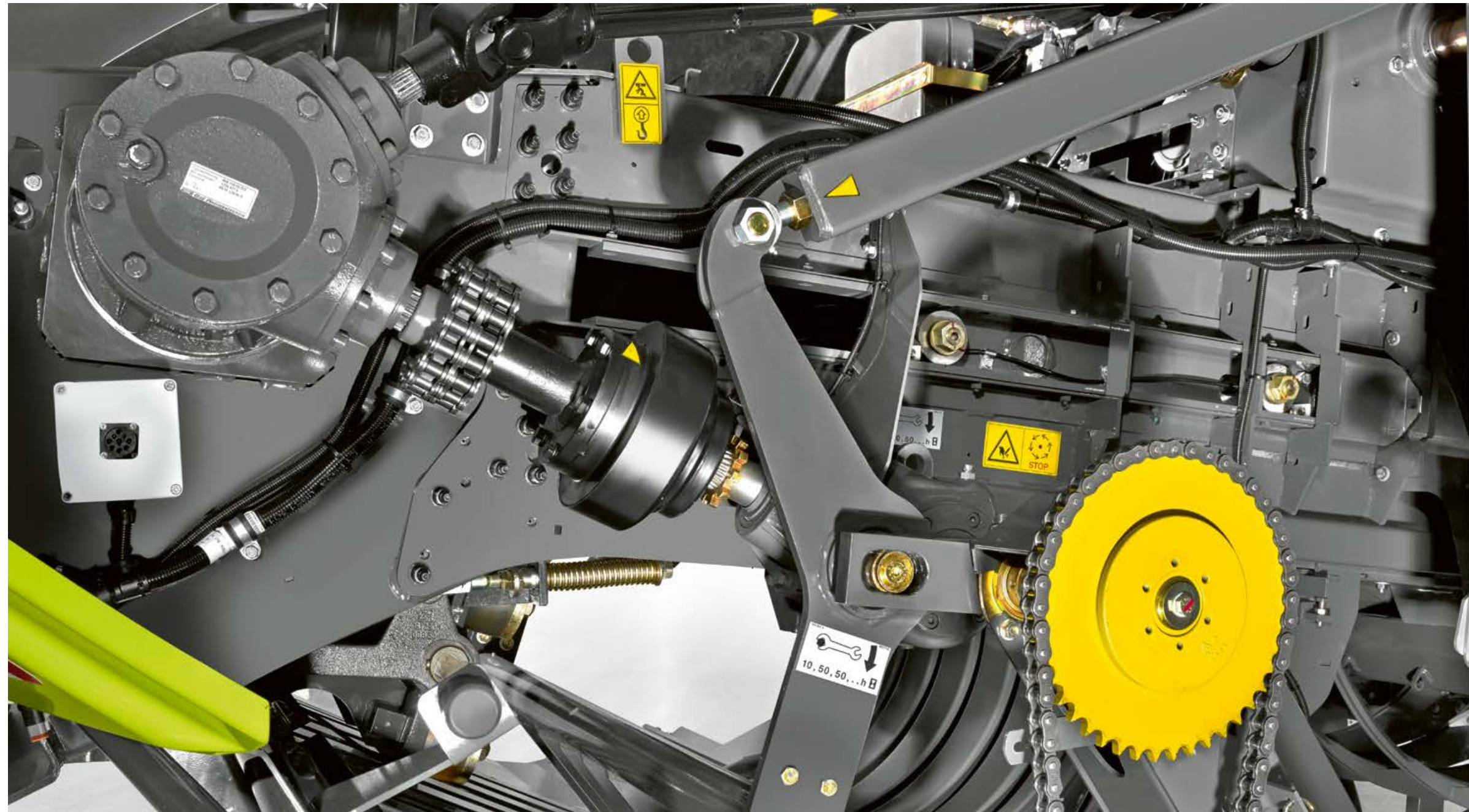
61 powerful ram strokes per minute compact the bales thoroughly and produce excellent throughput in every crop type. During the baling process, the QUADRANT takes load peaks in its stride, thanks to the 170-kg, 2,800-Nm-protected fly-wheel behind the main drive, giving even and smooth operation. The result is outstanding reliability and more bales per hour, every hour.

## Uninterrupted protection.

Superior safety technology ensures fault-free operation. The ingenious drive of the packer tines, needles and knotters via the shafts and transmission offers dependable peak performance. The baler is effectively protected by the main transmission's overload clutch against damage caused by the intake of foreign objects.

## Interactive connection.

The cam-type power interrupt clutch on the feed rake reliably prevents the machine from being brought to a standstill by a blockage. If there is a blockage at the feed rake and the cam-type power interrupt clutch engages, the pick-up shuts down in a controlled manner via the feed rake transmission. The operator is alerted via the CEMIS 700, reduces the engine speed and can then resume operation without needing to leave the cab, saving valuable time.



The baling ram is also protected against overload by a safety clutch. All overload clutches automatically reengage after reducing the PTO shaft speed. You'll never need to leave the cab in the event of a blockage.

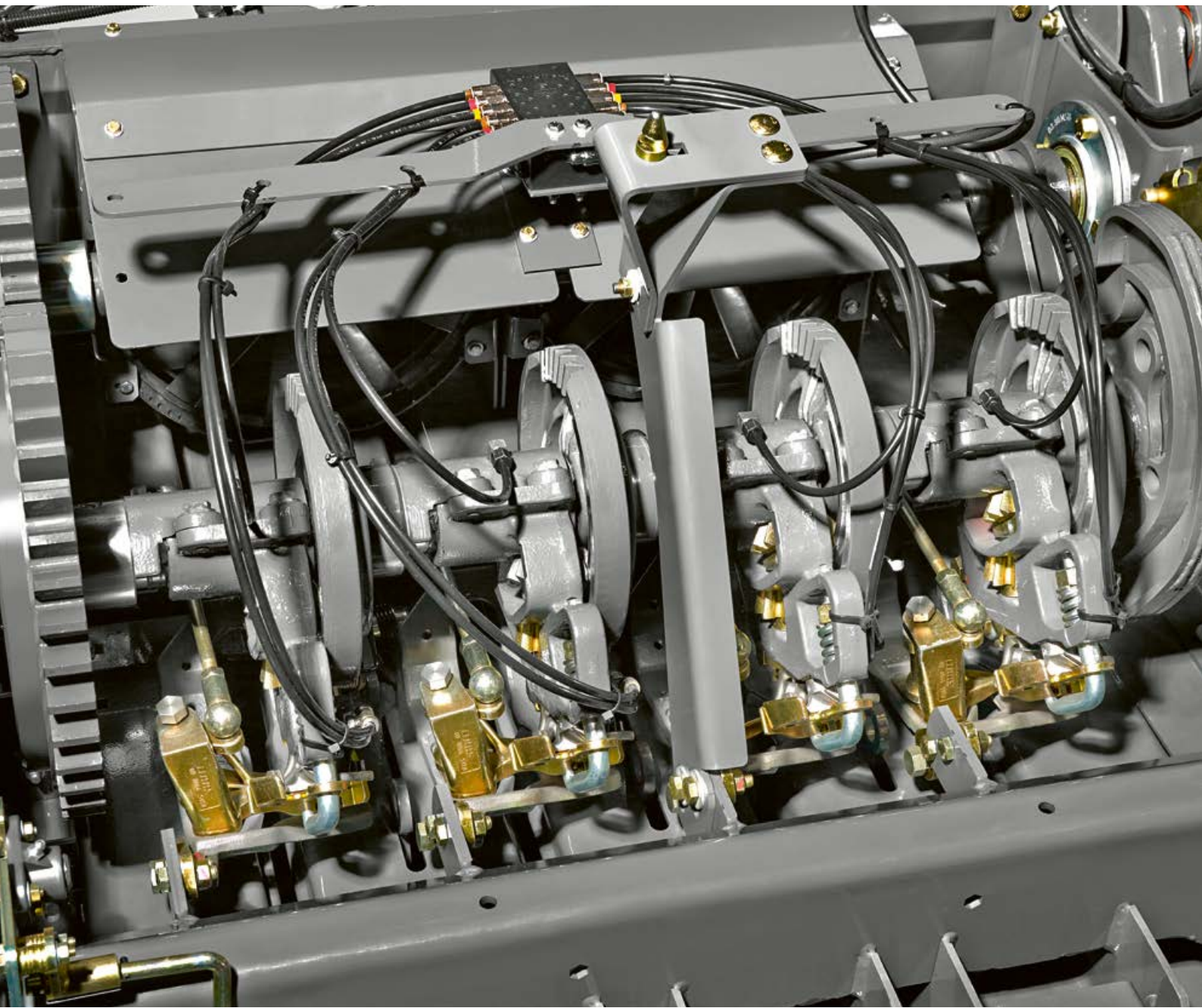
## Special protection.

The feed rake is efficiently and effectively protected by the specially synchronised auxiliary safety clutch to 4,300 Nm and reliably prevents the machine from being brought to a standstill. The torque increase of 26 percent ensures a high level of performance, delivering maximum operating comfort.

## Robust connection.

The new riveted front chassis and the similarly riveted centre section afford greater elasticity and higher shear resistance, as on all other QUADRANT balers.





The CLAAS knotter.

CLAAS balers would be inconceivable without the legendary CLAAS knotter. The individual knotter was the first CLAAS patented product, and in 1921 was awarded a DLG medal. Today, CLAAS remains the only agricultural machinery manufacturer worldwide to develop and manufacture its own knotters.

The CLAAS knotter has, in the past, helped shape the global success of CLAAS balers immensely, and ensures super-tight knots.



Clean and efficient.

The efficient TURBO FAN dual fan removes harmful stalked parts, short straw and dust from the knotter area to ensure perfect work results and outstanding functional reliability even in extremely dry conditions. What's more, the system virtually eliminates the time required for cleaning.

Efficient.

CLAAS baling twine is specifically designed for CLAAS knotters. The twine is highly tear-resistant and sufficiently flexible to minimise wear to the knotter. With each new refilling, four twine spools per knotter can be tied together without having to alternate between them, which saves time. An intelligent balance of high knot tightness and efficient run length makes CLAAS baling twine a cost-effective choice. CLAAS baling twine is available for all balers, and for different operating conditions.



Bound to hold.

CLAAS high-performance knotters are renowned for their unparalleled knot tightness and quality. The four knotters are driven directly via a cardan shaft and operate extremely quickly, reliably and with razor-sharp precision. The new knotter concept with active twine pusher, aggressive clamping plate and electromechanical twine start enhances tying reliability under all conditions. The direct drive ensures permanent synchronisation between the baling ram and needles. If the needles remain motionless in the baling channel, the baling ram is blocked automatically to prevent a collision with the needles.



Productive.

The large twine boxes on the QUADRANT 4000 can be opened up to the side in order to feed the twine to the knotters more easily when restocking, and to make it easier to clean the machine. In total, the boxes house 16 rolls of 130 to 150 m/kg baler twine – enough for a very long day in the field.

A further advantage: the knotters do not produce dangerous twine residues that can cause animal fatalities during feeding or leave residues when the bales are burned for power generation.



# Square bales.



## Shape-holding.

The 2.12-metre-long baling chamber, together with its high friction resistance and the packer ram driven by the large main gearbox, has the potential to produce super-hard bales even at high throughput rates. The baling ram is guided securely via four large guide rollers, and together with its adjustable side plates delivers a perfect bale density in all conditions. Straw, hay and silage are compressed into small slices in record time: 61 ram strokes per minute and hydraulic pressure applied from above ensure highly and uniformly compacted bales with more kilograms per cubic metre.

## Compact.

The baling pressure can be easily and quickly adjusted to the prevalent conditions at any time via the control panel. The well-positioned guide wheel facilitates high-accuracy monitoring of the bale-length configuration. Bale lengths are fully adjustable within a generous range of 70 to 240 cm. The clean-cut, perfectly right-angled bales leave the bale chamber as highly compact and dense blocks to be deposited onto the field via the roller chute.



## New chamber concept for high density.

The harvested crop is highly compacted in the bale chamber to produce solid, stable bales with hydraulic adjustment of the baling channel from the comfort of the cab. Each bale is compressed and shaped to a uniform density and length; the perfect result for a balanced and seamless truck-loading procedure.

## Smooth drop.

Important information for all baling contractors: with the optional bale ejector, the bale chamber is fully cleared, since it also ejects the last two bales. When it comes to cleaning and preparing the baler for winter, too, nothing remains behind. You can control the bale ejector directly on the exterior of the baler.

The roller bale chute slides the bales gently onto the field.



## Two bales in one go.

With the DUO PACK bale accumulator hooked up, two bales can be stacked one on top of the other and subsequently deposited onto the field as a large-size stack. This produces stacks 80 cm in width and 100 cm in height that can be loaded directly onto conveyor vehicles using suitable clamps.



Convenient operation with the new CEMIS 700.





# A wise investment – CEMIS 700

## The convenient alternative.

Having to climb down from the cab too often not only curbs your enthusiasm for work, but also decreases your daily output. That's why we have made sure that you can monitor the decisive settings of your QUADRANT from the comfort of the cab. With the new CEMIS 700 with ISOBUS technology, it's never been easier.

The diagnostics menu means you never lose sight of the status of your baler, and it provides key speed data on the machine. A twine breakage warning system is also included.

You can control the baler as needed via the different menu options. You can preset the baling pressure, lubrication intervals and bale length on your machine. You can then fine-tune the bale length and baling pressure, initiate the tying process, read off the ram strokes per minute and monitor the right/left display while you're working – all at the push of a button.

Your QUADRANT can be equipped with the following options, which are displayed in the CEMIS 700:

- Moisture sensor
- Automatic central lubrication
- Bale length adjustment and bale length indicator
- Right/left display
- Bale length setting
- Lubrication interval adjustment
- Residual moisture display
- Job management

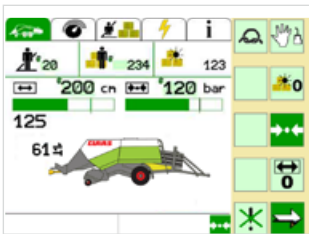
A total of 20 customer memories are available for job data collection. These store the operating duration and the number of bales produced per customer for invoicing.

## Every bale at just the length you want it.

The star wheel reliably measures the bale length and ensures uniform measurements.

Standard:

- Pressure setting
- Pressure display
- Counter menu with 20 storage spaces
- Display of the number of ram strokes
- Display of the current baling pressure
- NEW:
- Touch screen
- Excellent feel
- Camera-compatible
- ISOBUS-compatible



**Task menu:**  
Baling pressure, ram strokes per minute, number of bales, number of customers.

Optional: bale length display, bale length setting, right/left display, moisture sensor, bale deposit sensor.



**Job menu:**  
Up to 20 work records can be stored – details include total hours, number of bales.



**Settings menu:**  
Baling pressure, lubrication intervals, bale length optional.



**Information menu:**  
This menu provides key information on baler speeds. These include, for instance, the speeds of the main transmission and pick-up.



# Every minute counts.

## Time-saving.

Periods of downtime cost money and need to be prevented – so it's all the more crucial that care and maintenance routines on machines are performed just as quickly and smoothly as the harvesting process itself.

## Self-lubricating.

In principle, we could skip the topic of maintenance because it simply isn't an issue for QUADRANT owners.

On the QUADRANT 4000, everything is designed either to be easy to maintain or to require no maintenance at all.

- Drives and overload clutches operate in an oil bath
- The drive has only a minimal number of moving parts

The QUADRANT 4000 is optimally equipped for tough, continuous operation. The optional automatic central lubrication supplies all essential machine parts: feed rake and needles, baling ram and knotter. With its 2-litre tank, the central lubrication system greases the QUADRANT at 45 lubrication points. The lubrication intervals are configured ex factory. Optional: The lubrication intervals can be set directly via the CEMIS 700 in keeping with your requirements and workloads.



## Hard-working yet easy on soils.

A single axle with large 500/55 R 20 tyres is available for the QUADRANT for minimal ground pressure, optimal turf protection and excellent smooth running. The configuration provides a massive footprint to minimise damaging ground pressure, even on very light or wet soil.





Delivers on its promise.

In operation







"The packer tine technology ensures that the important proteins are preserved."

Julien Alain manages an equestrian centre in St Victoret near Marseille, France, home to around 100 horses. During the harvesting period, he recruits the services of contractor Olivier Bornand, from Tarascon. Olivier Bornand uses the new QUADRANT 4000 to bale hay for the horse business. The major selling point here is the forage protection that the packer tine technology of the QUADRANT 4000 affords. "As a source of protein, alfalfa plays a very important role in rearing racehorses", Julien Alain says. Olivier Bornand: "When it comes to alfalfa, it's crucial that the leafy material remains attached at the stem. The advantage of the QUADRANT 4000 is that the full extent of the forage stalk is drawn into the machine, preventing the leafy mass from tearing. The harvested crop is fed by a feed rake. This is especially important when it comes to animal forage, to ensure that the protein content is preserved."

"Everyone finds the dimensions very user-friendly."

Julien Alain again: "The 80/50-cm bales offer huge advantages, since bales of this size can be moved using small tractors, or even manually." When it comes to equestrian centres, the smaller bale size is an important consideration in the way the business operates. The individual bale slices, too, have a practical shape, particularly in the initial cut. "The slices are ideally suited to our regular customers, since they cover the horses' daily nutritional requirements", Olivier Bornand says.

"Very easy to operate, and extremely precise."

Julien Alain has come to appreciate the control terminal on the QUADRANT 4000. He hadn't used the system before, but was able to familiarise himself with it in no time at all: "Using the control terminal, I'm able to set the bale length and baling pressure in bar, and I have complete control over the machine." For Olivier Bornand, as a contractor, the increased straw density creates new market potential. With potential bale weights of up to 240 kg, transport costs can be slashed – an economic consideration that shouldn't be underestimated.



Julien Alain and Olivier Bornand both agree – the new QUADRANT 4000 is very user-friendly and works extremely fast. And the forage quality is great – all in all, an excellent investment.





More service from us – more success for you.



CLAAS ORIGINAL – for a long machine service life.

Members of the First CLAAS Service teams from CLAAS sales partners worldwide are available round the clock to provide a full spare parts supply and reliable service. They are on hand to assist you at any time, with expert knowledge, experience and a genuine commitment to you and your machine, and can also supply CLAAS ORIGINAL parts, characterised by top quality, superb function and a long service life, within very short timeframes.

Good customer service means one thing above all – available in your area.

Our central parts warehouse in Hamm (Germany) delivers all CLAAS ORIGINAL parts quickly and reliably all over the world. The dense network of CLAAS dealers around the world ensures that parts reach their destination as quickly as possible – wherever you happen to be.

In the best hands.

CLAAS dealers are among the most efficient agricultural technology companies in the world. Our service teams are ideally qualified and equipped with the all-important special tools and diagnostic systems. CLAAS Service stands for high-quality work which meets all your expectations with regard to expertise and reliability.

Invest in the best – invest in success!

Increasing cost pressure and narrow timeframes during the harvesting season call for measures with which you can ensure the availability of your machine – far beyond the first twelve months covered by the statutory warranty. With this in mind, CLAAS offers individual service products with easily predictable costs which ensure that you can count on a high degree of reliability and efficiency. With the CLAAS post-harvest check, maintenance contract and MAXI CARE (warranty extension) service products, we can tailor a service package to meet your specific requirements. This allows you to work on the basis of predictable costs while minimising the risk of a machine breakdown.



QUADRANT		4000
<b>Hitching</b>		
PTO shaft speed	rpm	1000
Hydraulic jack		●
Ball hitch		○
Hydraulic connection		1 dual-acting and 1 single-acting
<b>Pick-up</b>		
Width	m	2.00
DIN raking width	m	1.80
Number of tine bars		4
Ground tracking via two oscillating pick-up castor guide wheels		●
<b>Crop feed</b>		
Phase packer tines		2 ●
Packer tines	Qty.	5
<b>Bale chamber</b>		
Ram strokes	rpm	61
Max. baling pressure	bar	160
Bale ejector		●
Moisture sensor		○
<b>Bale chamber dimensions</b>		
Length	m	2.12
Width	m	0.80
Height	m	0.50
Bale length	m	0.70 – 2.40
<b>Operation</b>		
CEMIS 700		○
ISOBUS cable		●
Automatic central lubrication		●
Manual central lubrication		○
<b>Wrapping</b>		
Number of knotters		4
Number of twine reels in twine box		16 x 11.5 kg
Knotter cleaning with two blowers		●
TURBO FAN knotter cleaning system		○
<b>Bale drop onto field</b>		
Mechanically folding roller bale chute		●
<b>Dimensions and weights</b>		
Width	m	2.45
Height	m	2.73
Length in transport position	m	6.63
Length in working position	m	7.75
Height with DUO PACK	m	3.00
Length with DUO PACK	m	9.75
Weight (single axle)	kg	4210
Weight with DUO PACK	kg	4830
<b>Tyres</b>		
Single axle		500/55 R 20

CLAAS continually develops its products to meet customer requirements. This means that all products are subject to change without notice. All descriptions and specifications in this brochure should be considered approximate and may include optional equipment that is not part of the standard specifications. This brochure is designed for worldwide use. Please refer to your nearest CLAAS dealer and their price list for local specification details. Some protective panels may have been removed for photographic purposes in order to present functions clearly. To avoid any risk of danger, never remove these protective panels yourself. In this respect, please refer to the relevant instructions in the operator’s manual.

● Standard   ○ Optional   □ Available   – Unavailable





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