

LEXION
670 660 650 630 620
Stage IIb (Tier 4i)

CLAAS

LEXION. Harvest more.



More LEXION.
More advantages.





More than a first-class combine.

The LEXION name stands for the ability to cope with any challenge, to perform to the highest standards and to deliver clear, measurable results.

The LEXION embodies not only the experience gained in the course of 75 years of combine production at CLAAS, but also valuable input from customers and an understanding of the challenges which the future holds.

More powerful, more productive, more flexible, more comfortable, more profitable: the new LEXION 600 series stands for all these qualities and represents a combine class in its own right.

- Higher engine output
- New planar cooling system
- Larger grain tank
- Higher discharge rate
- CRUISE PILOT
- Reinforced cutterbar drives

LEXION – a commitment.

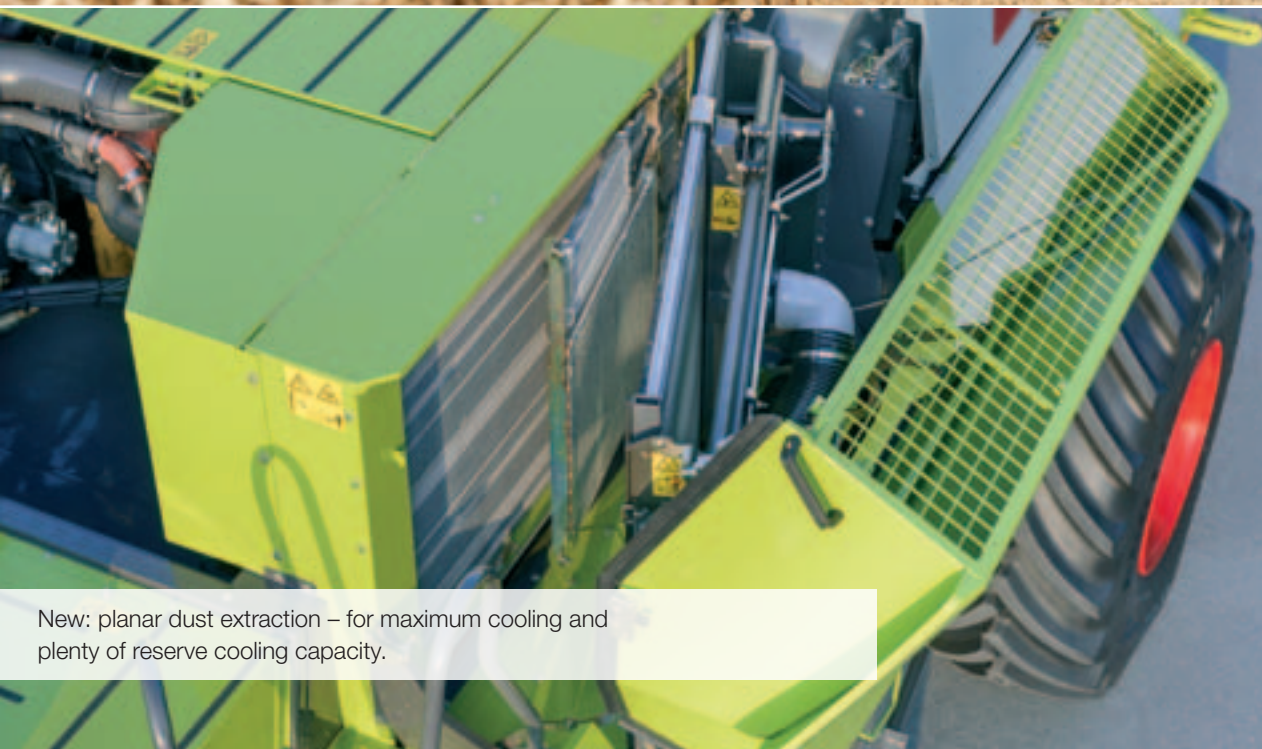
Note: This brochure uses QR codes, which you can use to access additional animated content online using your smartphone. If you are unable to use QR codes, simply enter the accompanying URL into your web browser.



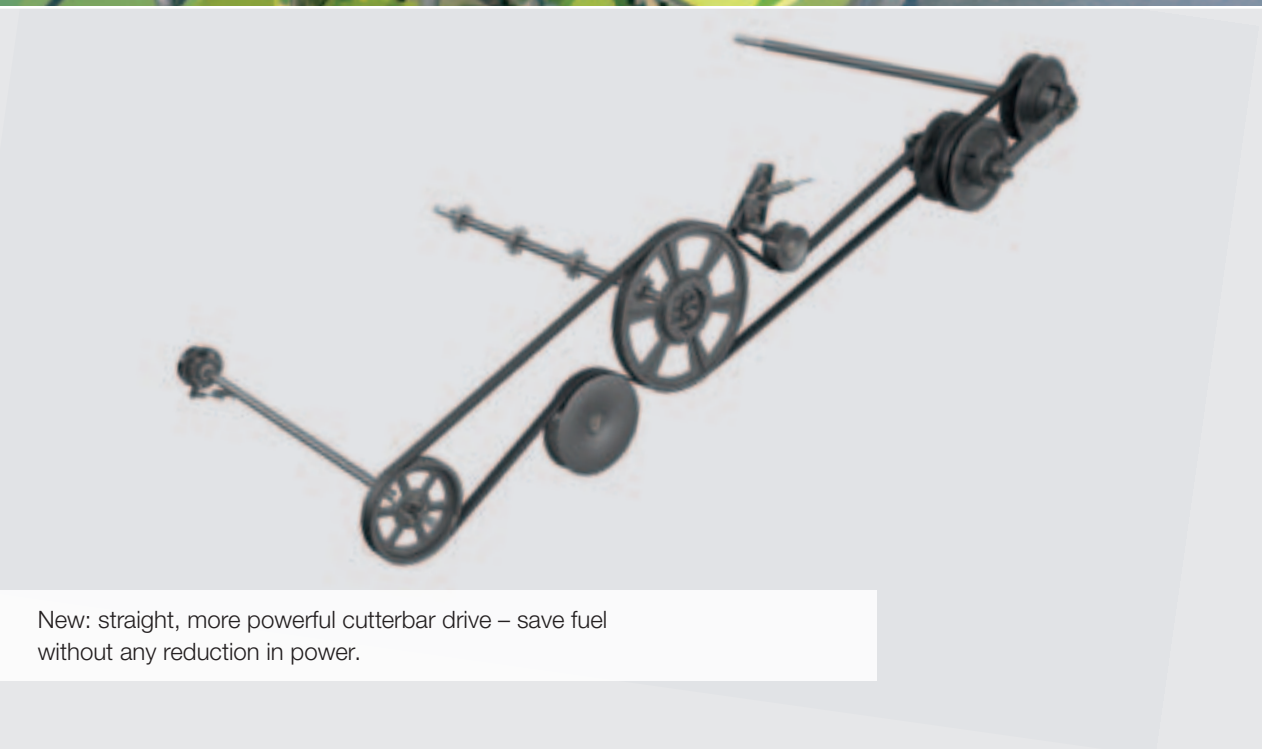
go.claas.com/newlexion



New: increased grain tank capacity with increased discharge rate – more grain in the tank.

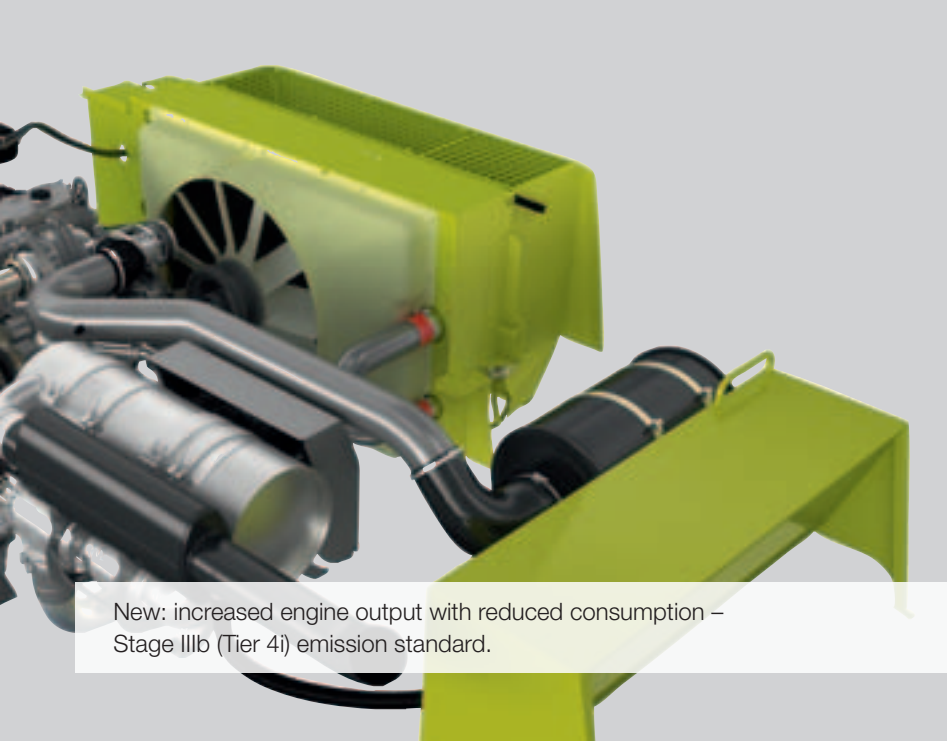


New: planar dust extraction – for maximum cooling and plenty of reserve cooling capacity.



New: straight, more powerful cutterbar drive – save fuel without any reduction in power.





New: increased engine output with reduced consumption – Stage IIIB (Tier 4i) emission standard.



New: cutterbar brake – reduced braking torque, reduced wear.



New: MONTANA feeder housing – for cutterbar widths up to 9 m.

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Committed to
operator comfort.
The cab.





Greater support for the operator. The LEXION pulls out all the stops to maintain a high level of operator motivation and sustained productivity – even when working days are particularly long.

Comfort cab



For optimal working conditions.

With even more space than the previous model, the new LEXION gives the operator freedom of movement, an overview of controls and excellent visibility on all sides. The air conditioning provides a consistent, comfortable atmosphere, which together with superb soundproofing and a three-position adjustable steering column provides first-class working conditions.



Cushions, supports, ventilates and keeps you warm: the deluxe operator's seat.

Full support for dynamic, active work while seated. Active comfort control ensures optimal ventilation and sweat removal without subjecting the operator to unhealthy draughts. The air suspension seat with automatic height control adjusts automatically to the operator's weight and effectively absorbs vibrations up to 40%. A pneumatic, two-part lumbar support keeps your back in shape while the automatic thermostat for the seat's heating keeps you warm and comfortable.

Fully featured: passenger seat with integrated cooler.

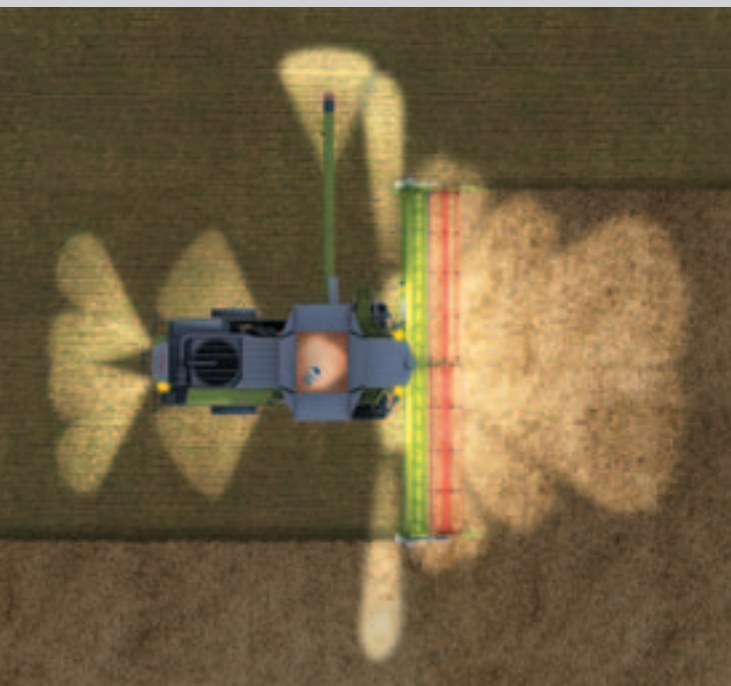
- Integrated arm support at left on door
- Foldable backrest as a table
- Large in-cab refrigerator, with 43 litres volume and a bottle holder
- Many other stowage compartments



go.claas.com/lexioncabin



More space. More comfort. A more productive workplace.



Turns night into day at the flick of a switch.

The lighting systems ensure the best visibility for the entire work area and machine parts even at night. Intelligent features, such as the afterlight function, make for a complete package. Powerful H9 and xenon lights turn night into day.

- Up to ten work lights
- Lighting for the folding front attachments
- Side lights, stubble lights, steering axle lights
- Automatic lighting of the discharge auger tube
- Automatic reverse spotlights
- Lighting for the cleaning system, grain tank and returns
- Service lights below the side panels
- Mobile work light

The operating panel gives a good overview and enables simple control of the working lights. The light settings can be adjusted easily in CEBIS.



The refrigerator (A) and passenger seat (B) make a major contribution to the excellent standard of comfort. The steering column can be adjusted three ways (C).



Cab
Lighting

EASY. Simply more.

The name says it all.

All the electronics expertise of CLAAS can be summarised in a word: EASY.

That stands for Efficient Agriculture Systems, and it lives up to the name. Equipment settings, steering systems, software solutions and more: EASY makes it all simple. Your systems can be matched perfectly with each other, enabling you to get the best performance from your combines and top results for your operation.

Go on. Go easy.

The EASY concept is made up of four components, each providing specialist competence and together forming a strong team.

- on board – combine control and performance optimisation from the cab
- on field – increased productivity directly in the field
- on track – equipment monitoring and remote diagnosis
- on farm – software solutions for your operation

Go on. Go easy.

EASY

Efficient Agriculture
Systems by CLAAS.



on board



on field



on track



on farm



Even better adjustment to changing conditions. Increase productivity. Optimise performance. EASY makes it possible.

EASY
Efficient Agriculture Systems
by CLAAS

More informed, more monitoring.



Keeping the operator in the picture at all times.

Information, registration, control and monitoring are the tasks of the CEBIS electronic on-board information system. It is distinguished by its clear, logical organisation of functions in the menu structure.

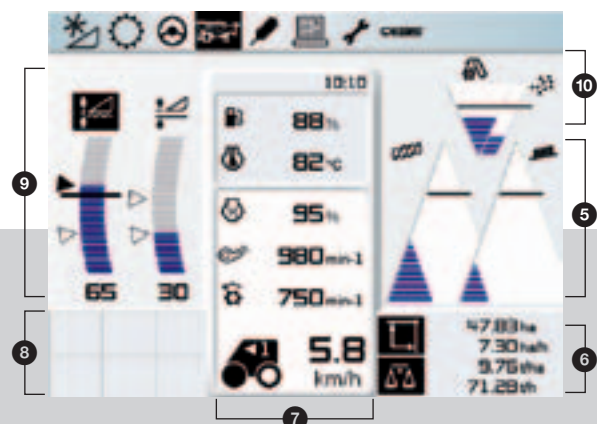
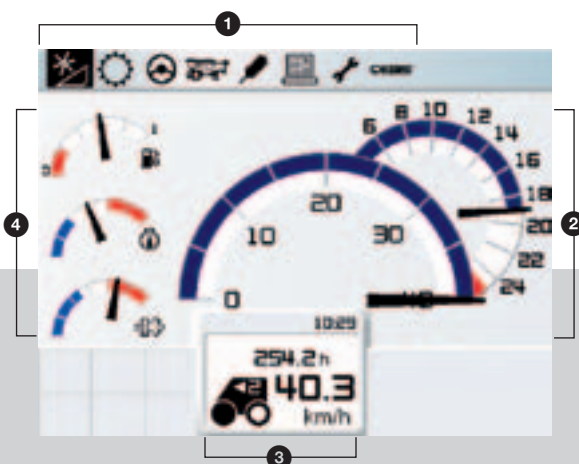
A brief glance at the CEBIS display gives an overview of the current processes and conditions: all the relevant information for driving or harvesting is summarised clearly on the screen. Warning messages are given audibly as a buzz tone and visually as icons and text.

CEBIS on the road.

- 1 Menu bar
- 2 Ground speed and rpm
- 3 Operating hours
- 4 Fuel level and temperature display as well as contamination level of diesel particulate filter (DPF)

CEBIS in the field.

- 5 Throughput monitoring
- 6 Area scaling and yield metering
- 7 Driving information (up to 40 displays freely selectable)
- 8 Message window (for alarms and information)
- 9 Front attachment position (AUTO CONTOUR/cutting height)
- 10 Returns check (volume/quality)





An eye-catching 21 cm diagonal screen.

The 8.4" colour CEBIS screen offers an ideal view thanks to its ball coupling mount which enables the monitor to be adjusted as required by the operator. It can be adjusted for inclination as well as horizontally and vertically.

Clear, simple and fast operation.

- The basic machine settings in working mode are made via the CEBIS rotary switch (B)
- An additional hotkey rotary switch allows fast access to other functions (E)
- The position of the rotary switch is shown on the CEBIS display (H)
- The CEBIS and hotkey increment control buttons (A/D) are used for menu navigation and making changes to settings
- A Compact Flash Card makes data exchange particularly easy
- New: the QUICK ACCESS button provides direct access to the last menu setting. It also offers fast access to the image from the camera

All's clear on the operating panel!

Integrated with the operator's seat, its flexible functions can be adapted as needed. Function switches include:

- A CEBIS increment control
- B CEBIS rotary switch
- C Escape
- D HOTKEY increment control
- E HOTKEY rotary switch
- F Info button
- G QUICK ACCESS button
- H CEBIS screen
- I Front attachment on/off
- J Threshing unit on/off
- K Front attachment reverser
- L Rapeseed knife, left, on/off
- M Lateral adjustment of cutterbar/ changes to values in hotkey menu/ longitudinal position of VARIO cutterbar table
- N Gear shift
- O Parking brake
- P LASER PILOT left/right preselection
- Q All-wheel drive
- R Diesel engine speed (three steps)
- S Grain tank cover open



CEBIS controls

go.claas.com/lexioncebisdemo

CEBIS screen
Control panel



Performance optimisation in CEBIS.

CEBIS allows you to access crop-specific data for the combine and automatically adjust its basic settings. For optimising performance afterwards, CEBIS has a library of measures for various problem cases for all LEXION models.

For example, if sieve losses are too high, the first measure suggested by the system is to open the upper sieve by increments of 1 mm. For this case alone, CEBIS offers eight possible actions which can be performed manually by the operator.

In this way, the driver is provided with comprehensive assistance to get the most from the performance made possible by the advanced equipment design.



More functions at your fingertips.



CMOTION. One control, greater comfort.

The multifunction control lever, which is integrated in the right armrest of the operator's seat, plays a key role in making the new LEXION so user-friendly and comfortable for the operator. The CMOTION has been specially developed for ergonomic operation by the right hand. The innovative, three-finger control concept allows several functions to be controlled intuitively without having to reposition one's hands.

- 1 Front attachment height control
- 2 AUTO PILOT (steering, CRUISE PILOT)
- 3 Extend the grain tank discharge auger
- 4 Retract the grain tank discharge auger
- 5 Cutterbar stop
- 6 Reel operation
- 7 Grain tank offloading on/off

Another toggle switch (8) is situated on the back of the multifunction control lever. With three functions assigned to it, this switch enables either manual lateral control of the cutterbar, changes to values in the hotkey menu or manual adjustment of the VARIO cutterbar table.

The choice is yours: multifunction control lever or CMOTION



CEBIS
Multifunction control lever
CMOTION

More information. CLAAS TELEMATICS.



A full overview with just a click of the mouse.

The CLAAS TELEMATICS feature enables you to access all the important data for your combine any time, anywhere via the Internet. Enjoy the benefits of CLAAS TELEMATICS.

Optimise your settings.

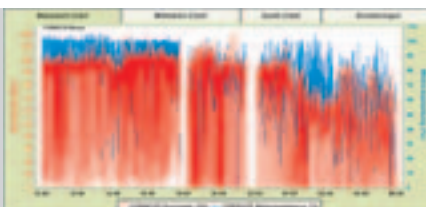
Quickly compare the performance and harvesting data for your combines on the Internet so you can fine tune the settings for the best results under all conditions every day.

Improve work processes.

A report with the operating time analysis and other important evaluations of the machine is sent by e-mail each day. This enables you to review the specific data from the previous day and determine when and how efficiently the combine operated before you start threshing again. In addition, the working tracks of the combine can be viewed together with the event log in order to optimise the transport logistics. CLAAS TELEMATICS enables planned fleet management and avoids unprofitable idle time because job orders issued in the job management module can be monitored online.

Simplify documentation.

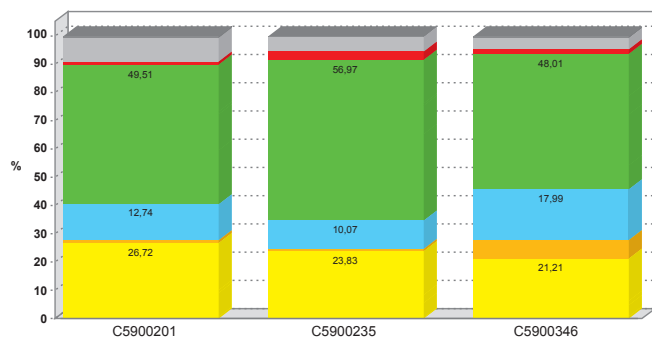
Use TELEMATICS to export the relevant data to your field catalogue and save valuable time. Transfer data on area-specific yields, for example. What's more, maps for yields, moisture and losses can be displayed graphically for quicker analysis.



Operator, farmer and dealer service can monitor all the machine data simultaneously.



Operating time analysis.



Faster service with CLAAS remote diagnostics.

CLAAS TELEMATICS can transmit service data to your CLAAS dealer if you wish. This enables your CLAAS service team to perform an initial diagnosis remotely if required, identify causes more quickly and prepare to provide the most effective assistance in the field as quickly as possible.

How you benefit:

- Readout of stored errors
- Checking of combine parameters such as hydraulic pressure
- Checking sensor systems for engine speed, etc.
- Configuring the combine
- Machine location can be determined quickly

Status	C5900201	C5900235	C5900346
Total time	100.00%	100.00%	100.00%
Offloading during operation	26.72%	23.83%	21.21%
Offloading while stopped	0.98%	0.78%	6.54%
Turning time	12.74%	10.07%	17.99%
Processing time	49.51%	56.97%	48.01%
Idle time	1.02%	2.84%	1.54%
Engine off	8.41%	5.19%	3.97%
Other time	0.62%	0.32%	0.74 %

The location and path of the combine are shown against the background of satellite photos from Google™ Earth.



CLAAS TELEMATICS



Electronics system.

Data can be processed and sent faster than ever. The electronics system improves the function of the entire electronic control of the LEXION. With its extremely fast on-board network, the LEXION is already prepared to meet the far-reaching challenges of the future.

- All data is backed up when a specific task is completed or the working day comes to an end
- The data can be printed out on the combine or transferred with a data card
- All data can be viewed and processed further on a PC
- Daily counts, crop counts and total counts can also be displayed and printed in CEBIS

Job management.

You can manage your work orders with CEBIS. Moreover, with AGROCOM MAP START software from CLAAS you can prepare customer and parcel data to be run and processed with CEBIS.

Yield mapping.

Building on the foundation of the job management functions, you can use your LEXION to perform yield mapping. Sensors in the LEXION measure the yield and grain moisture while CEBIS adds geographic coordinates using GPS satellite data.

All measurements are stored on portable chip cards to facilitate transfer. AGROCOM MAP START software is included to enable you to produce informative yield maps to use as a basis for your future production strategy.



All electronic connections meet in the cab.



The working tracks picked up by GPS can be displayed in CEBIS.



Greater potential when you need it.



CRUISE PILOT: automatic forward travel control.

The CLAAS CRUISE PILOT automatically controls the harvesting speed for best results. Depending on the travel mode, the system uses various equipment parameters simultaneously for control: ground speed, crop volume in the feeder housing, engine load and grain losses.

The following travel modes are available, the parameters always being adjusted on the basis of the engine load:

- Constant speed – specified target speed
- Constant throughput – specified target throughput
- Constant throughput with losses – specified target throughput and loss rate

The factor responsible for restricting the harvesting speed, e.g. engine load, losses or throughput, is indicated in CEBIS.

To enable superior control of the LEXION's power, you can set a maximum speed and five control response levels with quick, easy operation via the hotkey.

You benefit from the CRUISE PILOT's anticipatory working behaviour, which responds before peak system loads occur. This keeps your LEXION running automatically at the upper limit of productivity at all times and gives better harvest results.



A wealth of information can be printed whenever required.

Job management
Yield mapping
CRUISE PILOT

More precise steering.



Choose from three automatic steering systems.

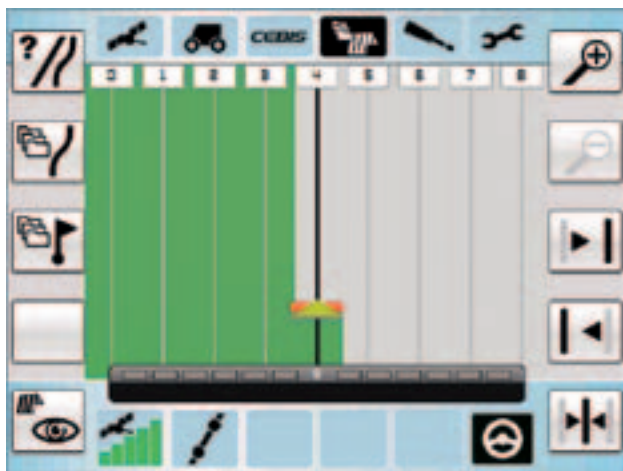
All the new LEXION models can be equipped with three automatic steering systems which can be selected as needed according to application.

- GPS PILOT – the satellite-supported guidance system
- LASER PILOT – the electro-optical guidance system
- AUTO PILOT – the electro-mechanical guidance system

GPS PILOT.

The satellite-guided GPS PILOT uses global positioning system signals to guide the LEXION automatically along the cut edge of the crop with up to 2 cm accuracy. Simply divide your field into identically sized sections using GPS PILOT. No more time wasted on unproductive cutting of leftover strips.

GPS PILOT uses the multifunctional CEBIS MOBILE colour display; concurrent operation of CEMOS software is possible.



The ISOBUS-enabled CEBIS MOBILE can be put to use quickly and easily. After the harvest, it can be used for GPS steering of tractors or as an ISOBUS terminal for controlling implements.

GPS PILOT is shown on the CEBIS MOBILE colour display.





LASER PILOT.

The electro-optical sensors of the LASER PILOT use pulses of light to scan between the crop and stubble and guide the LEXION automatically along the edge.

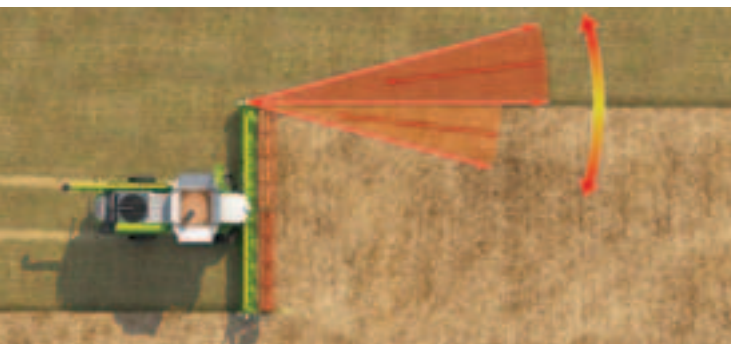
The LASER PILOT can be folded away for transport and is available for both the left and right side of the cutterbar. Its optimal positioning on the cutterbar side close to the crop edge enables a good viewing angle and ensures high functional reliability even with laid crops and slopes.

AUTO PILOT.

Two digital sensors, incorporated in one of the picker units, record the position of the LEXION and automatically guide it on the best path through the rows of maize in all field conditions. In this way, AUTO PILOT contributes to greater performance and efficiency.

How you benefit.

- High functional reliability and safety regardless of visibility conditions
- Optimal use of the full width of the cutterbar
- Greater precision for mapping areas and yields
- Reduced fuel consumption
- Reduced turning times
- Increased seasonal performance
- Significant reduction in workload for the operator, enabling greater concentration on threshing



LASER
PILOT

AUTO
PILOT



Automatic guidance systems

Committed to meeting diverse
harvesting requirements.
The cutterbars.



Standard cutterbar



VARIO cutterbar



Rapeseed cutterbar



Rice cutterbar



Folding cutterbar



FLEX soybean cutterbar



CONSPED



SUNSPEED



RAKE UP



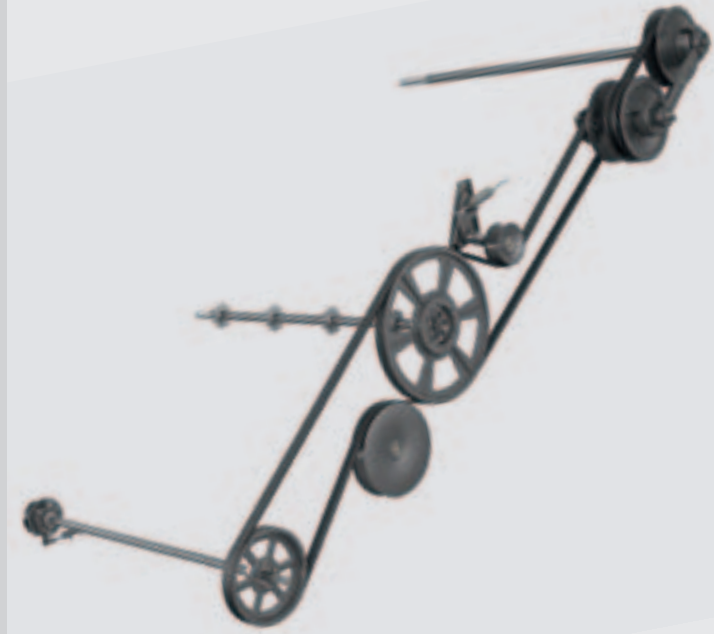
MAXFLO



Greater scope for matching your requirements.
Whatever the harvesting task, your LEXION is ideally equipped.

Front attachments

Higher feeder performance.



Universal feeder housing.

The universal feeder housing works for all crops, avoiding time-consuming changeovers. A shallow intake angle to the threshing parts facilitates optimal crop flow. Rugged intake chains with feeder slats ensure high stability, and a replaceable wear plate guarantees long service life. There is a hydraulic cylinder on both the right and left sides for controlling the AUTO CONTOUR.

The feeder housing can be equipped with an additional middle support roll. Greater support of the feeder slats in the guide roller increases stability and optimises the guidance of the chain. In addition, an enclosed guide roller is available for use in dry and low-straw conditions.

New: MONTANA feeder housing up to 9 m wide.

Based on the axle position, the innovative MULTI CONTOUR system moves the pivoting frame, adjusts the cutting angle and performs all the familiar AUTO CONTOUR functions.

The new MONTANA feeder housing is equipped with a horizontal cylinder for cutting angle adjustment as well as two vertical cylinders for AUTO CONTOUR control and side slope levelling. The new, reinforced design enables harvesting with a VARIO cutterbar up to 9 metres wide.

HP feeder housing.

The HP (header pitch) feeder housing allows fast, simple adjustment of the cutting angle to adapt to all field conditions. From the central position the cutting angle can be moved 8° back and 11° forward.

The AUTO CONTOUR cylinder ensures a clean cut



Position display of the cutterbar lateral control in CEBIS



New: straight cutterbar drive.

Reduce fuel consumption without reducing power – the straight cutterbar drive plays a key role in making this possible. The great benefit of this design is that it allows the power to be used to the full. Combine performance is increasing all the time, and with it the volume that has to be transported through the feeder housing. Drive systems have to be able to meet these growing requirements.

The new LEXION drives impress with outputs of 80 kW (constant), 120 kW (variable) or 150 kW (step drive) as well as variators with belts up to 51 mm wide and powerbands with up to four grooves. This means that CLAAS is able to offer the right drive for every application profile and can therefore ensure top throughput rates.

New: cutterbar brake.

Effective protection against foreign bodies and other causes of damage: the cutterbar brake (1) allows the front attachment to be stopped immediately if necessary by means of the multifunction control lever. As the new cutterbar brake is fitted directly on the feeder housing, only a small mass has to be braked. This means less braking torque and less wear.

Hydraulic reverse.

Blockages are taken care of easily; the hydraulic system (2) enables protective reversing with high starting torque. The hydraulic reverse can be actuated conveniently with a toggle switch in the cab. The direction of rotation of the hydraulic reel drive also changes automatically, providing additional support for the reversing procedure.



For a clear view: dust extraction at the feeder housing

Feeder housing



Cutterbars for every crop.

In all harvest regions around the world, there is a CLAAS cutterbar to handle the job for any threshable crop: grains like wheat, rye, barley, oats and triticale or rapeseed, maize, sunflowers, rice, soybeans, flax, beans, lentils, grass and clover seed or millet. Benefit from the unique combination of high-quality performance and equipment features.

Multicoupler.

The central connection coupling for all the hydraulic and electronic connections to the cutterbar.

- You gain valuable time due to shorter attachment and removal procedures
- No danger of confusion thanks to the integrated design
- Easy to connect, even under pressure
- Environmentally friendly with no oil leakage

Central locking system.

A single lever on the left side of the cutterbar operates all locks simultaneously.

Replacement knife bar and crop lifters.

All CLAAS cutterbars are factory-equipped with a replacement knife bar. The knife sections are made of hardened material and are therefore extremely durable.

The use of crop lifters enables loss-free pickup of laid crops in particular while reducing the intake of stones. Crop lifter replacements can be carried conveniently on the rear side of the cutterbar.

Greater convenience with the MultiCoupler and central locking.



More good reasons for CLAAS attachments.

Automatic soft start system.

Gradual running up of the cutterbar avoids peak loads on drives.

Hydrostatic reel drive.

A variable displacement pump on the basic machine supplies a maximum torque of 1000 Nm at the reel. The reel speed is automatically adjusted independently of the ground speed.

- Plenty of pulling power thanks to high torque
- Greater efficiency than gear pumps
- A closed hydraulic circuit ensures better reel rotation
- Fast adjustment of the reel speed
- Large reel clearance height

Versatile road transport trailers.

Like the cutterbars themselves, the CLAAS trailers are also extremely versatile. Once the supports have been adjusted, every SUNSPEED and certain CONSPEED and CONSPEED LINEAR models can be transported safely. This means that you can transport up to four different front attachments with just one trailer - and save on costs and storage space at the same time.

Single-axle trailers are available for cutterbar widths of 3.7 m to 6.6 m; single and twin-axle trailers are available for cutterbars 7.5 m wide and twin-axle trailers are available for cutterbar widths from 9 m to 12 m. Depending on the specific trailer, braked and unbraked variants as well as 25 km/h and 30 km/h variants are available. With the LEXION 670 TERRA TRAC, for example, you can transport your cutterbar safely at 30 km/h.



Additional crop lifters stored
directly on the cutterbar



Cutterbar convenience

Higher performance in rapeseed.

Even crop flow.

The VARIO high-performance cutterbar feeds the crop evenly to the threshing system. This is the only way to enhance performance and fully utilise the machine's technical performance potential. Furthermore, it reduces fuel consumption and helps the operator to boost productivity significantly. Additional advantages include:

- Adjusts to handle different stalk lengths perfectly
- High RPM stability in the engine, threshing and separation units and the cleaning system
- Extremely consistent performance
- No load peaks in the threshing equipment
- Protection of the drives

New: the reels for V 900 and V 750.

Significantly reduced risk of wrapping: the enhanced reel design with optimised reel tine carriers from the V 1200 and V 1050 high-performance cutterbars has also been adopted for the V 900 und V 750.

V 1200 und V 1050 high-performance cutterbars.

- Robust drive concept with dual-sided, synchronised knife drive for optimum low-noise operation
- Linear drive of the divided knife makes for an increased cutting frequency of 1344 strokes per minute
- Centre-bearing supported reel and intake auger for greater stability and optimal crop flow
- Larger 660 mm diameter intake auger for significantly improved anti-wrapping protection and better crop uptake
- Externally adjustable stripper bars for reliable crop flow
- Enhanced reel design with optimised reel tine carriers and bearings for significantly reduced risk of wrapping
- Hydraulic pump for rapeseed knives that can be switched on and off to reduce the power required and so reduce wear
- Overload protection features protect against damage

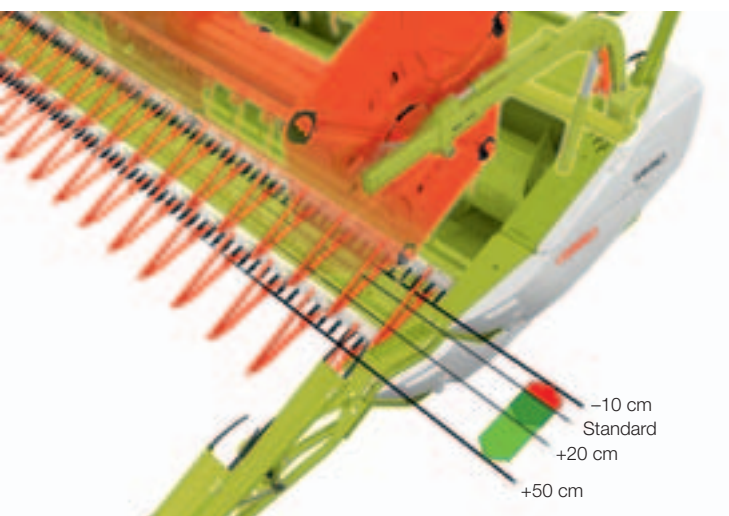
V 1200 and V 1050
transmission drive





Rapeseed requires particular attention.

Ripe rapeseed pods need careful handling during threshing, because they often burst and grains scatter in all directions. Thus the rapeseed deflector and extension are indispensable parts of the rapeseed equipment on VARIO cutterbars to minimise losses.



The rapeseed kit can be stored in a box on the trailer for road transport, saving a great deal of weight on the cutterbar.

The right cut.

For grain harvesting, the cutterbar table can be extended by up to 20 cm or shortened by as much as 10 cm to keep the crop flow even and ensure efficient, trouble-free working.

For rapeseed, the cutterbar table can be moved forward by 50 cm – the integrated rapeseed table is ready in no time.

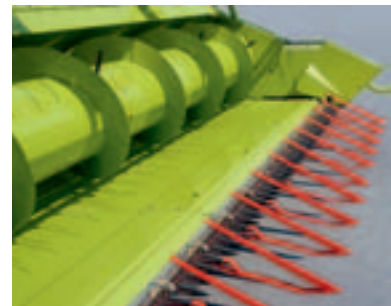
Hydraulically driven side cutters on the right and on the left (the latter can be switched on and off at will) can be fitted quickly and easily without additional tools.

The knife bar comes with an integrated hydraulic drive.

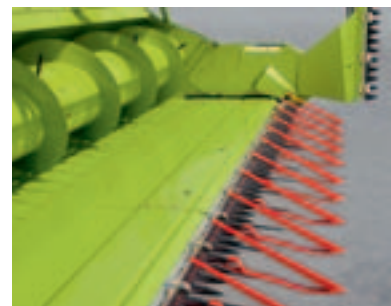
Knife position –10 cm



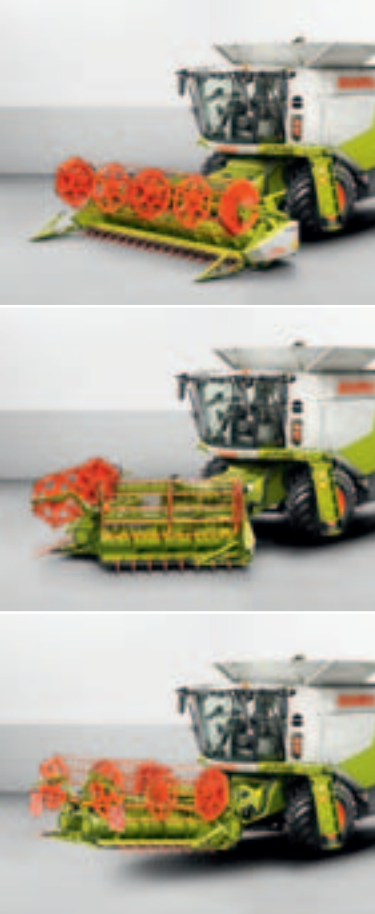
Knife position +20 cm



Knife position +50 cm



VARIO cutterbar
Rapeseed cutterbar



The folding cutterbar offers numerous advantages.

Narrow roads, challenging lanes, heavy traffic: with its folding cutterbar, the LEXION lets nothing stand in the way of top daily output. The folding cutterbars do away with the need to attach and detach the cutterbar, ensure optimal handling during travel with outstanding visibility and facilitate transfers from one field to the next with practically no interruption in productive working.

How you benefit:

- No additional trailer necessary
- Drastically reduced set-up times
- Tremendous savings of time and costs
- Extremely easy operation
- High operational reliability
- Safer in road traffic
- Greater efficiency
- Better scheduling

FLEX cutterbar:
coveted down-to-earth quality.

Legumes such as soybeans grow in pods close to the ground. Thus to prevent substantial losses during harvesting, the crops must be cut as close as possible to the ground to ensure that every last pod gets picked up by the machine.

FLEX soybean cutterbars by CLAAS are equipped with a flexible knife bar that automatically adapts to the slightest ground contours. The knife bar can flex up to 100 mm. The intake auger, reel and knife bar are divided. Together with the cutting angle adjustment on the HP feeder housing, this prevents intake losses under all field conditions.

These cutterbars are also suited for peas and other specialised crops such as clover.

Harvest
soybeans without
losses.



Faster to cut.
Simple to fold.



Dual blade knife bar.

Rice stalks are extremely tough. To achieve clean, top quality cutting results at a high rate in this hard, unforgiving crop, all the cutterbars are equipped with a dual blade knife bar. The specially hardened knife blades are particularly durable.

Hardened intake auger.

The intensive irrigation of rice fields leads to high levels of dirt particles on the plants, which is particularly tough on combines during harvesting operations. To protect against wear, the edges of the hardened intake auger are sintered. Special deflectors on its sides reliably prevent wrapping. Altogether, these features ensure smooth crop flow and high throughput.

The deflector
protects against
wrapping

Hardened
intake auger



Rice cutterbar
FLEX cutterbar
Folding cutterbar

More picking power.

Committed to higher picking performance: CONSPEED and CONSPEED LINEAR.

Picking at a high rate while handling the ears of maize gently has a critical influence on the combine's throughput. The CONSPEED and CONSPEED LINEAR maize harvesters meet these requirements and are optimally adapted to the performance of the LEXION. The display of the snapping plate spacing in CEBIS is also ideal.

Make the most of the maximum efficiency of the CONSPEED:

- Snapping rollers with tungsten carbide coated knives
- Electrohydraulic snapping plate adjustment
- Horizontal chopper
- Reliable drives using only shafts and gears
- Durable, non-corroding plastic covers
- Automatic machine guidance via AUTO PILOT
- Simple rpm adjustment
- Can be adapted to all field conditions



A horizontal rotating knife under each snapping unit chops stalks finely so they will decompose quickly.





The CONSPEED principle with conical snapping rollers.

Each picker unit has a compact, integrated transmission for the snapping rollers, intake chains and the chopper. Each drive unit is individually protected against overload. The picker speed can be adjusted continuously using a front attachment variator. The conical snapping rollers are a particular feature of the CONSPEED. They first pull the maize plants down slowly so the ears contact the snapping plate slowly. The rest of the plant is then drawn down quickly. This design ensures a high picking rate with careful handling of the ears and low grain loss.

Convenient transport to the field and back.

The individual picking units of the hinged 6 and 8-row CONSPEED and CONSPEED LINEAR fold in hydraulically to a transport width of only three metres. This operation is performed from the cab.

The CONSPEED LINEAR principle with linear snapping rollers.

The CONSPEED LINEAR maize picker is driven by spur gears which provide six different picker speeds simply by exchanging two gearwheels. The straight, linear snapping rollers are set forward and are thus particularly rugged.

CONSPEED LINEAR sunflower kit.

The CONSPEED LINEAR maize picker can be refitted for sunflower harvesting with a kit. Knives are mounted over the snapping rollers and lateral cover extensions as well as an attachment on the back of the CONSPEED are added. The chain is turned and the guide changed.



CONSPEED
CONSPEED LINEAR



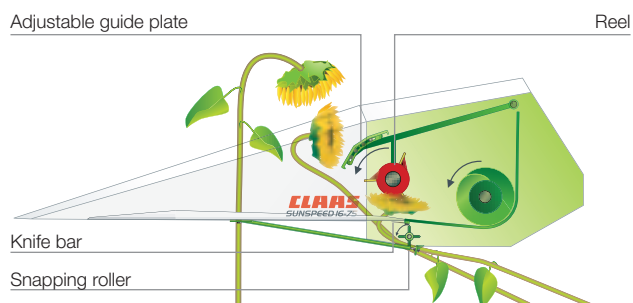
The effective SUNSPEED principle.

The SUNSPEED sunflower cutterbar was developed with the goal of achieving maximum output per unit area with the lowest losses. Particular attention was paid to keeping set-up times as short as possible and making the system extremely easy to operate.

The sunflower stems are first captured by the shuttles. An adjustable guide plate ensures that the sunflower heads are pushed to the front. At the same time, the snapping roller under the knife bar pushes the stalks down. It is impossible for them to be cut too early as this only takes place once the special reel has captured the sunflower heads. The precisely cut heads are then passed to the intake auger and feeder housing. The entire process is conducted on a row-independent basis in the most diverse harvesting conditions and ensures a high level of grain cleanness and low wear.

SUNSPEED adapts.

- Reel height and speed can be adjusted hydraulically
- Adjustable guide plates keep the stalks securely positioned so only the sunflower seed heads are harvested
- The gap between the shuttles can be adapted to the relative stalk diameter via adjustable rails – nothing gets jammed and harvesting runs like clockwork
- The angle of the shuttles is also adjustable, so they can be adapted to the most diverse harvesting conditions



Snapping roller



Adjustable shuttles



More flexibility.

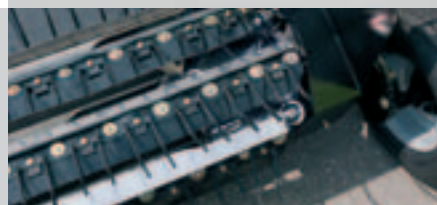
RAKE UP: the specialist.

In areas which are unsuited to direct threshing the LEXION once again proves its reliability under all imaginable conditions. The RAKE UP enables nearly all windrowed crops to be picked up. This is an extraordinarily efficient concept particularly for crops such as rapeseed and grass seed.

RAKE UP – the unique pick-up system.

This front attachment is distinguished by its cam track controlled pick-up. The controlled tines are mounted on six bars and retract downward and sideways when the crop is fed onto the belt. The additional sideways movement enables a loss-free take-up of the crop while also reducing the risk of stones being picked up. The RAKE UP feed belts run in the direction of travel and pass the crop to the intake auger with a two-part compressing rake maintaining an efficient crop flow.

The speed of the intake unit can be adjusted continuously with hydraulic control from the cab. Furthermore, the speed of the intake is adjusted automatically in line with the ground speed.



SUNSPEED
RAKE UP

A more reliable crop flow.

An exceptional transport system.

The MAXFLO proves its special efficiency above all in places with average yields. The idea is simple: the crop is cut by the knife bar and brought to the feeder housing on conveyor belts as opposed to the usual combination of cutterbar and intake auger. This principle ensures that even low quantities of material are harvested reliably.

Unlike the usual systems.

In the middle of the cutterbar, the crop is not brought to the feeder housing on a belt running in the direction of travel. With MAXFLO, feed augers mounted laterally on the intake auger pick up the material and with the support of a guide element deliver it in a cam track to the intake auger and from there to the feeder housing. This design from CLAAS ensures a particularly even flow of crop.



The guide element feeds the material gently in a cam track.



The speed of the feed belts can be adjusted continuously in CEBIS.



How the technology works.

- The drive to the synchronised, counter-directional knives is transmitted by drive shafts on the left and right on the feeder housing
- The feed augers in the cutterbar are driven by gears or hydraulically
- The speed can be adjusted to three settings (150, 200 and 250 rpm)
- The speed of the feed belts in the cutterbar can be adjusted infinitely from the cab by means of CEBIS
- The belts can be reversed
- An overload safety feature protects the linear synchronised knife drive from damage
- The unique form of the centre-bearing supported reel prevents the crop from wrapping
- Rapeseed equipment can also be fitted

Cutterbar guidance with sensors.

Up to six sensor bands on the bottom side of the cutterbar are used for AUTO CONTOUR control and cutterbar guidance. The additional chassis on the MAXFLO absorbs shocks to the cutterbar with a hydraulic cylinder and nitrogen pressure reservoir.

Two in one.

In regions where direct threshing is impossible, the MAXFLO can be used as a swather. A quick, simple changeover enables the MAXFLO to lay the whole crop in a swath:

- Remove the feed auger in the cutterbar
- Move one of the two feed belts with back panel to close the opening of the feeder housing
- Change the direction of one of the two belts so both move laterally in the same direction

Swathing is possible to the right or left. The result is an ideal windrow that can be collected later by the RAKE UP.



The MAXFLO chassis absorbs shocks to the cutterbar.



MAXFLO



CLAAS CONTOUR ensures excellent adaptation to ground contours.

The cutterbar with CLAAS CONTOUR adjusts automatically to ground irregularities along the direction of travel. You select a contact pressure and CONTOUR ensures that it will be uniformly maintained. Every time the cutterbar is lowered, the preselected cutting height ensures that the specified cutting height is always found automatically.

AUTO CONTOUR: faster and more accurate than ever.

AUTO CONTOUR goes a step further by compensating all ground irregularities, including those which are transverse to the direction of travel. Sensor bands below the cutterbar provide early detection of undulations and trigger the corresponding cutterbar cylinders on the feeder housing.

- Electronic sensors detect the hydraulic pressure in the system and react quickly
- Valve-controlled, nitrogen-filled accumulators ensure optimal shock absorption with front attachments of different weights

With fully automated comparison of the current status and the setpoint, the AUTO CONTOUR adapts the cutterbar position optimally to the terrain. This greatly simplifies the work of harvesting, particularly with large cutting widths, at night, with laid crops, on slopes and rocky ground. AUTO CONTOUR helps to increase performance and to make the use of the LEXION pay even greater dividends.



2-way cutterbar cylinders control the ground pressure precisely.



The automatic cutterbar control is activated simply by pressing the button for height adjustment on the multifunction control lever.

A more intelligent cutterbar.

Automatic reel control.

The RPM of the reel and thus its speed adjust automatically and proportionally to the ground speed. The operator can select and save various settings for the ratio of ground speed to reel speed. The reel speed can be adjusted continuously between forward, synchronous and after-running. A digital RPM sensor ensures absolutely exact adjustment of the rotation speed. Different working heights of the reel can be saved and recalled for various cutting heights. But the reel height can always be adjusted directly.

VARIO automation.

The VARIO cutterbar with automated reel control enables the reel levelling and table position to be saved and recalled by activating the automatic cutterbar control. Manual adjustments can also be made.

Automatic functions.

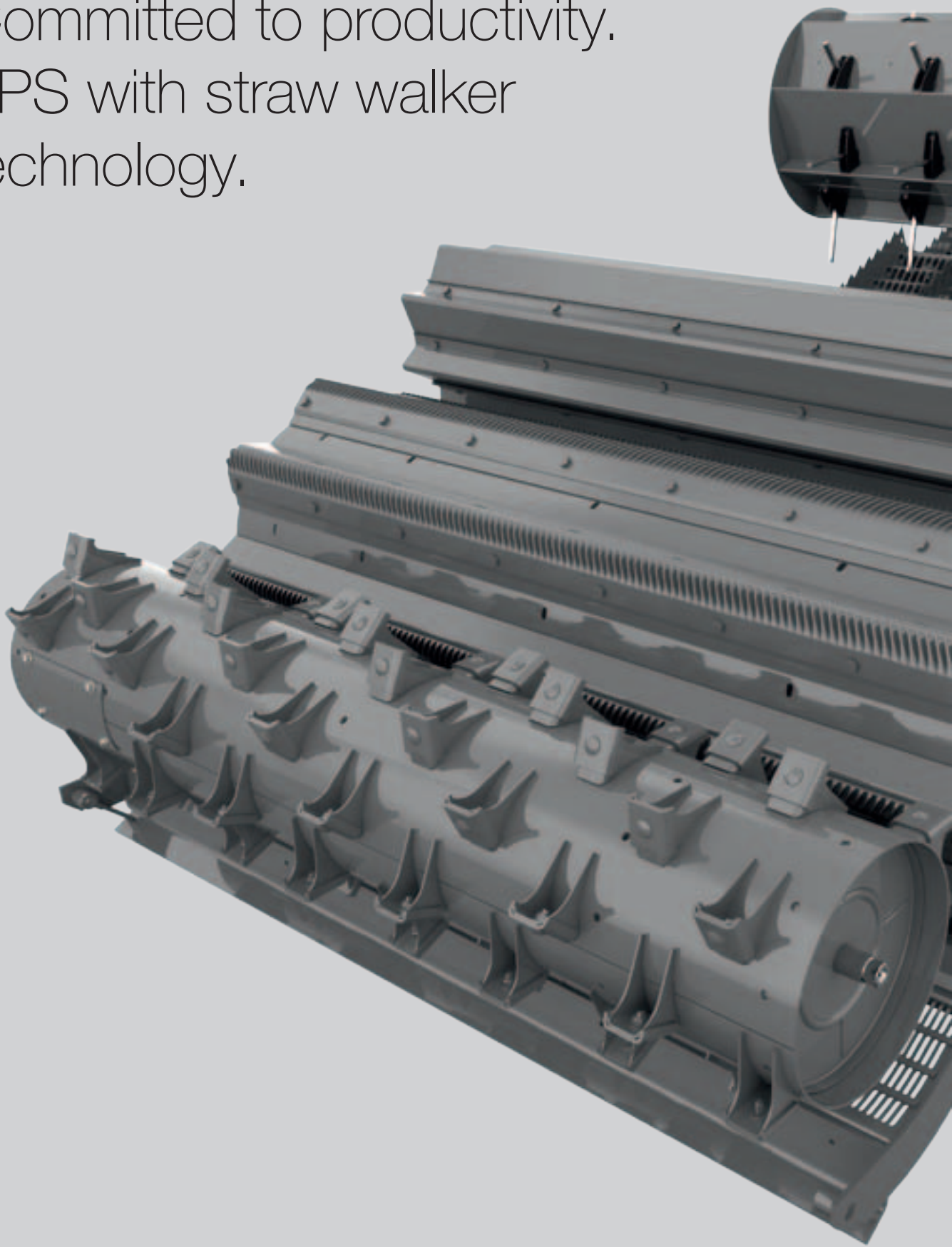
- CONTOUR / AUTO CONTOUR
- Automatic reel speed
- Automatic reel height
- Automatic reel levelling (VARIO only)
- Automatic table position (VARIO only)

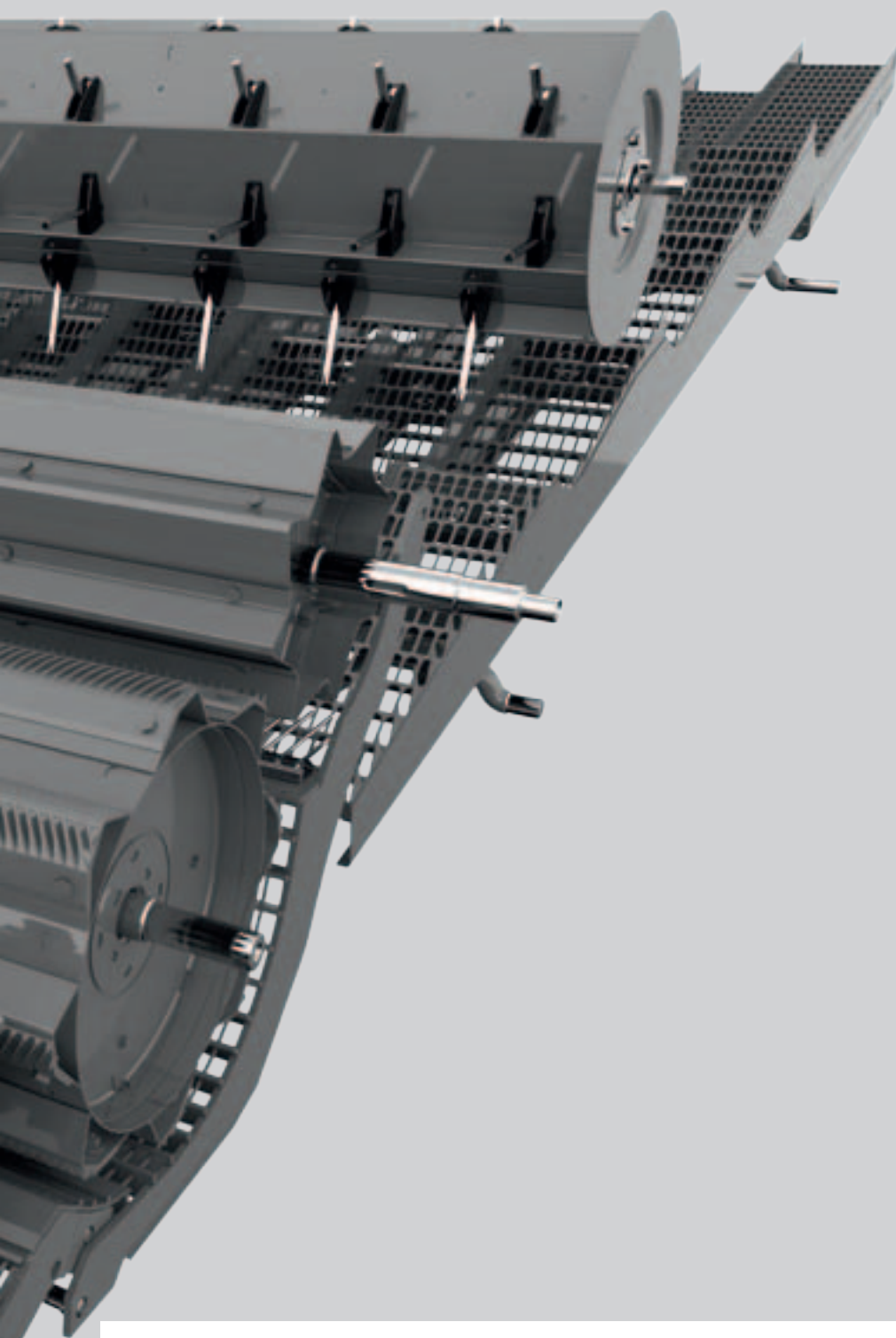


Sensor bands detect the position of the cutterbar.

Automated cutterbar control

Committed to productivity.
APS with straw walker
technology.





More ideas and intelligent solutions that create an integrated system incorporating superior technology. For outstanding seasonal performance.

Threshing technology



Unique APS threshing system.

Only CLAAS offers this outstanding high performance patented system with a pre-accelerator in the threshing unit. The decisive competitive edge of CLAAS appears well before the threshing drum, with dramatically improved acceleration of the crop flow from 3 m/s to 20 m/s, which triggers a chain of extremely efficient processes:

- The pre-accelerator separates the crop more thoroughly
- The crop flow is particularly even and up to 33% faster
- Higher centrifugal forces sort considerably more grain
- Up to 30% of all grains are already sorted in the pre-separation concave directly below the accelerator, significantly reducing the load on the main concave

Thus there is a net performance increase of up to 20% with no rise in fuel consumption.

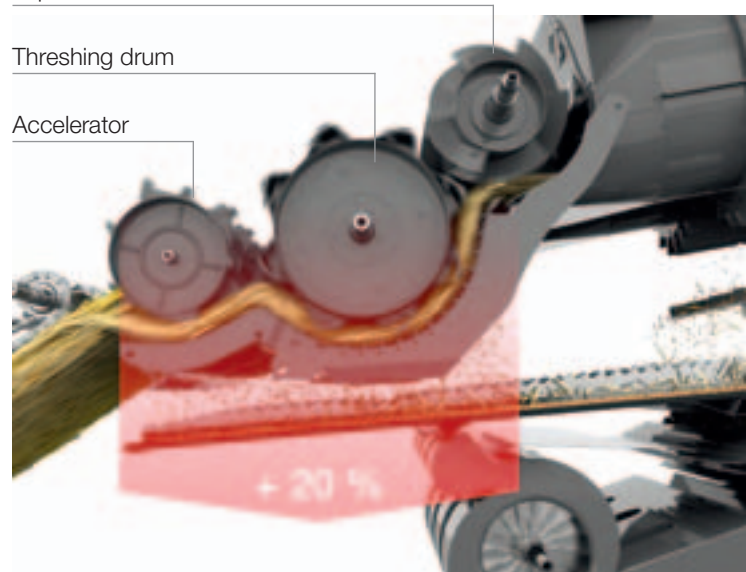
Closed threshing drum.

Along with the open rasp bar threshing drum there is a closed threshing drum available which can be used for any crop and is distinguished by its optimised crop flow, which ensures even more protective handling of the crop, as well as improved grain quality.

Impeller

Threshing drum

Accelerator



The pre-separation concave is designed as a MULTICROP concave so it can handle all types of crops. The three concave segments can be changed rapidly, minimising changeover times between crops and maximising efficiency and profitability.

Greater pre-acceleration. APS.

Overload protection increases daily output.

The concave is adjusted hydraulically from the operator's seat. Parallel concave control provides the best quality of threshing. At the same time, integrated hydraulic overload protection reliably prevents damage from foreign objects and enables you to use the full capacity of the machine without risk.

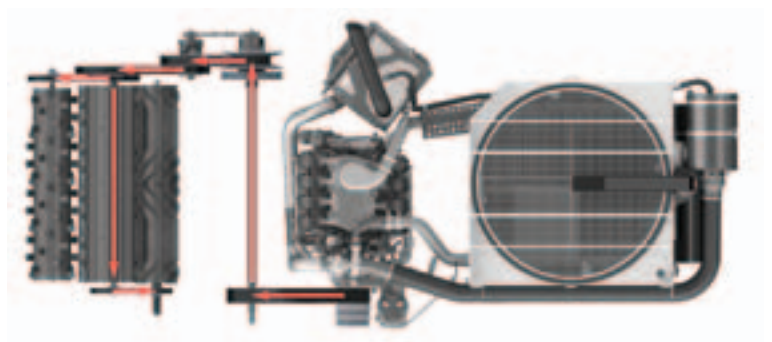
Top quality grain with the APS system.

The APS system is equipped with multistage adapters for optimal deawning. With the intensive threshing component and the deawning plates, which can be engaged in just seconds via a lever on the feeder housing, APS ensures outstanding grain quality.

Synchronised function.

The accelerator, threshing drum and impeller can be driven by a central variator. Each change in drum speed causes a corresponding adjustment of the speed of the accelerator and impeller.

The result is protective crop handling with even crop flow throughout.



The large stone trap is easy to open from the side and is self-emptying.



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lexion600aps](https://go.claas.com/lexion600aps)

APS threshing system

More residual grain separation.

Effective straw walker technology.

The APS threshing system operates so efficiently that only about 10% of the grains run through the residual grain separation stage in the LEXION. 90% of the grains have already been separated from the straw by APS.

The even flow of straw on the open-bottomed straw walkers with an extreme gradient angle ensures that practically all the grain is separated from the straw.

A separate returns pan sends the grains on their way to the preparation floor.

Residual grain separation occurs on a total length of 4400 mm across four straw walker steps. The LEXION 670/660/650 models are equipped with six straw walkers and the LEXION 630/620 models with five. Centre and side extensions are available. Even large volumes of straw are transported quickly and easily.



go.claas.com/lexionstrawwalker



The MSS loosens things up.

Thorough loosening of the straw mass is critical for high separation efficiency, particularly under difficult field conditions such as wet straw or green growth. This is why all LEXION straw walker combines are equipped with the MULTIFINGER SEPARATION SYSTEM (MSS), a drum with controlled tines positioned over the straw walkers. It ensures effective residual grain separation under all conditions.

MSS increases output.

MSS actively fluffs the crop with multiple controlled tines which dig into the straw. The tines reach in to the mat of straw from above and aerate it whilst simultaneously speeding it up and effecting active control of the crop flow. The straw mat is thinned, making it easier for the remaining grains to fall out. The available length of the straw walkers is used more effectively, whilst the structure and quality of the straw is optimised. The operation speed of the tines can be adapted to differing harvest conditions.



Fast, easy adjustment of the tines.



Straw walker technology
MULTIFINGER SEPARATION
SYSTEM (MSS)



Two-stage pre-cleaning.

A dual-ventilated straw walker step ensures intensive pre-cleaning. The multi-stage turbine fan, which is continuously adjustable from the cab, creates the necessary air flow. The fans ensure constant air pressure with uniform distribution, even with varying sieve loads, effectively increasing the cleaning capacity.

Electric sieve adjustment.

Even the sieve can be adjusted electrically from the cab.

- Easy and convenient
- No need to exit the cab
- Immediate result monitoring

Preparation floor.

Pre-sorting of the grains (top) and chaff and broken straw (bottom) takes place on the preparation floor. The resulting reduction in the load on the upper sieve increases the cleaning capacity. The six (LEXION 670–650) individual plastic elements - or four in the case of the LEXION 630/620 - can be easily pulled out to the front for cleaning the preparation floor after harvesting is completed.



Electric sieve adjustment

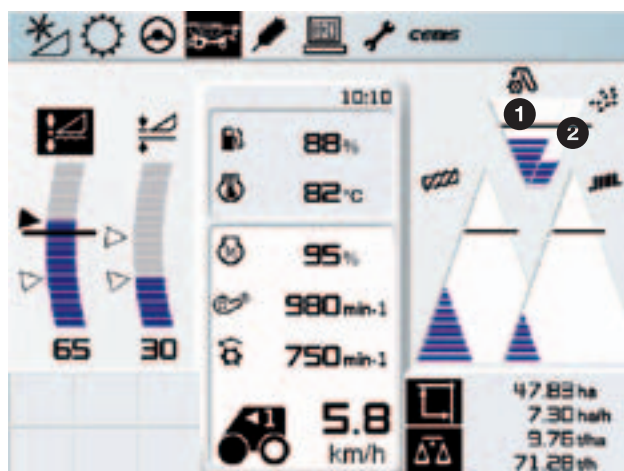


Divided grain pan that can be removed from the front

Even better cleaning. For impressive results.

3-D cleaning system.

- Dynamic sidehill levelling via active control of the upper sieve
- Completely consistent performance on sidehill slopes up to 20%
- No wear - completely maintenance free
- Fast, simple retrofitting
- Together with the AUTO CONTOUR, it is the ideal "hillside package"



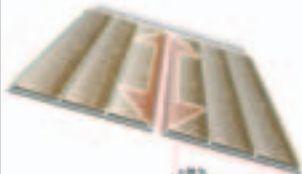
Returns and the GRAINMETER.

The fill level and composition of the returns enable conclusions to be drawn about the best equipment settings to use. The cab also enables the operator to view the well-lit returns directly whilst seated.

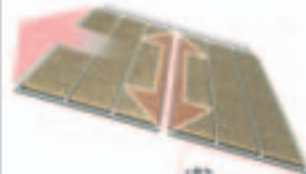
In all LEXION models, the fill level indicator (1) can be complemented by the GRAINMETER. The electronic returns quality display also allows convenient checking of the proportion of grain (2) in the returns in CEBIS.

This data enables the operator to optimise the equipment settings manually to utilise the full production capacity of the LEXION.

Without 3-D



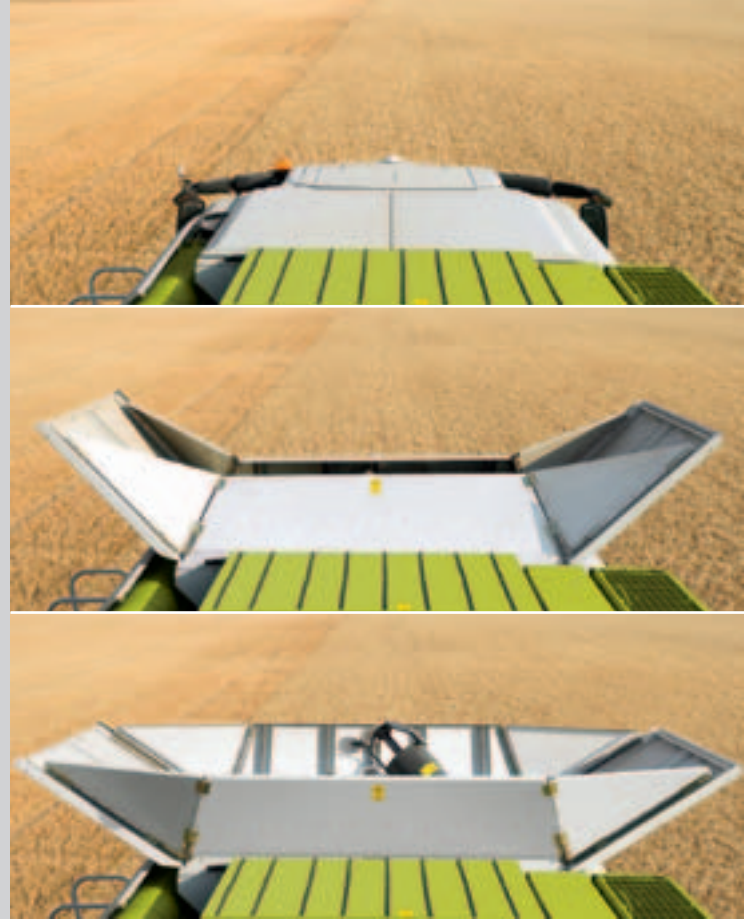
With 3-D



[go.claas.com/lexion600
cleaningsystem](https://go.claas.com/lexion600cleaningsystem)

Cleaning system

More grain in the tank.



Grain tank capacity of up to 11,000 l.

After the threshing unit, post-threshing grain separation and cleaning systems have done their work, the cleaned grain is collected in the expandable grain tank. With the volume now increased once again to as much as 11,000 litres, the new LEXION demonstrates its capacity for high productivity, enhanced by many other strengths.

The choice is yours.

With the new LEXION, you can select whichever grain tank capacity best meets your requirements:

Model	Discharging rate (l/s)	Grain tank capacity (l)
LEXION 670	110	11000
LEXION 670 MONTANA	110	10000
LEXION 660	110	11000/10000
LEXION 650	110	10000/9000
LEXION 630	110/80	9000
LEXION 630 MONTANA	110/80	9000
LEXION 620	110/80	9000/8000

PROFI CAM – everything in view.

All LEXION models can be equipped with a PROFI CAM on the edge of the grain tank discharge auger tube. This camera position has been chosen precisely to allow up to three processes to be monitored simultaneously on a colour display from the comfort of the cab:

- Grain tank discharge auger tube deployed: transfer process
- Grain tank discharge auger tube retracted: distribution of chopped material
- Grain tank discharge auger tube retracted: rear of machine during reversing or on-road operation

Up to four cameras can be connected to the system and simultaneously feed their images to the colour monitor in the cab.



The high performance turret auger delivers up to 110 litres per second from the grain tank.



PROFI CAM



Convenient yield checking.

The large window in the back wall of the cab allows convenient visual inspection of the harvested crop. The interior of the grain tank is illuminated for work at night. An inspection port provides constant access so samples can be taken manually any time.

The sample cup, which is always to hand in the space provided in the inspection port, also serves as a calibration container for determining the bulk density.

The QUANTIMETER measures and checks.

The primary functions of the QUANTIMETER are throughput measurement, moisture content measurement and data display in CEBIS. The throughput measurement is grain-specific. The moisture content of the crop is monitored continuously and displayed upon request.

During the volume measurement in the grain elevator, a photo cell records the filling of the individual paddles. Using appropriate correction factors, including the lateral and transverse tilt of the machine among other things, the QUANTIMETER automatically determines the precise quantity harvested.

All data are available in real time through CLAAS TELEMATICS or can be printed conveniently via CEBIS. Fully automatic chain tensioning for the elevator is standard with the QUANTIMETER.



Convenient
sampling



Relevant data can be printed
directly in the cab

Grain tank
Grain collection
QUANTIMETER



CLAAS straw management. With SPECIAL CUT II.

From the rotors, the straw moves directly to the chopper, which can be varied in intensity depending on the conditions. One hundred and eight closely arranged dual bladed knives, a cross blade and a bank of stationary blades are the recipe for finely chopped straw. The LEXION also has a swivelling grating element for the best straw chopping and spreading. The finely chopped material is subsequently fed to the power spreader.



- 1 Adjustable cross-cutter
- 2 Rotor shaft
- 3 Knives
- 4 Rasp bar
- 5 Adjustable friction concave plate
- 6 Adjustable stationary knife

Efficient power spreader.

The power spreader ensures perfect, top-quality straw spreading with two counter-directional discharge rotors. The entire mixture of chopped material and chaff is removed from circulation, accelerated once more and evenly distributed across the entire working width. Performance map controlled motion of the inner and outer deflectors ensures optimal spreading quality.

All this enables the LEXION to achieve efficient straw spreading with a minimal use of power, even under such unfavourable conditions as heavy straw volumes, high side winds or steep slopes. The spreading width can be adjusted overall and for each side individually in CEBIS.



[go.claas.com/
lexion600specialcut](https://go.claas.com/lexion600specialcut)

The chopper is set for straw deposition electrohydraulically at the push of a button.



More effective spreading.

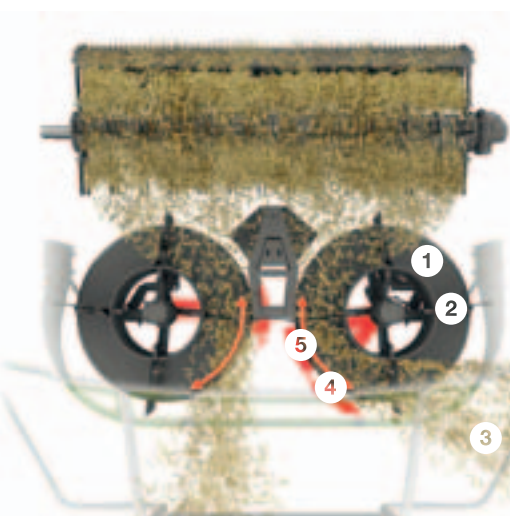
Fast-drying swaths of straw.

Thanks to the protective threshing and separation process, the straw retains its full original structure, which is ideal for high-bedding straw. When the straw chopper is switched off, the swath is laid loosely, allowing it to dry quickly and be baled easily.

Even chaff distribution.

From the sieve pans, the short straw and chaff are routed to the chaff spreader or the chaff fan. The chaff spreader is hydraulically driven and spreads the sieve pan discharge evenly behind the machine. The speed and spreading width can be adjusted individually with a flow control valve.

The chaff blower goes a step further. It receives the material and conveys it directly to the power spreader. This system has a distinct advantage: the chaff/short straw mixture, which can be as much as 25% of the total throughput, is fed to the active spreading system and distributed over the entire working width.



- 1 Spreading rotor
- 2 Paddle
- 3 Material flow
- 4 Outer deflector
- 5 Inner deflector

Setting the direction and width of spreading in CEBIS



Straw management

Committed to performance. CLAAS POWER SYSTEMS (CPS).

Optimal drive for maximum performance:
CPS.

At CLAAS, machine development means an ongoing effort to achieve even greater efficiency and reliability as well as greater profitability in the field.

Of course, this applies to all aspects of a CLAAS combine harvester. The drive system is of decisive importance – and requires much more than just a powerful engine.

In CLAAS POWER SYSTEMS, we have brought together the best components to create a drive system in a class of its own. One that always delivers the greatest power when needed. Ideally matched to the work systems and with fuel-saving technology that quickly pays for itself.

It goes without saying that the new LEXION also embodies this development philosophy: the combination of experience gained over 75 years of combine production and 15 years of LEXION development has resulted in the best ever CLAAS drive system that delivers the best working results.

CPS | CLAAS
POWER
SYSTEMS





More technological landmarks and engineering refinements:
for maximum reliability even under extreme conditions. The LEXION is ready.

CLAAS POWER SYSTEMS

More power reserves. The engines.

Advanced, high-performance engines.

Outstanding power delivery with low fuel consumption is assured by high-performance Caterpillar engines with the hydraulic electronic unit injection (HEUI) system. The pressure, timing and duration of injection are determined by the engine control unit independent of the speed. This gives the LEXION enough power to handle long, productive jobs easily even under difficult field conditions.

- CAT C 9.3 engine with displacement of 9.3 l
- Emissions standard Stage IIb (Tier 4i)
- Optimised combustion process
- Improved engine running characteristics
- Low fuel consumption
- Optimal power transmission
- Up to 800 litre fuel tank capacity
- Tested by CLAAS POWER SYSTEMS



The fuel tank:
capacity of up to 800 l



For the sake of the environment.

The high-performance engines in the LEXION comply with the new Stage IIIb (Tier 4i) emissions standard thanks to an exhaust aftertreatment system.

Exhaust-gas recirculation (EGR) with DPF.

The Caterpillar engines in the LEXION 670 to 620 comply with the new emissions standard thanks to exhaust gas recirculation (EGR) with a diesel particulate filter (DPF). The exhaust gas recirculation principle works by mixing a proportion of the engine exhaust gas with the intake air. This reduces the combustion temperature in the engine which in turn largely prevents the formation of nitrogen oxides. In addition, the particulate content in the exhaust emissions is reduced by being trapped in the diesel particulate filter. The filter is cleaned by a regular regeneration process which can be fully automated in the case of the LEXION.

New: planar dust extraction.

Already proven in the LEXION 700 series, planar dust extraction now ensures high-performance cooling in the 600 models with plenty of reserve cooling power.

As air is being drawn in at the top, an automatic dust extraction system ensures continuous cleaning of the radiator. The dust is extracted downwards. Soiling of the cooling fins is reduced significantly.

Enhanced performance calls for reserves.

Extremely high throughput requires corresponding reserves of power. The electronic engine control in the LEXION delivers a power boost from the optimised engines if a drop in speed occurs. The engine power curve has also been optimised for even better power delivery with reduced fuel consumption and a rated speed of 1900 rpm.



The planar dust extraction assembly folds down to make maintenance much easier.



go.claas.com/egr-dpf

Engine
Cooling

More performance on steep slopes.



The working hydraulics:
more lifting power, faster response.

The outstanding performance of the LEXION is now better than ever on steep slopes as well. New working hydraulics offer improved operation of the entire MONTANA control system:

- Higher efficiency of the working hydraulics thanks to an axial variable displacement pump (LS pump)
- Operating pressure 200 bar (+ 10%)
- Oil displacement of the working pump: 120 l/min (+ 50%)
- Greater front attachment lift capacity: +10% weight/+50% faster response (proportional valve technology)
- Maximum reversing power even when idling, 10% more torque
- Synthetic oil with a high viscosity index provides better friction characteristics
- Low noise thanks to constant system pressure
- Efficient pump distributor gear



Operating panel with
MONTANA control system



The positions of the axial cylinder
and the pivoting frame are
displayed in CEBIS.



Threshing just like on level ground.

The drive shaft is the key component of the LEXION MONTANA. Hydraulic swing cylinders turn the portals to adjust the wheels to the ground. The MONTANA chassis compensates cross tilt up to 17% and longitudinal tilt up to 6%, so even in steep areas high threshing output and effective work are possible just like on level ground. The operator is in an optimal, comfortable seated position in any slope situation, enabling even long working days to be handled without stress.

MULTI CONTOUR.

Based on the axle position, the innovative MULTI CONTOUR system moves the pivoting frame, adjusts the cutting angle and performs all the familiar AUTO CONTOUR functions.

3-D cleaning for extra reliability.

In the LEXION MONTANA as well, the 3-D cleaning system ensures good performance on side slopes above 17%.

The advantages of MONTANA at a glance:

- Side slope levelling up to 17%
- Longitudinal levelling up to 6%
- Suitable for cutterbars up to 9 metres wide
- Improved traction thanks to a differential lock
- Easier operation
- Improved functionality of the entire MONTANA control system thanks to working hydraulics
- 30 km/h hydrostatic ground drive
- Drives smoothly
- More comfort for the operator
- Same performance as on level fields



The differential lock enables the combine to move forward safely even on very steep slopes. The wet hydraulic multiple disc brake provides additional safety.



MONTANA



Thoroughly proven in practical use.

CLAAS has offered its proprietary TERRA TRAC system for over 20 years and there are now countless TERRA TRAC drives in use around the world. The CLAAS TERRA TRAC has proven itself in practical use in the most challenging conditions time and time again.

At home on any road.

Today's traffic conditions are making it increasingly difficult to transport large machines on public roads. What's more, the authorised width of vehicles transported on public roads is restricted by the respective road traffic regulations of each country.

A total of three different TERRA TRAC tracks are available for the LEXION 670. This means that there is a suitable TERRA TRAC for every requirement.

A new dimension of comfort.

Your LEXION moves gently over the field on the sophisticated TERRA TRAC system which features independent suspension for all its components (drive wheel, land wheel and support rollers). This reduces shocks to the body and machinery, increases operator comfort and ensures better stability on curves.

Automatic level compensation. Hydropneumatic suspension.

- The hydropneumatic suspension can be raised or lowered during operation by filling or emptying the hydraulic cylinders
- The drive wheel, land wheel and support rollers are counter-directionally pivot-mounted; hydraulic cylinders with an integrated pressure reservoir support the suspension
- This results in automatic levelling at speeds above 2 km/h for improved stability on curves



go.claas.com/terratractfunction

Three different chassis heights can be set in CEBIS to adjust the machine's ground clearance.

More ground protection in the field.

The TERRA TRAC crawler track assembly at a glance.

Taking care of the soil and preventing compaction during harvesting means you won't have to worry about crop loss in the future.

- Transport width 3.49 m
- Ground protection: 66% less pressure on the soil than with wheeled machines
- Improved traction (maize/rice/wet conditions/slopes)
- Greater stability on slopes (transverse slopes)
- Less drive resistance, less slippage, lower fuel consumption
- Longer operating times, better seasonal performance
- Completely suited for road travel at 30 km/h



635 mm



735 mm



890 mm



go.claas.com/terractransportwidth

Ground protection
TERRA TRAC

More speed on the road.

Faster than any other combine harvester.

Every minute a combine harvester saves in road travel improves performance in the field. The LEXION 670 TT attains a top speed of 30 km/h on the road.

This means that your LEXION can travel from field to field faster than any other combine harvester, with greater driving safety, a high level of comfort and outstanding directional stability. The system was recognised for these qualities in 2011 when it was awarded a silver SIMA Innovation Award. TERRA TRAC allows you to spend more time on the fields and significantly increases results for the season. Better adaptation to ground contours, uniform stubble height, less equipment stress and 30% lower ground pressure peaks make the difference clear. Soil protection means greater profit.

LEXION 670



The TERRA TRAC with hydropneumatic suspension was recognised with the silver "SIMA Innovation Award" in 2011.



30 km/h, fully suited to road travel.



Hydrostatic ground drive. New series.

The hydrostatic ground drive of the LEXION can be controlled extremely easily with the multifunction control lever without the need to operate a clutch or change gear. The new series of hydrostatic drives is characterised by increased efficiency. You benefit, as the power saved is available for use by the rest of the machine, the overall result being more efficient operation.

Thanks to the electrohydraulic control system, the LEXION can be equipped with the CRUISE PILOT for automatic forward travel control. But whether used in manual or automatic mode, it drives like a luxury car with such a high level of operating comfort that performance is enhanced immediately.

Your option for extra power: all-wheel drive. Depending on the model, it is possible to select an on-road top speed of 20, 25 or 30 km/h.

Drives like an automobile.

When driving in road traffic, the LEXION 670, 670 MONTANA and 630 MONTANA models automatically reduce the engine speed based on the position of the ground speed control lever for even lower fuel consumption during travel. Of course, the full engine power at rated speed is available at start-up.

CLAAS 4-TRAC.

Just a push of a button and the full power of the LEXION keeps you moving forward even under the most adverse ground conditions. The all-wheel drive works reliably and is maintenance-free.

Outstandingly powerful:
the CLAAS 4-TRAC all wheel
drive



TERRA TRAC
Drive train

A superior driving experience.

Tyre technology for long-term ground protection.

Intensive joint efforts between CLAAS and renowned tyre manufacturers have led to the development of this tyre technology.

Outstanding benefits: the tyres improve on-road mobility. Their greater contact area provides more traction, less slippage and lower fuel consumption for travel, and the lower tyre pressure reduces ground compaction, making a sustainable contribution to improving soil structure.

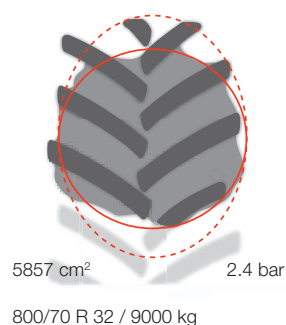
Tyre size	Standard tyres	MICHELIN CerexBib
680/85 R 32	2.9 bar	1.8 bar
800/70 R 32	2.4 bar	1.6 bar

Tyre size	Standard tyres	SVT CHO Continental
800/70 R 32	2.4 bar	1.6 bar

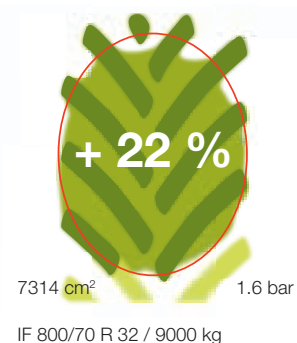
Facts and figures:

- Tyre pressure can be reduced by between 0.6 and 1.1 bar with full load capacity compared to standard tyres of the same size – this represents a reduction of 35%
- The tyres have the contact area of standard tyres two sizes larger, providing 22% more ground contact with the same transport width
- Tyres on drive axle: 800/70 R 32 and 680/85 R 32, tyres on steering axle: 620/70 R 26 and 520/80 R 26

Standard tyres



MICHELIN CerexBib



Reduced tyre pressure
for less soil compaction.



Reduced transport width
with increased contact area



Low maintenance.

The LEXION also impresses as a model of restraint where maintenance requirements are concerned. Service intervals are long: 1000 hours for the oil in the working hydraulics. And when it's time to do the job, easy access to all maintenance points makes the task fast and simple.

- The hinged radiator cover of the planar extraction system pivots all the way up
- Mobile, foldable ladder for simple access to the engine compartment and other maintenance areas
- Fully folding rear hood
- Compressed air system with compressed air hose and gun for convenient cleaning
- Lubrication banks for faster access to lubrication service points
- Storage box, for example for the toolbox
- Unique side panel design (aluminium sandwich construction) for even simpler access

Large maintenance doors at all points, lightweight and easy to open

Tyre technology
Maintenance

More service from us. More success for you.

Round-the-clock assistance.

You can rely on the professional and dependable FIRST CLAAS SERVICE® team whenever you need us. CLAAS importers and sales partners ensure optimum parts availability and reliable round-the-clock customer service worldwide.

We're there where you need us.

Our central spare parts warehouse delivers all ORIGINAL CLAAS parts quickly and reliably throughout the world. The large number of CLAAS partners ensures that they'll reach their destination in a very short time, no matter where you are.

Our diagnostics are reliable.

The vast experience of our service specialists together with cutting edge diagnostic systems, such as CDS, guarantee spot-on troubleshooting as well as reliable configuration and updates by CEBIS.





We speak your language.

CLAAS dealers are among the world's foremost agricultural engineering companies. Not only are they highly trained and equipped with the right tools, they are also extremely well acquainted with the way farmers and contractors work. They understand your expectations and can provide the professional expertise and reliability you require.

Service is close even when far away.

Every minute counts during the harvest. With CLAAS remote diagnostics you gain valuable time, and so do we. Our service staff have direct access via the internet to all the performance and electronic data of your LEXION, often enabling the problem to be solved remotely. If a service technician is required on site, we have all the necessary information in advance and can send any spare parts required right away.

Invest in the best. Invest in success!

You can count on CLAAS to offer you the highest level of reliability and professional expertise with service packages and the individual CLAAS MAXI CARE® programme.

With our post-harvest and annual checks to ensure maximum performance, service contracts at fixed prices for greater reliability and a flexible selection of extended warranty options, you can keep your costs transparent and predictable.

The comprehensive package for maintenance and repair:

- Post-harvest/annual check: proper inspection keeps you better prepared
- Maintenance contracts. FIRST CLAAS quality with maintenance at a fixed price
- MAXI CARE® – reliable all-round protection



FIRST CLAAS SERVICE®
MAXI CARE®

More equipment.

GPS PILOT

Comfort cab

Folding dividers

MultiCoupler

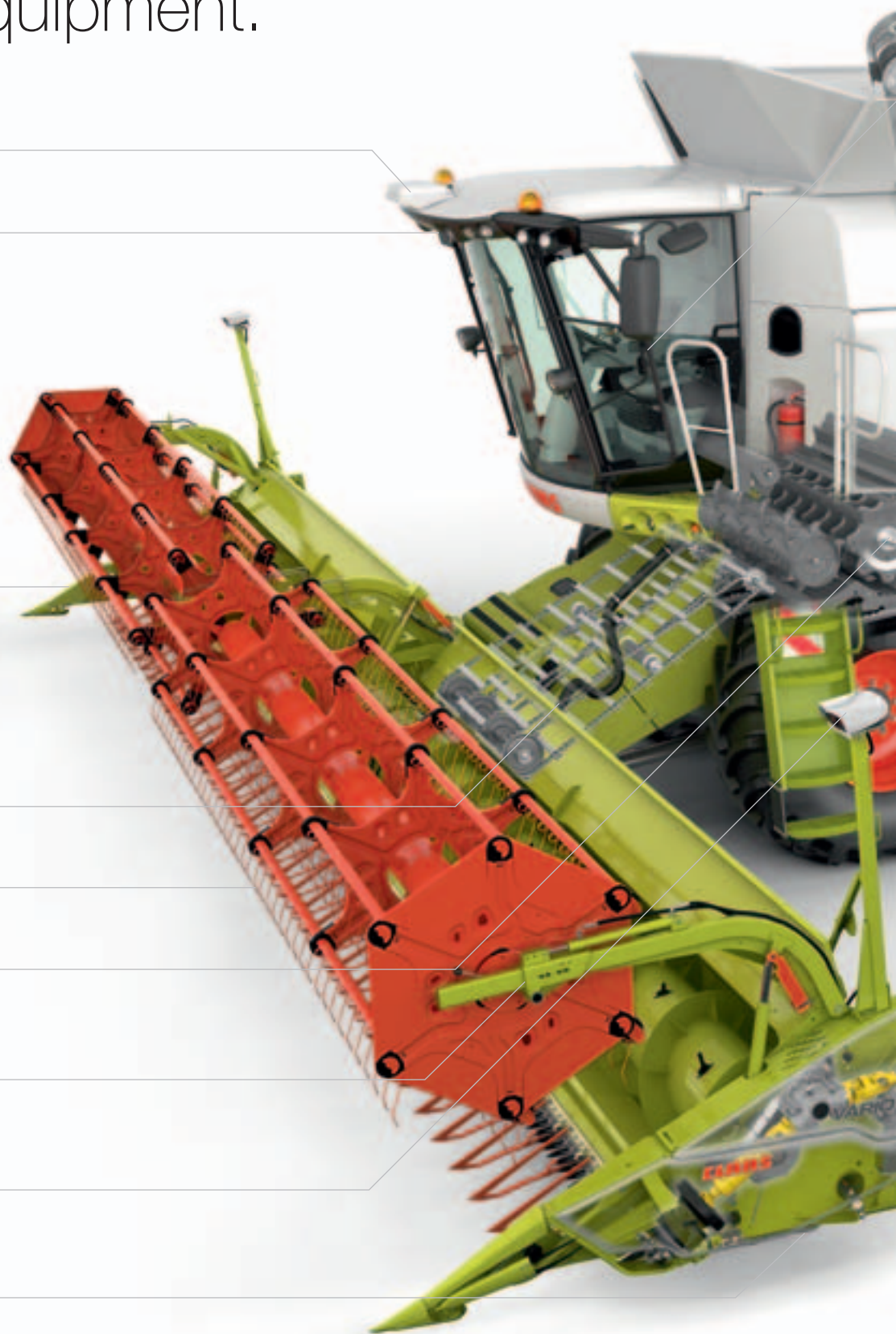
VARIO cutterbar table

APS threshing system

Hydrostatic reel drive

LASER PILOT

AUTO CONTOUR





CEBIS

Caterpillar engine

High-performance straw walker

PROFI CAM

SPECIAL CUT II chopper

Power spreader

Chaff blower

MULTIFINGER SEPARATION SYSTEM (MSS)

All-wheel-drive axle

3-D cleaning system

Separate return pan

Turbine fan

Tyre technology / TERRA TRAC

The new LEXION
at a glance

A greater choice of equipment.

Depending on the model concerned, two or three different equipment packages are available for the LEXION range. As well as ensuring that you are ideally equipped for every application they offer cost savings compared with the price of an equivalent array of individual options.



Comfort package

- **Automatic climate control with heating** Optimum cab temperature through fully automatic climate control
- **Deluxe operator's seat** Ventilated, heated, automatic adjustment to operator's weight as well as vibration suppression
- **Refrigerator** 43-litre capacity for chilled food and drinks
- **CD/MP3 radio with hands-free function** Impressive sound quality and Bluetooth hands-free function
- **Trailer coupling, automatic** Fast and reliable coupling of the road transport trailer



Light & Sight package

- **GRAINMETER** Measurement and display of the grain content in the returns in order to optimise throughput
- **Electrically adjustable rear-view mirrors** Convenient adjustment of rear-view mirrors from operator's seat for optimal visibility
- **Xenon High End working lights** Optimal visibility in the working area, even after dark
- **Roller blinds for side windows** Prevention of dazzle for greater comfort when working
- **PROFI CAM** Outstanding view when offloading, distributing chopped material and reversing

LEXION – a commitment.

The arguments.

Cab.

- The soundproofed deluxe cab provides an exceptionally quiet environment to enable you to focus on your work
- Visual returns check and electronic monitoring with GRAINMETER from the cab
- EASY: CEBIS, CRUISE PILOT, automatic steering and CLAAS TELEMATICS ensure outstanding steering comfort and control
- Yield mapping and measurement as well as comprehensive order management

Cutterbars.

- VARIO cutterbars in widths up to 12 m facilitate up to 10% better performance by optimising the crop flow
- AUTO CONTOUR is an intelligently controlled cutterbar which automatically compensates for surface irregularities in the direction of travel as well as those in the transverse direction
- The standard and VARIO cutterbar, rice cutterbar, rapeseed cutterbar, folding cutterbar, FLEX soybean cutterbar, CONSPEED, SUNSPEED, RAKE UP and MAXFLO ensure high flexibility

Threshing technology.

- Up to 20% more throughput with the APS threshing system
- 11,000 litre grain tank, discharging rate up to 110 l/s
- 3-D cleaning system for slopes up to 20%
- Professional straw processing with SPECIAL CUT II and power spreader for even spreading of straw over the entire working width

CLAAS POWER SYSTEMS (CPS).

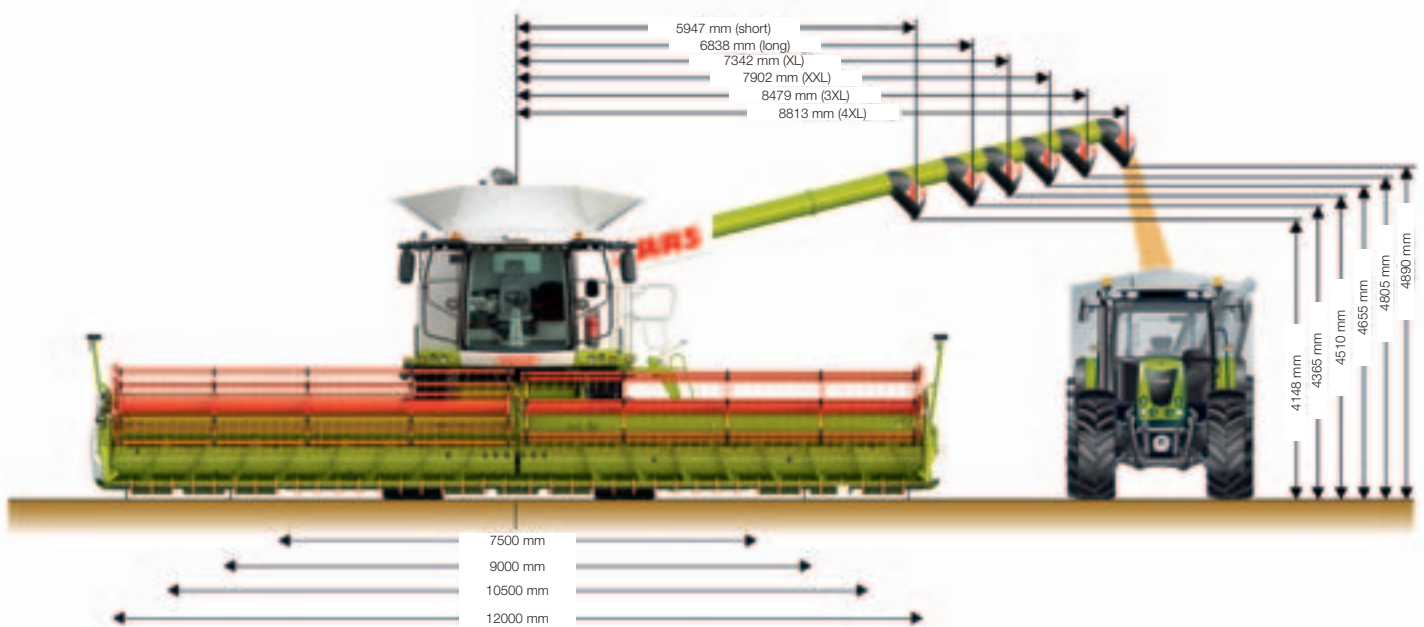
- Caterpillar engines meet the latest emission standards and provide reliable reserves of power even under the toughest field conditions
- High-performance working hydraulics for even faster operation of the MONTANA control system as well as AUTO CONTOUR
- TERRA TRAC and tyre technology for optimal ground protection
- Easy and convenient access to maintenance points



lexion.claas.com

Equipment packages
Features

More height and width for comfortable offloading.



LEXION		670/ 670 TERRA TRAC/ 670 MONTANA	660	650	630/ 630 MONTANA	620
Threshing system						
APS acceleration and pre-separation		●	●	●	●	●
MULTICROP concave		●	●	●	●	●
Drum width	mm	1700	1700	1700	1420	1420
Drum diameter	mm	600	600	600	600	600
Drum speed	rpm	395–1150	395–1150	395–1150	395–1150	395–1150
with reduction gear	rpm	166–483	166–483	166–483	166–483	166–483
Rasp bar threshing drum		○	○	○	○	○
Closed rasp bar threshing drum		●	●	●	●	●
7/18 concave		●	●	●	●	●
Concave wrap angle	degrees	142	142	142	142	142
Main concave area	m²	1.26	1.26	1.26	1.06	1.06
Concave adjustment, electrohydraulic, with overload protection		●	●	●	●	●
Synchronised accelerator and impeller		●	●	●	●	●
Automatic drum variator tensioner		●	●	●	●	●
Large stone trap		●	●	●	●	●
Rice threshing unit		–	–	–	○	–
Residual grain separation						
Straw walkers	quantity	6	6	6	5	5
Walker length	m	4.4	4.4	4.4	4.4	4.4
Straw walker area	m²	7.48	7.48	7.48	6.25	6.25
Separation area	m²	9.85	9.85	9.85	8.23	8.23
MULTIFINGER SEPARATOR SYSTEM		●	●	●	●	●
Cleaning system						
Plastic preparation floor		●	●	●	●	●
(divided, removable from the front)						
Fan		6-turbine	6-turbine	6-turbine	4-turbine	4-turbine
Electric fan adjustment		●	●	●	●	●
Dual ventilated step		●	●	●	●	●
Divided, counter-directional sieve pan		●	●	●	●	●
3-D cleaning system		○	○	○	○	○
Total sieve area	m²	5.8	5.8	5.8	4.8	4.8
Sieve adjustment, electric		●	●	●	●	●
Returns feed to accelerator		●	●	●	●	●
Returns visible from the cab on the go		●	●	●	●	●
Returns display in CEBIS		○	○	○	○	○
GRAINMETER		○	○	○	○	○
Grain tank						
Volume	l	11000/ 10000 (MONTANA)	11000	10000	9000	9000
Unloading auger swivel angle	degrees	101	101	101	101	101
Discharge rate	l/s	110	110	110	110	110
QUANTIMETER yield meter		○	○	○	○	○
Automatic chain lubrication for grain tank unloading		○	○	○	○	○
Chopper						
SPECIAL CUT II chopper, 88 knives		●	●	●	–	–
SPECIAL CUT II chopper, 72 knives		–	–	–	●	●
STANDARD CUT 64 blade straw chopper		○	○	○	–	–
STANDARD CUT 52 blade straw chopper		–	–	–	○	○
Power spreader		○	○	○	–	–
Hydraulic positioning		●	●	●	●	●
Chaff spreader		●	●	●	●	○
Chaff blower with power spreader		○	○	○	–	–

● Standard
○ Option
– Not available

CLAAS continually develops its products to meet customers' requirements, so 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 consult 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 the function clearly. Never remove these protective panels yourself to avoid hazards. Please refer to the relevant instructions in the operator's manual in this regard.

LEXION		670/ 670 TERRA TRAC/ 670 MONTANA	660	650	630/ 630 MONTANA	620
Running gear						
Side slope compensation up to 17%		● (MONTANA)	–	–	● (MONTANA)	–
Fore and aft compensation up to 6%		● (MONTANA)	–	–	● (MONTANA)	–
TERRA TRAC crawler tracks with hydropneumatic suspension		● (TERRA TRAC)	–	–	–	–
4-TRAC all-wheel drive		○	○	○	○	○
2-speed manual transmission		● (MONTANA)	–	–	● (MONTANA)	–
30 km/h		○	–	–	● (MONTANA)	–
Automobile-like driving characteristics		●	–	–	● (MONTANA)	–
Engine						
Manufacturer		Caterpillar	Caterpillar	Caterpillar	Caterpillar	Caterpillar
Model		C 9.3	C 9.3	C 9.3	C 9.3	C 9.3
Cylinders/displacement	no./l	S 6/9.3	S 6/9.3	S 6/9.3	S 6/9.3	S 6/9.3
Engine control		Electronic	Electronic	Electronic	Electronic	Electronic
Rated speed	rpm	1900	1900	1900	1900	1900
Engine output at rated speed (ECE R 120)	kW/HP	305/415	269/366	239/325	239/325	224/305
Maximum power (ECE R 120)	kW/HP	330/449	294/400	264/359	264/359	224/305
Emissions standard Stage IIlb (Tier 4i)		●	●	●	●	●
Fuel consumption metering		○	○	○	○	○
Fuel tank capacity	l	800	800	800	800	800
Planar radiator screen cleaning		●	●	●	●	●
EASY						
CEBIS		●	●	●	●	●
TELEMATICS		○	○	○	○	○
Job management		○	○	○	○	○
Yield mapping		○	○	○	○	○
CRUISE PILOT		○	○	○	–	–
GPS PILOT, LASER PILOT, AUTO PILOT		○	○	○	○	○
Weight						
Wheeled machine without front attachment, straw chopper and chaff spreader, full fuel tank (can vary depending on equipment)	kg	14,800	14,500	14,400	13,700	13,400

Tyres on the drive axle		670	660	650	630	620
LEXION						
Tyre size	ø cat. (m)	External width (m)				
900/60/R 32	1.95	3.90	3.90	3.90	3.62	3.62
IF800/70 R 32 MI	1.95	3.78	3.78	3.78	3.49	3.49
800/70 R 32 CHO	1.95	3.78	3.78	3.78	3.49	3.49
800/70 R 32	1.95	3.78	3.78	3.78	3.49	3.49
710/75 R 34 MI	1.95	3.65	3.65	3.65	3.37	3.37
IF680/85 R 32 MI	1.95	3.50	3.50	3.50	3.22	3.22
680/85 R 32	1.95	3.50	3.50	3.50	3.22	3.22
800/65 R 32	1.85	3.86	3.86	3.86	3.58	3.58
650/75 R 32	1.85	3.49	3.49	3.49	3.20	3.20
30.5L R 32	1.85	–	–	–	3.49	3.49
650/75 R 32¹	1.85	4.61	4.61	4.61	–	–
dual + 18.4 R 38						
TERRA TRAC 635 mm	–	3.49	–	–	–	–
TERRA TRAC 735 mm	–	3.79	–	–	–	–
TERRA TRAC 890 mm	–	4.05	–	–	–	–

Tyres on the steering axle		670	670	660	650	630	630	620
LEXION		MONT.			MONT.			
Tyre size	ø cat. (m)	External width (m)						
VF620/70 R 26 MI	1.50	3.80	3.80	3.80	—	—	—	—
600/65 R 28 IMP	1.50	3.80	3.80	3.80	3.80	3.49	3.49	3.49
VF520/75 R 26 MI	1.50	3.49	—	3.49	3.49	3.22	—	3.22
500/85 R 24 IMP	1.50	3.50	—	3.50	3.50	3.22	3.50	3.22
600/55-26.5 IMP	1.35	3.80	3.80 ¹	3.80	3.80	3.50	3.50¹	3.50
500/70 R 24 IMP	1.35	3.49	3.49	3.49	3.49	3.22	3.49	3.22
16.5/85-24 IMP	1.35	—	—	—	3.49	3.20	—	3.20

Cutterbars

Front attachment selection

VARIO cutterbars	V 1200, V 1050, V 900, V 750, V 660, V 600, V 540
Standard cutterbars	C 900, C 750, C 660, C 600
Rapeseed attachment	For all standard and VARIO cutterbars
Folding cutterbars	C 540, C 450
Maize harvester	6, 8 and 12 row
SUNSPEED	12 and 16 row
FLEX cutterbars	S 900, S 750, S 600, S 510, S 450
MAXFLEX	1200, 1050
MAXFLO	1200, 1050, 900
Standard rice cutterbars	R 750, R 660, R 600, R 540, R 490, R 430 (LEXION 760, LEXION 750, LEXION 750 TERRA TRAC Rice)
VARIO rice cutterbars	V 750, V 660, V 600, V 540 (LEXION 760, LEXION 750, LEXION 750 TERRA TRAC Rice)
RAKE UP	P 420
Variable speed drive front attachment (electrohydraulic)	rpm 284–420
Front attachment step drive	rpm 332, 420
Instant cutterbar brake	o

Standard cutterbars

Effective cutting widths	C 900 (9.12 m), C 750 (7.60 m), C 660 (6.68 m), C 600 (6.07 m)
Drive	Single-side belt drive
Folding divider	●
Spacing of knife bar to intake auger	mm 580
Cutting frequency	strokes/min 1120
Multifinger intake auger	●
Hydraulic reverser	●
Hydrostatic reel drive	rpm 8–60
Automatic functions	
CONTOUR	o
AUTO CONTOUR	●
Reel speed control	●
Reel height adjustment	●
Replacement knife bar	●
Crop lifters	●

VARIO cutterbars

Effective cutting widths	V 1200 (11.97 m), V 1050 (10.67 m)	V 900 (9.12 m), V 750 (7.60 m), V 660 (6.68 m), V 600 (6.07 m), V 540 (5.46 m)
Drive	Synchronised transmission drives on both sides	Single-side belt drive
Folding divider	●	●
Spacing of knife bar to intake auger	mm 480–780, for rapeseed 1080	480–780, for rapeseed 1080
Knife bar	Divided, synchronised drive on both sides	Undivided
Cutting frequency	strokes/min 1334	1120
Reel and auger bearing	Divided reel and intake auger with central bearing	Single-unit reel and auger
Intake auger diameter	660	580
Automatic functions		
CONTOUR	o	o
AUTO CONTOUR	●	●
Reel speed control	●	●
Reel height adjustment	●	●
Reel levelling system	●	●
Table positioning	●	●
Replacement knife bar	●	●
Crop lifters	●	●

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