



Combine harvesters

LEXION

670 660 650 630 620



The new CEBIS MOBILE. Redefining ease of handling.

With its 12" touch-sensitive screen, the new CEBIS MOBILE offers entirely new possibilities for controlling the CRUISE PILOT, CEMOS DIALOG and CEMOS AUTOMATIC operator assistance systems. All operating status indicators appear within the machine silhouette.





Front attachments	06	CLAAS POWER SYSTEMS	54
VARIO	08	Engine	56
CERIO	14	DYNAMIC COOLING	58
Cutterbar convenience	16	MONTANA	60
Automated cutterbar control	18	TERRA TRAC	62
Feeder housing	20	Ground drive	64
Threshing system	24	Comfort cab	66
APS threshing system	26	CEBIS	70
AUTO CROP FLOW	28	CEBIS, multifunction control lever, CMOTION	72
MULTIFINGER SEPARATION SYSTEM (MSS)	30		
Crop cleaning	32	Electronics expertise	74
AUTO SLOPE	34	Fleet View, TELEMATICS	74
CEMOS AUTOMATIC	36	Job management,	
CEMOS AUTO CLEANING	38	yield mapping	76
CEMOS DIALOG	40	Automatic guidance systems	78
Grain tank, PROFI CAM, rear camera, QUANTIMETER	42	Central lubrication, maintenance	80
GRAIN QUALITY CAMERA	44	CLAAS Service & Parts Technology in detail	82
			84
Straw management	46	Features	86
Straw chopper	48	Technical data	87
Power spreader	50		
Discharge direction adjustment	52		

Committed to meeting diverse harvesting requirements.

The cutterbars.

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



VARIO



MAXFLEX



CERIO



CERIO / Rice equipment



Folding cutterbar



SWATH UP



SUNSPEED



MAXFLO



VARIO / Rapeseed equipment



VARIO / Rice equipment





VARIO cutterbars.

VARIO cutterbars from CLAAS are synonymous with the best cutterbar table adjustment system in the market. With its VARIO 1230 to VARIO 500 models, CLAAS has made systematic enhancements to its proven VARIO cutterbar range.

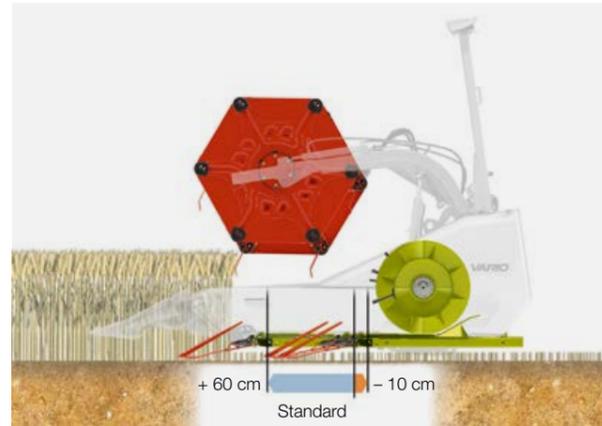
The highlights at a glance:

- Integrated rapeseed plates allow infinite adjustment within an overall range of 700 mm for grain and rapeseed
- Large, 660 mm diameter intake auger for optimal crop flow
- Reel optimised to reduce stalk take-up
- MULTIFINGER intake auger
- Quick-release mounting system allows crop dividers and rapeseed knives to be fitted/removed without the need for tools
- Automatic parking and transport position
- Automatic operating position

Use.

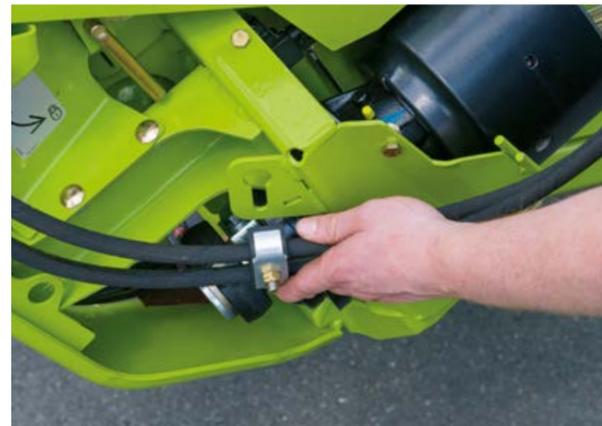
The new generation of VARIO cutterbars is the first choice for harvesting grain and rapeseed. It is ideally suited to deliver high performance and high area output, whether operating in low or high-yield regions. The ability to adjust the VARIO cutterbar table for grain harvesting (short or long straw varieties) and rapeseed ensures an optimal crop flow at all times and therefore results in an increase in total machine performance of up to 10%.

The wide range of models, from the VARIO 1230 to the VARIO 500 allows the LEXION, TUCANO and AVERO to use VARIO cutterbars.



Technology.

- Cutterbar table with integrated rapeseed plates
- Table position adjustable from - 100 mm to + 600 mm using the multifunction control lever
- Cutterbar table is unique in having an infinitely variable overall adjustment range of 700 mm
- Knife drive shaft with automatic, telescopic function
- Continuous knife bar and continuous reel (VARIO 930 to VARIO 500)
- Front attachment mechanical drive on one side (VARIO 930 to VARIO 500)
- Intake auger and knife bar mechanically driven via gearbox and drive shaft
- Reel with optimised reel tine carriers, wear-resistant tine tube bearings and a new design to reduce risk of wrapping and stalk take-up
- Angled cross-tube for a better view of the cutterbar table from the cab
- Intake auger height is infinitely adjustable
- Feeder housing and intake auger can be reversed
- Stripper bars adjustable from the outside
- LASER PILOT for automatic guidance system can be folded and adjusted without the need for tools



Easy connection of the hydraulic hoses for the rapeseed knife drive



The dividers and rapeseed knives can be secured without the need for tools thanks to the quick-release mounting system



Plug & Play for rapeseed.

Thanks to the rapeseed plates integrated in the cutterbar table and the ability to fit the rapeseed knives without the need for tools, conversion to rapeseed harvesting takes only a matter of minutes. Connecting the rapeseed knives to the hydraulic system automatically activates the hydraulic pump which drives the side knives. The connection is made easily with two flat-seal couplings.

- The hydraulic pump is switched on and off automatically
- Even with the rapeseed knives fitted, the table can still be extended or retracted by 150 mm
- A locking transport container on the attachment trailer allows the rapeseed knives to be carried securely and saves weight on the cutterbar

Use in rice.

The VARIO cutterbars are equipped ex factory - or can easily be converted with a coated feed roller and a rice harvesting system - for optimal performance in rice.



Rugged drive train.

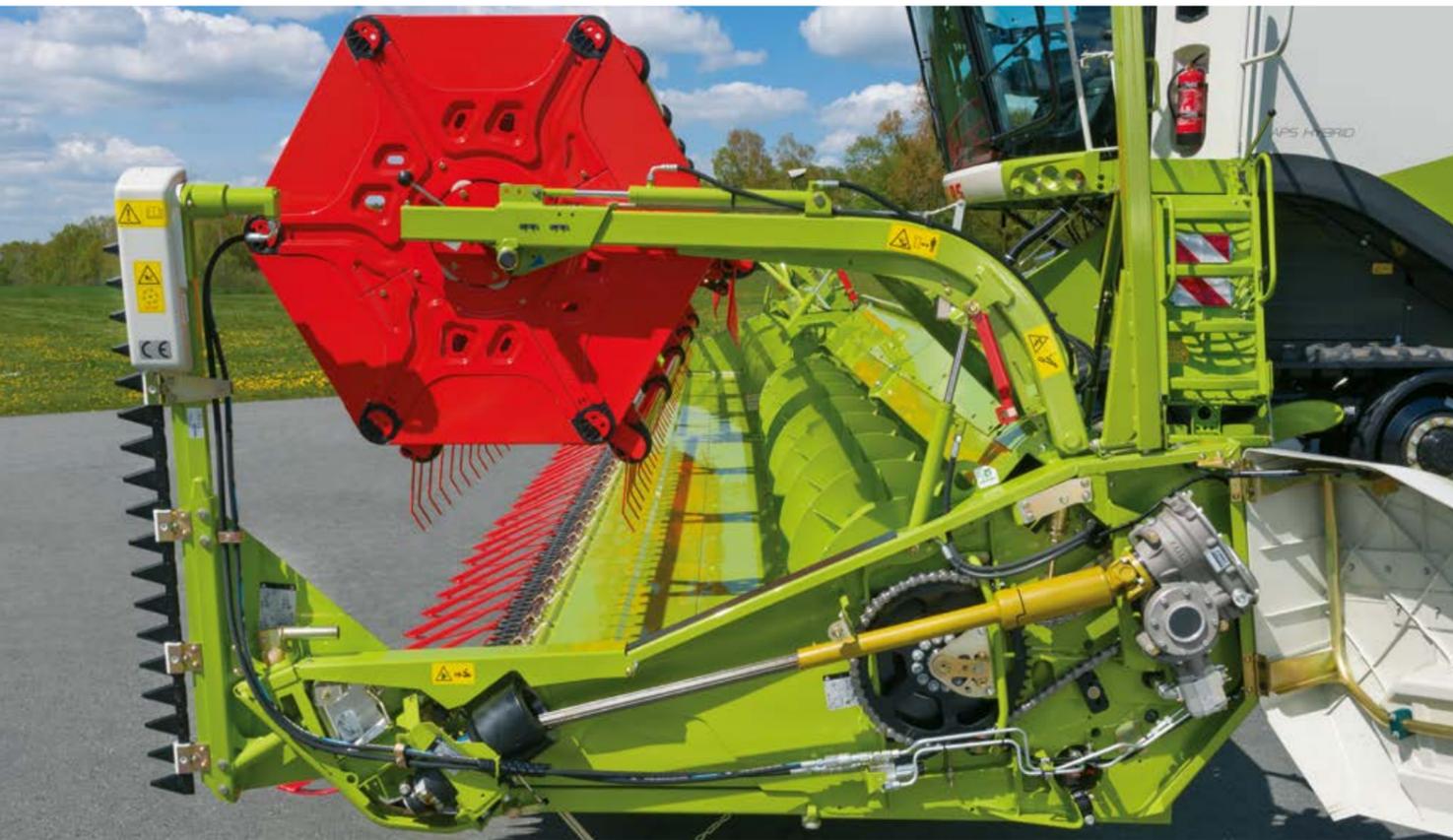
Thanks to its planetary transmission, the knife bar drive runs extremely smoothly. When the cutterbar table position is changed, the drive shaft adjusts telescopically at the same time, thus allowing work to continue in any position without the need for operator intervention.

The feed roller and knife drive are protected by individual overload clutches. This system allows the VARIO cutterbar to withstand the most adverse conditions and ensures reliable operation.



Rapeseed knives fitted by means of quick-release mounting system

The new VARIO cutterbars: VARIO 1230 and VARIO 1080.



The drive train.

Thanks to the mechanical drive via drive shafts, gears and large chains, the drive train is extremely efficient and requires little maintenance. The synchronised knife drive makes for a very smooth-running cutterbar. An overload clutch protects the entire drive train in the event of the intake auger becoming jammed. The knives are driven by gears on the left and right sides and are also protected by overload clutches.

Overload protection is also provided for the hydraulic drive of the rapeseed knives. If one of these is jammed by a foreign body, a shut-off valve protects the hydraulic system from overpressure.

Following the ground.

In order to ensure that excellent cutterbar guidance is also maintained over large working widths, the VARIO 1230 and VARIO 1080 models have two additional sensors. These are located in the centre and provide the AUTO CONTOUR system with an additional signal to identify the position of the cutterbar table.

Optimal crop flow.

The VARIO cutterbars from CLAAS are designed for the most demanding field conditions. An optimal crop flow, clean cutting and a robust design are the defining characteristics of the two largest models, the VARIO 1230 and VARIO 1080. For these working widths, CLAAS uses the principle of the divided reel and intake auger as well as a divided knife bar.

Ever since its introduction in 2009, this system has proved to be the ideal solution under all conditions for the high throughput associated with the most powerful LEXION combine harvesters. The crop flows from both halves of the cutterbar are combined at the centre of the cutterbar. The outstanding strength and ruggedness required to handle such large quantities of harvested material have made the VARIO cutterbars the benchmark for the industry.

Precise adjustment produces the best results.

An optimal crop flow starts right at the cutterbar, with the correct height setting of the intake auger being a particularly important factor. This is why height scales are provided at the adjustment points on the left and right sides and in the centre. This makes for effortless adjustment of the auger to the perfect height for every requirement.



Practical bracket for additional crop lifters on cutterbar

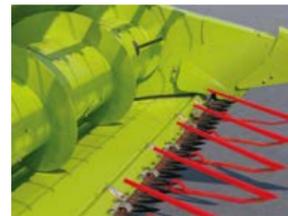
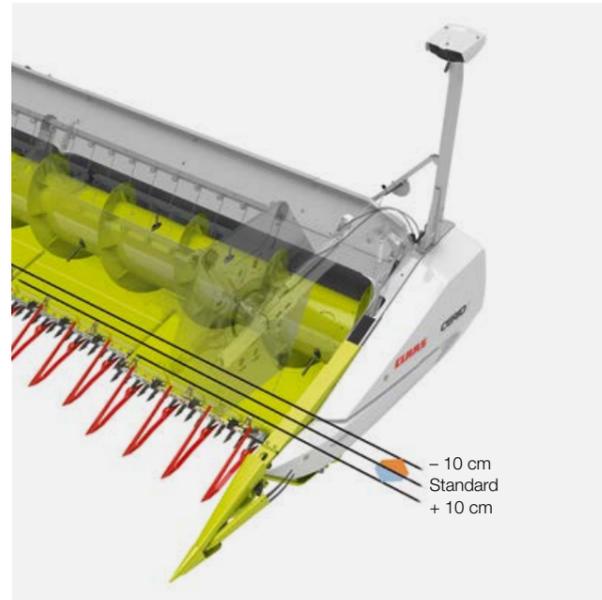
Use.

The CERIO model series is based on the VARIO 930 to 560 cutterbars and is an alternative for grain harvesting. It is ideally suited to deliver high performance and high area output, whether operating in low or high-yield regions. The cutterbar table can be adjusted manually from - 100 mm to + 100 mm. This means that the cutterbar is able to respond to differing crop conditions or varieties.

The wide range of models, from the CERIO 930 to the CERIO 560, allows the LEXION, TUCANO and AVERO to use CERIO cutterbars.

Technology.

- Manually adjustable table position from - 100 mm to + 100 mm
- Overall manual adjustment range of 200 mm
- Knife drive shaft with automatic, telescopic function
- Continuous knife bar and continuous reel
- Front attachment mechanical drive on one side
- Intake auger and knife bar mechanically driven via gearbox and drive shaft
- Reel with optimised reel tine carriers, wear-resistant tine tube bearings and a new design to reduce risk of wrapping and stalk take-up
- Angled cross-tube for a better view of the cutterbar table from the cab
- Intake auger height is infinitely adjustable
- Feeder housing and intake auger can be reversed
- Stripper bars adjustable from the outside
- LASER PILOT for automatic guidance system can be folded and adjusted without the need for tools
- Automatic parking and transport position
- Automatic operating position



Cutterbar table retracted - grain (- 100 mm)



Cutterbar table extended - grain (+ 100 mm)



Reel tine carriers and bearings in plastic with optimised shape for reduced stalk take-up



Cutterbar adjustment.

- Manual adjustment under cutterbar table
- 10 screw fixings allow adjustment of cutterbar table
- 5 table positions can be set: + 100 mm, + 50 mm, 0 mm, - 50 mm, - 100 mm

Rugged drive train.

As the drive train of the CERIO cutterbars is identical to that of the VARIO cutterbars, it features individual overload clutches to protect the feed roller and knife drive. This arrangement allows the CERIO cutterbar to withstand the most adverse conditions and ensures reliable operation at all times.

Use in rice.

The CERIO cutterbars are equipped ex factory - or can easily be converted - with a coated feed roller and a rice harvesting system for optimal performance in rice.



The dividers can be secured without the need for tools thanks to the quick-release mounting system



Easy adjustment of divider height using the panel key



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.

Automatic soft start system.

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

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

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.



Greater convenience with the MultiCoupler and central locking



Twin-axle front attachment trailer with steering rear axle.

The new twin-axle front attachment trailers with 4-wheel steering are available for the VARIO 1230, 1080 and 930 front attachments.

- Excellent self-steering characteristics when cornering
- High directional stability
- Available in braked or unbraked versions for 25 km/h or 40 km/h
- The floating front axle can adapt optimally to uneven ground
- Special supports can be fitted to the trailers to allow SUNSPEED front attachments and maize pickers to be transported without any difficulty
- A cutterbar equipped with rapeseed knives can be placed on the trailer without any difficulty

The following options are also available ex-factory:

- Spare wheel
- Rotating beacon
- LED lights
- Marker lights
- Short or long drawbar

Transport container.

A locking transport container on all attachment trailers allows the rapeseed knives to be carried securely.



Twin-axle front attachment trailer with steering rear axle



Single-axle front attachment trailer



Locking transport container for rapeseed equipment



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 feature 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 rams 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 side slopes and rocky ground. AUTO CONTOUR helps to increase performance and to make the use of the LEXION pay even greater dividends.

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 allows the reel levelling and table position settings to be saved and recalled by activating the automatic cutterbar control. Manual adjustments can also be made.

Parking position for VARIO 1230 to VARIO 500.

A touch of a button is all it takes for these two VARIO cutterbars to move into the parking position for mounting on the road transport trailer or, after coupling, to move straight into the working position. The threshing system must be switched off before this function can be used.

Automated cutterbar control.

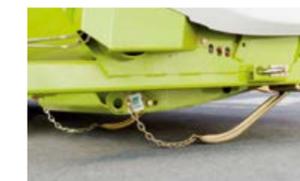
- CONTOUR / AUTO CONTOUR
- Automatic reel speed
- Automatic reel height
- Automatic reel levelling (VARIO only)
- Automatic table position (VARIO only)
- Automatic parking position



2-way cutterbar rams control the ground pressure precisely



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



Sensor bands detect the position of the front attachment

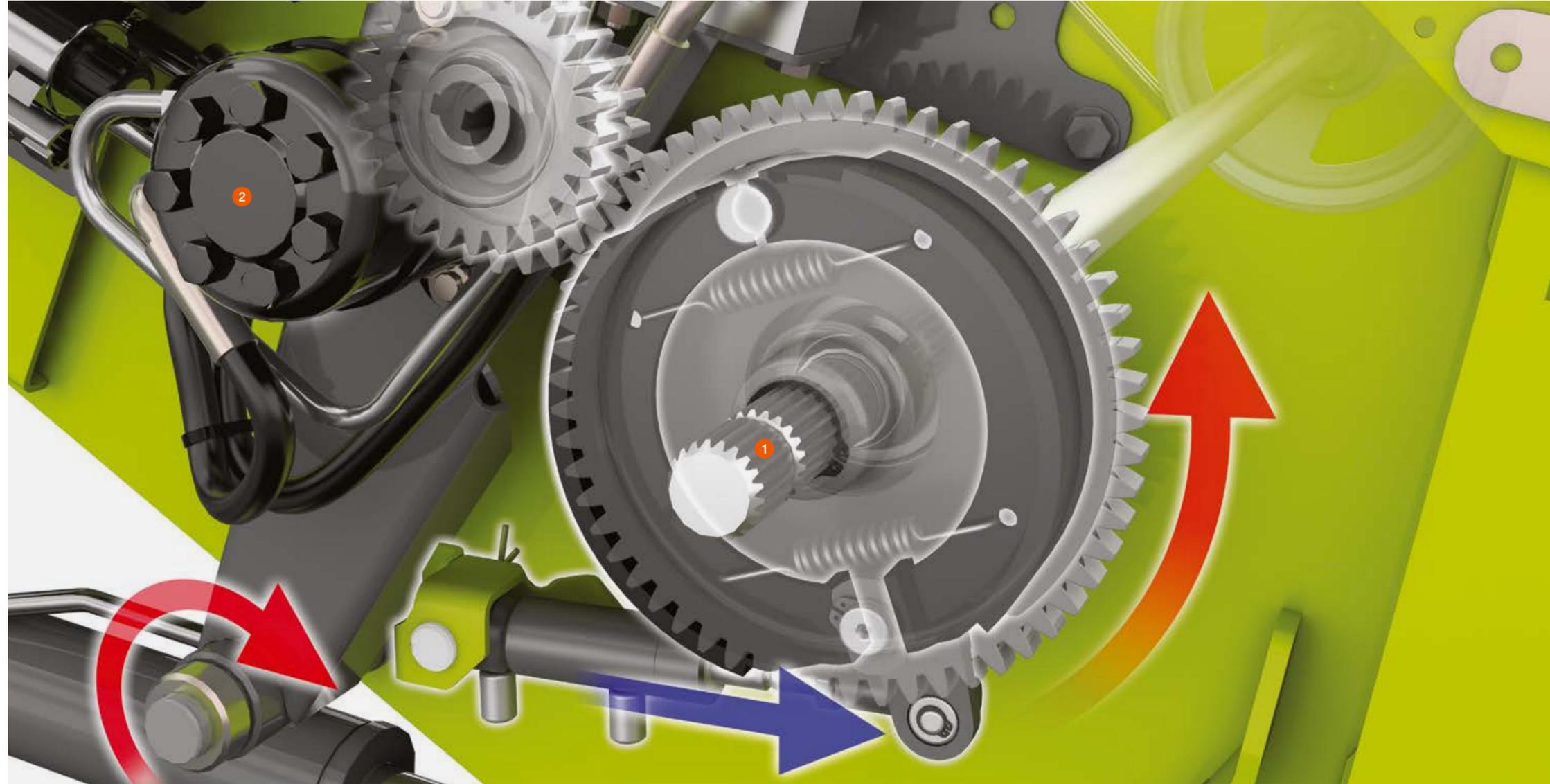




Straight cutterbar drive.

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.

Four different drives are available: S (constant), L (variable), XL (two-speed) and XXL (variable). CLAAS therefore offers the right drive for every range of applications and thus ensures maximum throughput.



The AUTO CONTOUR cylinder ensures a clean cut



For a clear view: dust extraction at the feeder housing

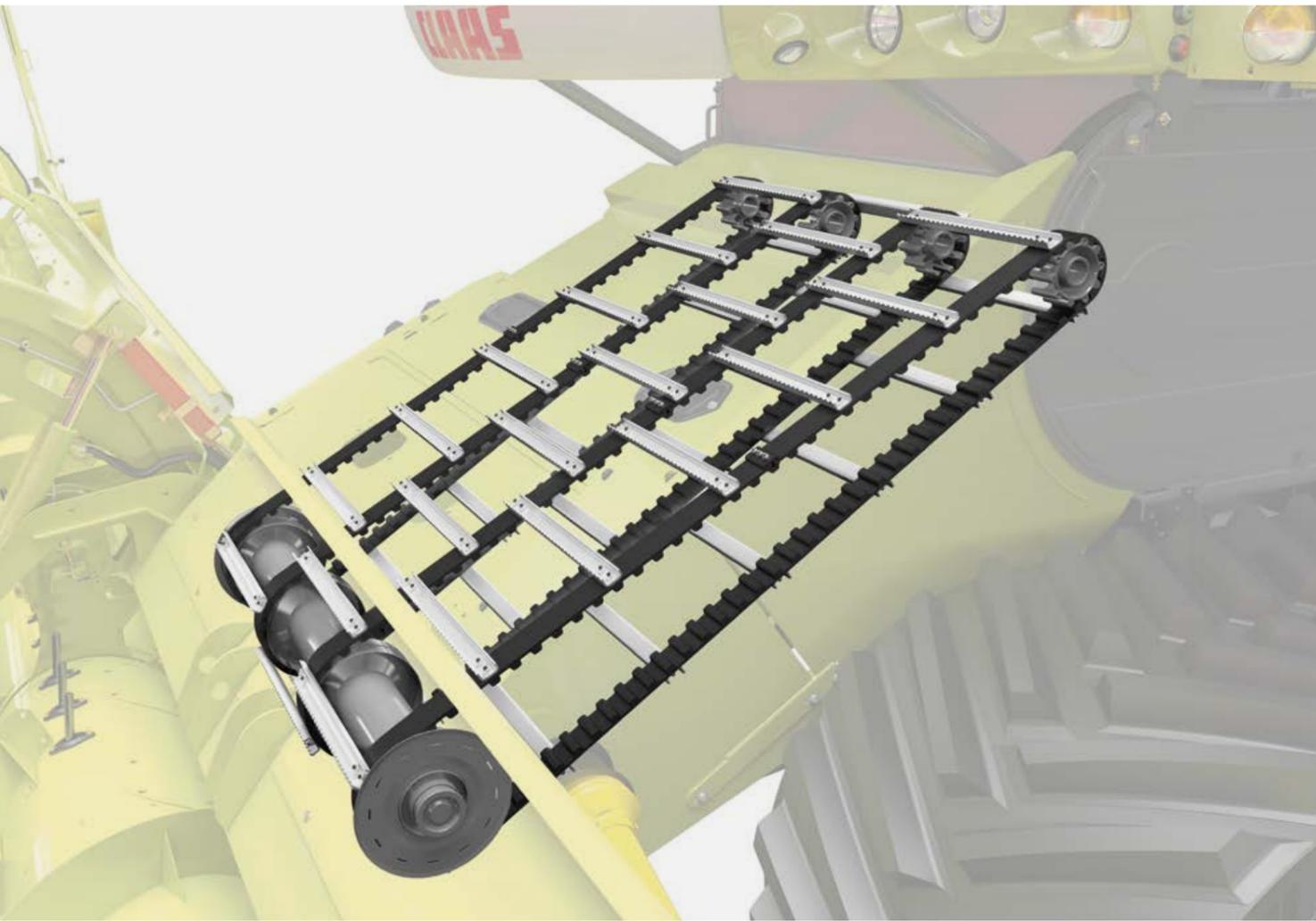
Front attachment drive brake.

Effective protection against foreign bodies and other causes of damage: the drive brake (1) allows the front attachment to be stopped immediately if necessary by means of the multifunction control lever. As the drive 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.

Optimised. The feeder housing.



Time to grow.

The extremely high performance of our LEXION combine harvesters begins with the feeder housing. A completely new feeder housing system ensures that we live up to our high standards.

Conventional feeder housings use chains to link the feeder slats? But now, instead of chains, belts are used to link the feeder slats with each other. The belts are driven by means of teeth on the underside. This arrangement ensures a powerful feed action, even when working with large quantities of material, as well as powerful reversing. Compared with a conventional feeder housing, the belt conveyor has a number of decisive advantages:

- Smooth and quiet operation
- Long service life and constant tension
- Very durable and resistant to damage caused by foreign objects



1 Universal feeder housing.

A shallow intake angle to the threshing parts facilitates optimal crop flow. Rugged intake chains or belts with feeder slats ensure high stability while a replaceable wear plate guarantees long service life.



2 HP feeder housing.

The HP (header pitch) feeder housing allows manual 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 mechanical adjustment is performed by means of a top link on the feeder housing.



3 HP hydraulic feeder housing.

Hydraulic adjustment of the cutting angle is performed by means of a hydraulic ram. The cutting angle can be stored along with the four possible cutting heights. In laid crops in particular, when short stubble is required, the cutterbar is always at the optimal cutting angle.



4 V channel feeder housing.

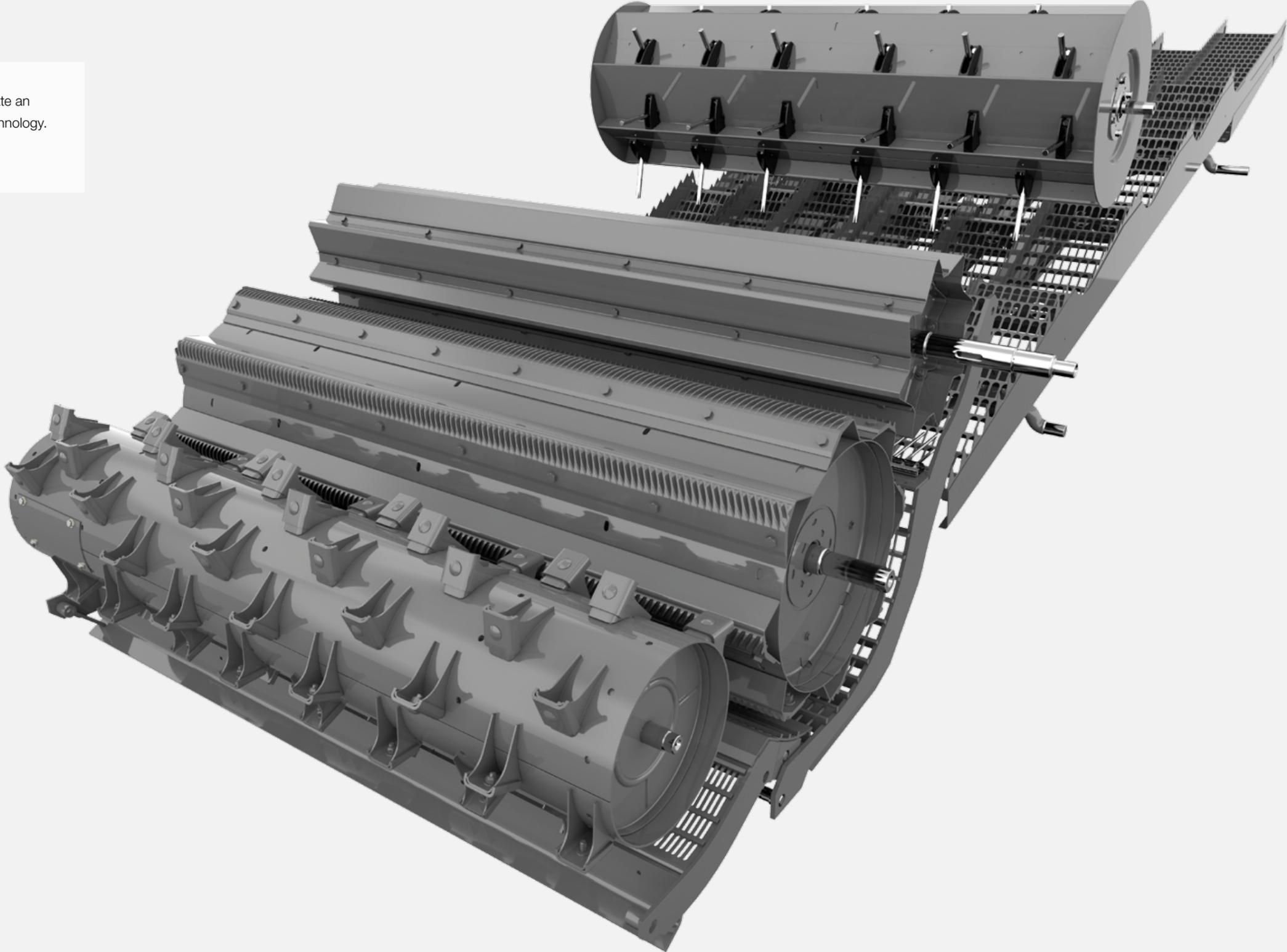
With the flexible positioning of the cutterbar mount, the V channel facilitates fast and easy mechanical adjustment of the cutting angle, even with a front attachment fitted. This ensures optimal adaptation to all field conditions and different types of tyres. The cutting angle is adjusted from one central point and transmitted in parallel to both sides. The cutting angle can be read on a scale.

NEW: Reinforced feeder slats.

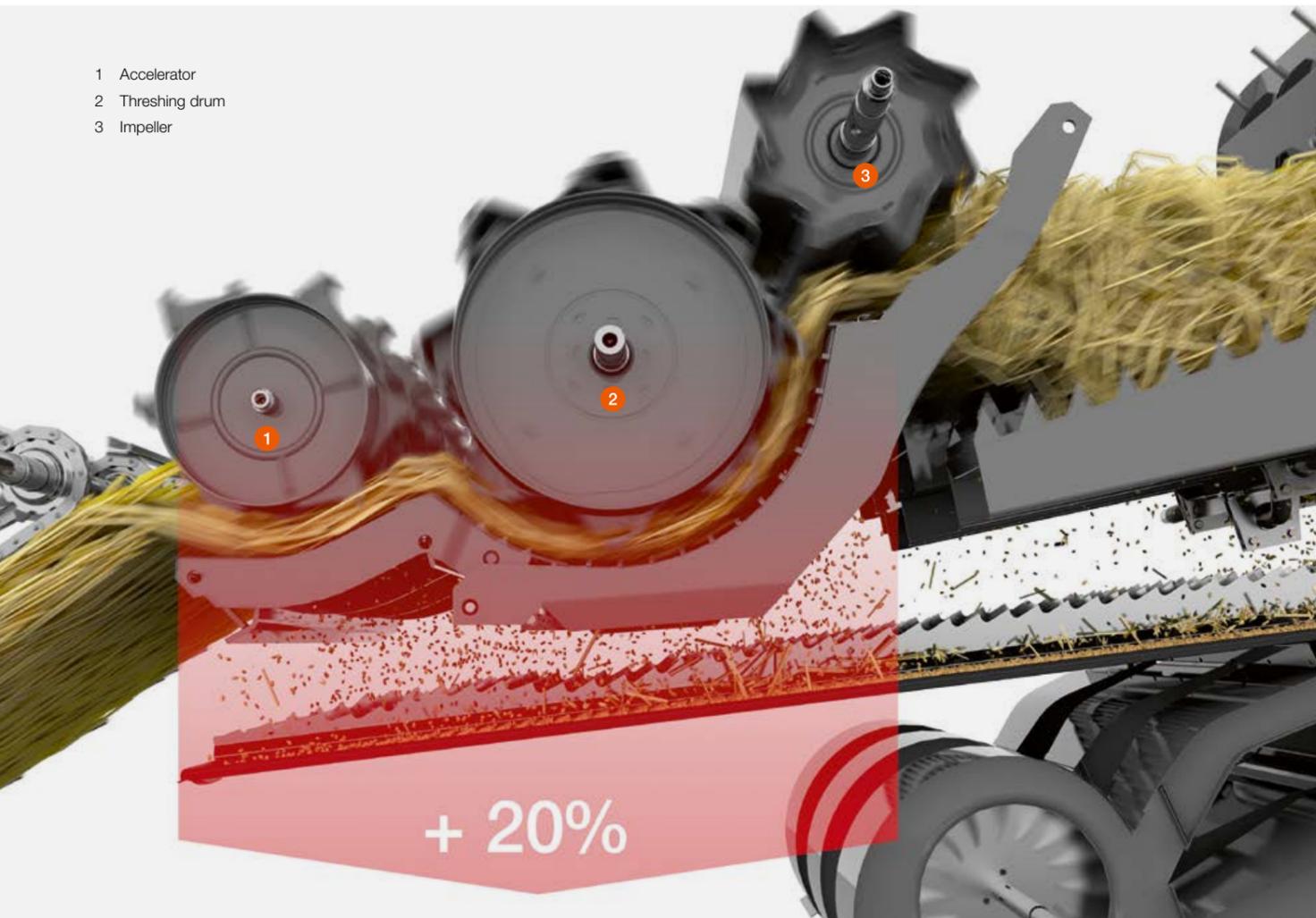
All LEXION 600 models are factory fitted with a new generation of harder feeder slats. They are particularly suited to high throughputs and difficult operating conditions.

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.



More pre-acceleration. APS.



- 1 Accelerator
- 2 Threshing drum
- 3 Impeller

+ 20%

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 grains
- 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.



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.

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.

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.



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.

MULTICROP concave.

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.



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



Segments can be changed quickly thanks to the MULTICROP concave



More safety and reliability. AUTO CROP FLOW.



Monitoring risks.

What can we do to make harvesting operations safer and more reliable? In extreme harvesting conditions, the operator has to concentrate fully all the time to be able to ensure trouble-free operation. It is often the case that there are only a few days during which grain can be harvested while at optimum quality – and it is precisely then that every minute of operation counts.

Early warning.

The following components of the machine are monitored to provide early warning of critical peak loads:

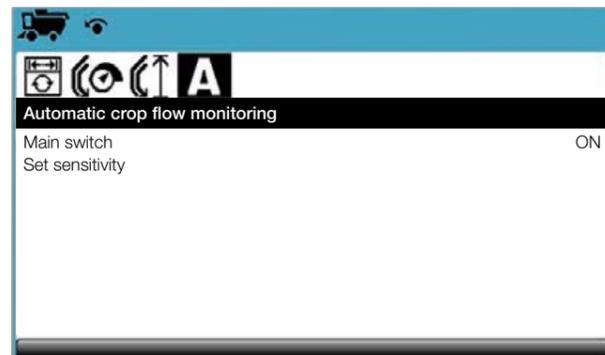
- APS threshing system
- Straw blockage flap in straw walker compartment
- Engine
- Straw chopper and power spreader

Fast response.

If a preset slip limit is exceeded, the following measures are triggered automatically:

- Cutterbar brake is activated
- Feeder unit and front attachment are switched off
- Cruise control or CRUISE PILOT: speed is reduced to 1.5 km/h if the systems are active
- Grain tank discharge is switched off if it is active

These measures ensure that no more crop material enters the machine. This reduces downtime resulting from blockages or damage.



Matched to the harvesting conditions.

The AUTO CROP FLOW function, which monitors the crop flow automatically, can be switched on and off in CEBIS. In this way, the operator can choose whether or not to use the system. The sensitivity of the slip limits can be set in three stages to match the system optimally to the conditions in the field.

Operate at the performance limits.

The AUTO CROP FLOW function is intended to support the operator in operating the machine at its performance limits. It provides the necessary safety margin by automatically monitoring the components relevant to the crop flow and initiating the necessary measures.



Harvesting is made more difficult by unevenly matured or laid crops



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.

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.

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.



More thorough cleaning.
For impressive results.



Electric sieve adjustment



Divided preparation floor that can be pulled out towards the front



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.

For convenience, even the sieve can be adjusted electrically from the cab.

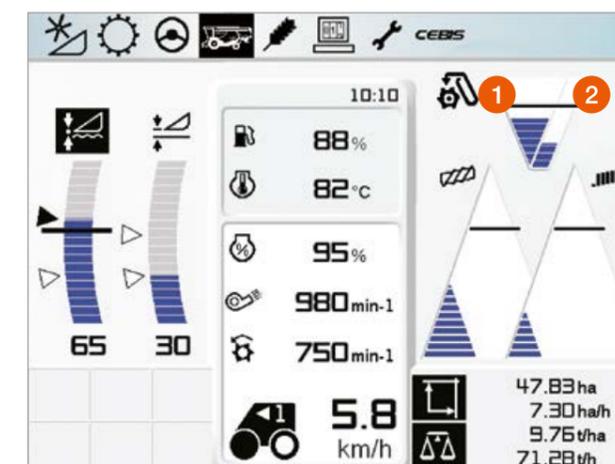
- Easy and convenient
- No need to exit the cab
- Immediate result monitoring

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.

3D-cleaning system.

- Dynamic side slope levelling via active control of the upper sieve
- Completely consistent performance on side 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.

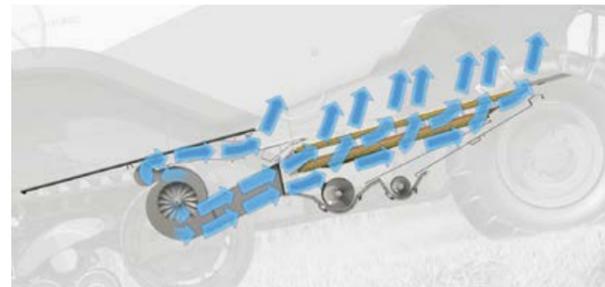
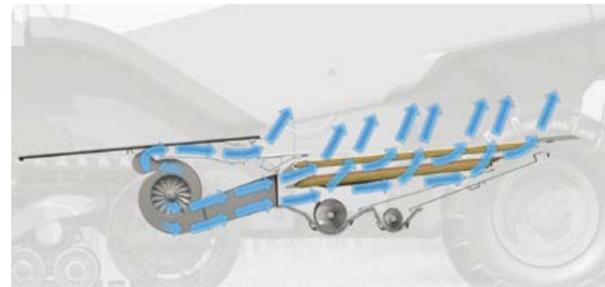
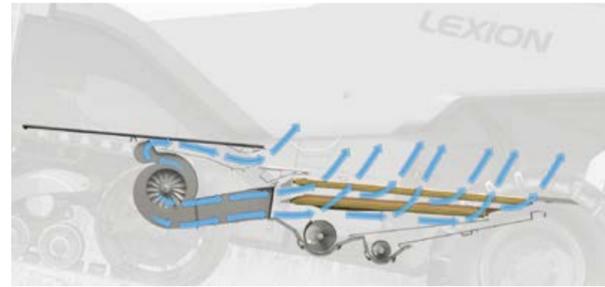
In all LEXION models, the fill level indicator (1) can be complemented by the GRAINMETER. The electronic returns quality display also allows convenient checking of the proportion of grain (2) in the returns in CEBIS.

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



AUTO SLOPE.

Automatic fan control.



Meet challenges.

Using the machine to harvest fields which are not level presents the cleaning system with a particular challenge. If the machine is operating uphill, the fan speed must be reduced to prevent grain losses from the sieve pan.

On the other hand, during downhill operation, the fan speed must be increased to maintain the crop flow in the cleaning system and so ensure that the grain is separated. AUTO SLOPE now adjusts the fan speed to the conditions, the starting point being the fan speed set beforehand by the operator.

How does AUTO SLOPE work?

When moving uphill:

- Fan speed is reduced

When moving downhill:

- Fan speed is increased

How you benefit:

- No wear - completely maintenance free
- The fan speed is adjusted automatically
- Improved sieve pan performance through adjustment of air volume
- Cleaning performance remains stable
- Perfect interaction with 3D-cleaning system in undulating terrain
- More throughput and reduced losses on slopes

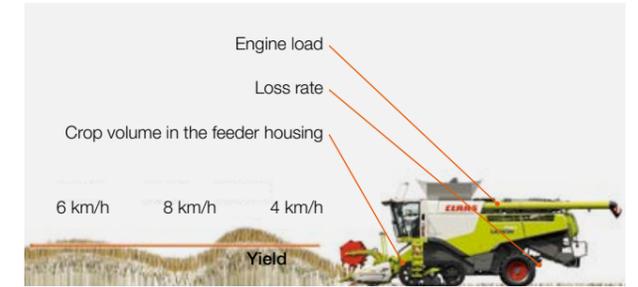
CRUISE PILOT: automatic forward travel control.

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



How you benefit:

The predictive CRUISE PILOT system 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.

NEW: Unloading mode for the CRUISE PILOT.

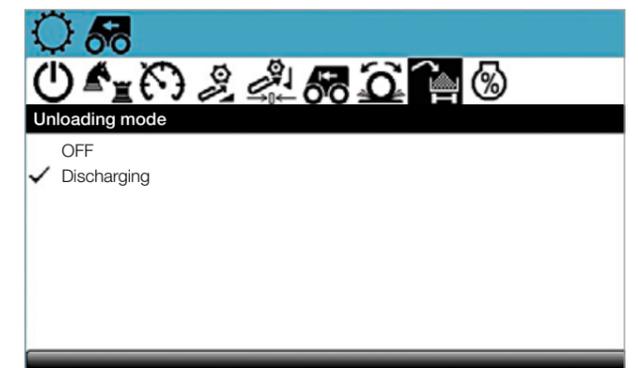
If offloading takes place during the harvesting process, the operator can preselect either of two different strategies:

Unloading mode OFF:

CRUISE PILOT does not take account of the unloading process and carries on making continuous adjustments to the forward speed.

Unloading mode Offloading:

The forward speed is maintained at a constant setting during the unloading process. The CRUISE PILOT is deactivated temporarily. This can make loading the transport vehicle easier.



More adjustment per second. CEMOS AUTOMATIC.

CEMOS.

CEMOS is the CLAAS umbrella term for all the systems which optimise machine performance. There are two different versions of CEMOS:

- 1 Dialogue-based systems, such as CEMOS DIALOG or CEMOS Advisor. These guide the operator through a number of steps in order to achieve the optimum machine configuration. This process requires the operator to confirm the suggested settings or apply them manually.
- 2 CEMOS AUTOMATIC, the term which covers various functions which optimise the machine and a particular process entirely automatically. All the operator has to do is activate the automatic system. The functions include CEMOS AUTO CLEANING, which optimises the cleaning process, and CRUISE PILOT for controlling the throughput.

Harvesting instead of adjusting.

All the CEMOS AUTOMATIC functions adjust the machine continuously and automatically in line with the current harvesting conditions and enable maximum throughput with top grain quality and cleaning while keeping fuel consumption to a minimum. All the operator has to do is activate the automatic functions.

Automatic cleaning.

CEMOS AUTO CLEANING optimises the cleaning process by adjusting the following:

- Fan speed
- Upper sieve opening
- Lower sieve opening

Functional principle.

Simple, but remarkably effective: when the combine starts work in the field, CEMOS AUTO CLEANING configures the machine to comply with certain preset values, quickly establishing the optimal setting for the work systems. Taking account of the changing harvesting conditions throughout the course of the day, this optimum setting is repeatedly checked and continuously adjusted. As a result, CEMOS AUTO CLEANING carries out continuous readjustment on a scale which no operator would be able to achieve manually.

Range of applications.

CEMOS AUTO CLEANING is used for wheat, barley, triticale, rye, oats, rapeseed, maize and soybeans. The function is therefore available throughout the entire harvest season.



The new CEBIS MOBILE keeps you in the picture.

The current conditions of all major assemblies and active CEMOS AUTOMATIC functions are shown. The image from the GRAIN QUALITY CAMERA can also be shown. In this way, the operator can keep an eye on all the relevant information and adapt the operating strategy if necessary.

New look and operating concept for CEMOS.

The new CEBIS MOBILE touchscreen terminal allows the following functions to be controlled:

- CEMOS DIALOG
- CEMOS AUTO CLEANING
- CRUISE PILOT
- AUTO CROP FLOW

Monitoring the whole picture.

Operating a combine harvester is a highly complex task with up to 50 settings from the reel to the chopper which influence the harvest result. The operator must continually monitor and assess about a dozen process variables. Few would be able to keep an eye on everything at the same time to get the most from the machine: and that's where AUTO CLEANING comes in.



Extremely easy activation by means of the AUTO PILOT button on CMOTION or on the multifunction control lever



CEMOS AUTOMATIC.
Gold SIMA Innovation Award

CEMOS AUTO CLEANING.

Optimisation strategies.

The operator can choose from various optimisation strategies:

- Maximum throughput
- Minimal fuel consumption / straw quality
- High grain quality
- Optimum balance

The selection made by the operator specifies the result which CEMOS AUTO CLEANING is to attain in accordance with the required strategy. In order to do this optimally, the cleaning settings are adjusted automatically by the CEMOS AUTO CLEANING function.

The operator has full control all the time.

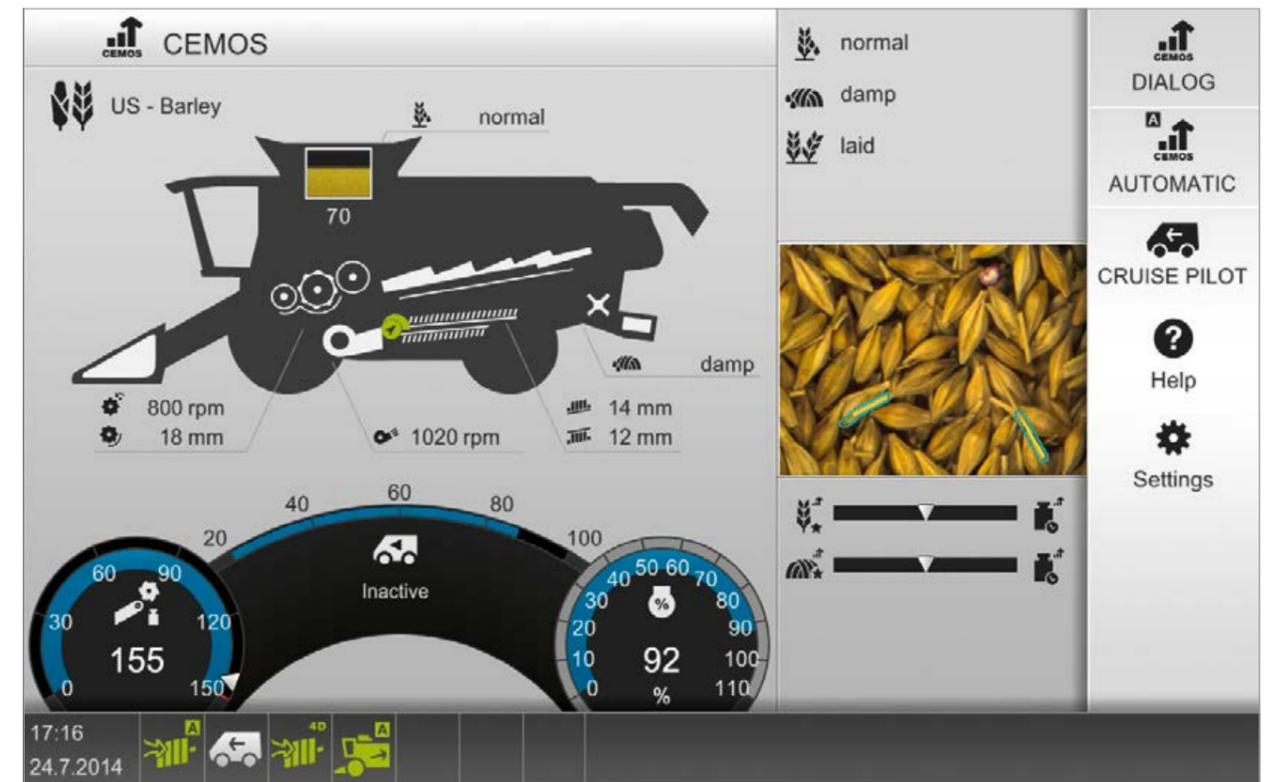
CEMOS AUTO CLEANING operates systematically on the basis of the CEMOS DIALOG software. The operator can intervene at any time and use the dialogue with CEMOS to establish the correct setting. The automatic system remains active in this situation.

CEMOS DIALOG and CEMOS AUTOMATIC are linked. CEMOS DIALOG therefore handles the entire machine monitoring activity and can give further driving instructions in the form of a text message. Touching the text message opens a dialogue window containing the system's suggestions.



Display and operation.

CEMOS AUTO CLEANING can be controlled and monitored via the machine's CEBIS terminal or the CEBIS MOBILE terminal. The CEBIS MOBILE terminal provides the operator with a permanent overview of all the functional units of the machine and their settings. The machine's CEBIS terminal can only be used to control the units; it does not provide an overview of them.

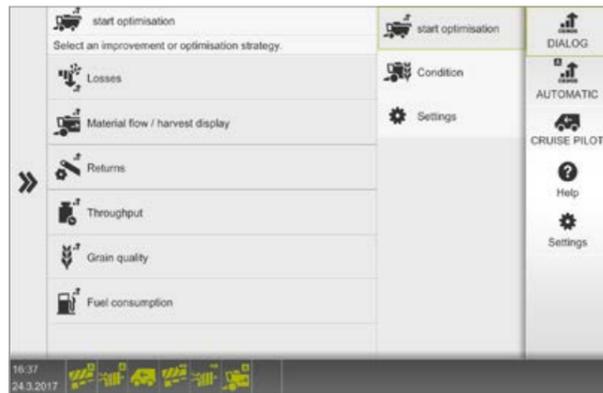


Fully automatic grain cleaning.

The GRAIN QUALITY CAMERA operates in conjunction with CEMOS AUTO CLEANING to control the grain cleaning process. The live image from the GRAIN QUALITY CAMERA can be displayed in CEBIS MOBILE.

Touching the image opens a dialogue window for adjusting the sensitivity. In this way, the operator can set the required level of grain cleaning. CEMOS AUTO CLEANING now optimises the cleaning continuously if the desired level has not yet been attained. The GRAIN QUALITY CAMERA, which supports this process, can be switched on and off in CEBIS.

More dialogue. CEMOS DIALOG.

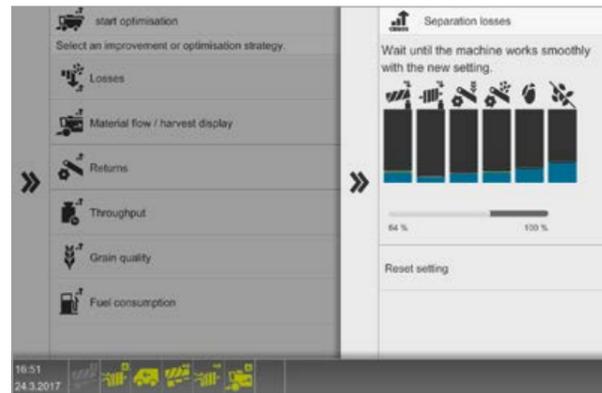


Operators benefit, results improve.

CEMOS DIALOG is a convincing, reliable partner for the operator, motivating him/her to optimise combine performance by adapting the settings to the situation, providing a sense of security and increasing skills through ongoing learning.

CEMOS DIALOG has the right setting.

CEMOS DIALOG fulfils the wish for an assistant capable of finding the right combine settings every time, balancing performance, quality, safety and efficiency. The specified values from CLAAS in the crop log are a good average value for nearly all harvesting conditions, but there is usually room for optimisation. CEMOS helps to utilise this potential consistently.



NEW: CEMOS DIALOG with new operating concept.

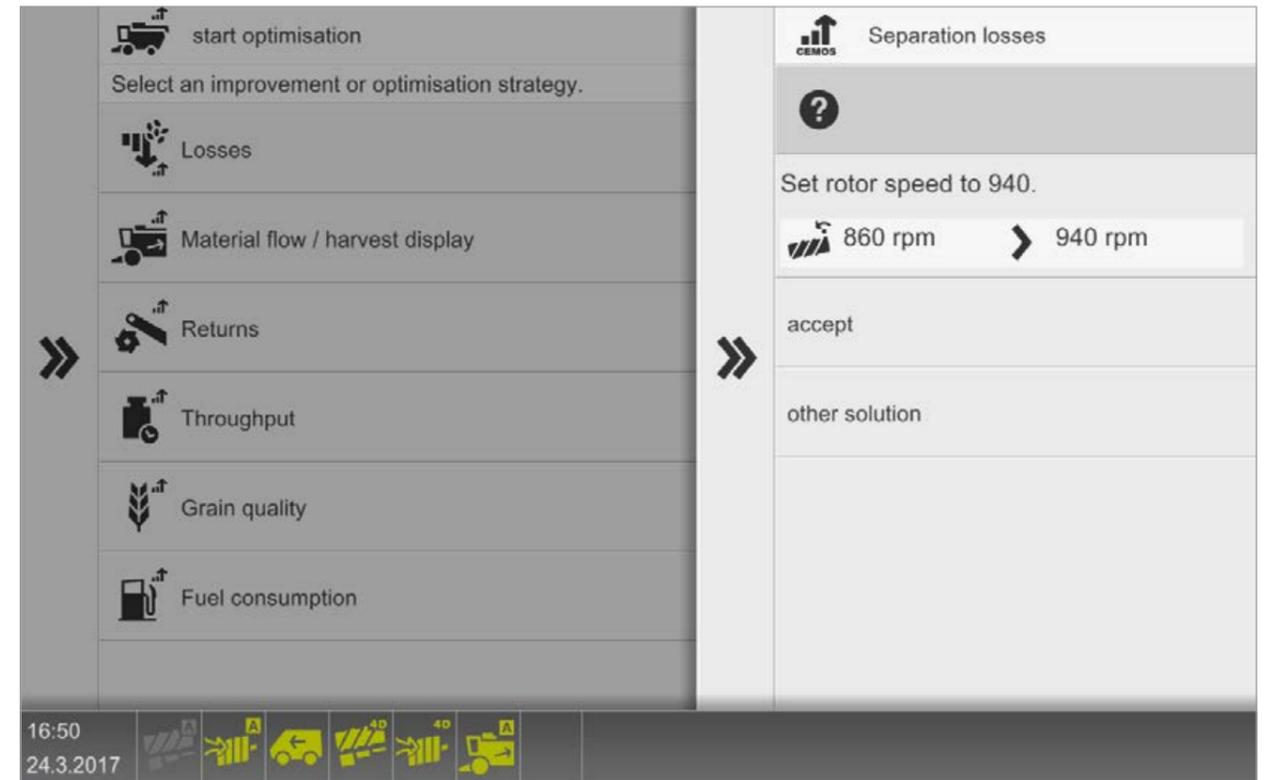
CEMOS DIALOG operation and display functions are controlled through the new CEBIS MOBILE. The main display area shows the current status of all the main components.

Tried and tested.

CEMOS DIALOG has proven outstandingly successful in practical use. Our customers have confirmed the increase in throughput many times over. Another recognised benefit for the operator is the learning effect which results from the continuous communication with CEMOS.

CEMOS Advisor app.

The CEMOS Advisor app is available free of charge for all LEXION, TUCANO and AVERO combine harvester models. Based on the CEMOS DIALOG logic, the CEMOS Advisor app provides assistance with the configuration of combine harvester settings. A lost grain calculation is also included for result monitoring.



A working dialogue.

CEMOS DIALOG guides the operator to the best setting using a screen dialogue.

The optimisation occurs in three steps:

- 1 The operator requests a suggestion for a setting (for example, to reduce losses)
- 2 CEMOS DIALOG makes a logical setting suggestion
- 3 The operator accepts this setting suggestion or rejects it

Steps 2 and 3 are repeated until the operator is satisfied with the result or CEMOS DIALOG has no further suggestions. Equipment adjustments (such as fan speed) are performed by CEMOS DIALOG whenever possible but must always be confirmed by the operator.

No adjustments are made automatically without operator control. Nearly every CEMOS DIALOG offers comprehensive help. If a manual adjustment must be made, CEMOS DIALOG uses a graphic to explain the setting procedure to the operator.

Suggestions for mechanical adjustments.

As CEMOS DIALOG considers the entire crop flow, the operator can also request suggestions for adjustments to mechanical components. If, for example, a crop flow problem arises in the cutterbar, CEMOS DIALOG contains corresponding text messages and illustrations to assist the operator in correcting it.



Top award at Agritechnica 2009: CEMOS was awarded the gold medal by the German Agricultural Society (DLG)

More grain in the tank.



NEW: LEXION 670 TERRA TRAC with grain tank of up to 12,000 l.

After the threshing, residual 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 12,000 litres, the LEXION demonstrates its capacity for high productivity, enhanced by many other strengths.

PROFI CAM – everything in view.

All LEXION models can be equipped with a PROFI CAM at the end 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

The choice is yours.

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

With a maximum discharging rate of 130 litres per second, the grain tank is emptied completely in less than two minutes. Grain tank discharge auger tubes in different lengths ensure that the right configuration is always available for the different cutterbar widths.

Model	Discharging rate (l/s)	Grain tank cap. (l)
LEXION 670	130/110	12000/11000
LEXION 670 MONTANA	110	10000
LEXION 660	130/110	11000/10000
LEXION 650	110	10000/9000
LEXION 630	110 / 80	9000
LEXION 630 MONTANA	110 / 80	9000
LEXION 620	110 / 80	9000/8000

The QUANTIMETER measures and checks.

The primary functions of the QUANTIMETER comprise 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 transverse and longitudinal tilt of the machine, the QUANTIMETER automatically determines the precise quantity harvested.



S10 terminal



CEBIS rear camera.

The image from the camera fitted on the rear hood is fed straight to the CEBIS screen. There is no need for an additional screen in the cab.

The image from the camera is displayed automatically on the CEBIS screen as soon as the multifunction control lever or CMOTION is used to move the LEXION backwards (1). It is also possible to use the DIRECT ACCESS button (2) to call up the image from the camera.

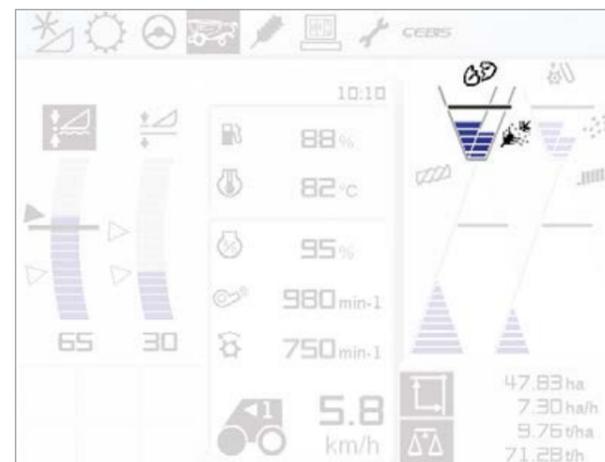


More grain quality. GRAIN QUALITY CAMERA.



NEW: For LEXION 670 and 660. GRAIN QUALITY CAMERA.

The task of assessing the grain quality, that is to say assessing the proportion of broken grains and non-grain constituents (NGC) in the grain tank, calls for a certain level of experience and a high degree of concentration on the part of the operator. The task is complicated by the segregation of the crop in the grain tank caused by the discharge cone. NGC consist of straw, chaff, ear tips and dust. The GRAIN QUALITY CAMERA, which is fitted on the elevator head, is capable of assessing the crop visually and is available for the LEXION 670 and 660.



CEBIS display of GRAIN QUALITY CAMERA.

The grain quality can be represented in CEBIS in two ways. It can be shown as a live video image which can be assessed by the operator. At the same time, the proportion of broken grains and NGC is shown at the right edge of the picture.

Alternatively, the proportion of broken grains and NGC can be shown in the "typical" CEBIS harvest display so that the proportion of broken grains and NGC appears next to the returns display.

Automatic image evaluation.

The images captured by the GRAIN QUALITY CAMERA are evaluated continuously in a fully automatic process. Thanks to the position of the camera on the elevator head, the data obtained are very reliable as the material has not been segregated and the camera acquires a direct image of the crop flow.

Possible crops.

The GRAIN QUALITY CAMERA can evaluate the following crops:

- Wheat
- Rapeseed
- Maize
- Barley
- Rye
- Triticale

It is, of course, also possible to show the video image of other crop types in order to inspect the crop flow.

Improved grain quality.

The GRAIN QUALITY CAMERA provides significantly improved information as a basis for optimising the combine settings for grain quality as the latter is subjected to continuous automatic monitoring. The CEBIS displays allow the operator to carry out the assessment quickly. This results in perfect grain quality and reduced losses.

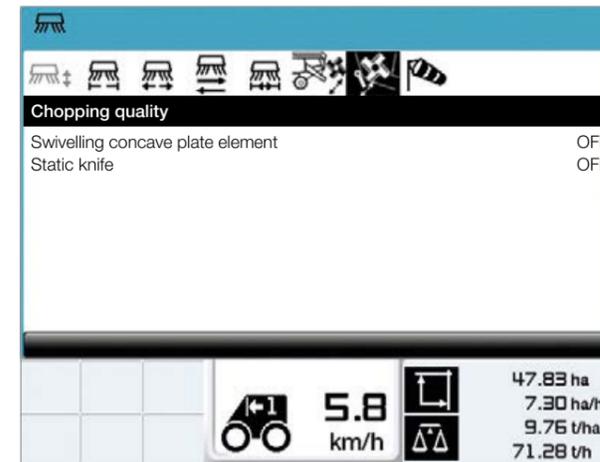
Even better.
The straw management.

Efficient and precise.

The new straw chopper, the new mechanically driven power spreader and the automatic discharge direction adjustment form the effective and well-thought-out straw management system for your LEXION.

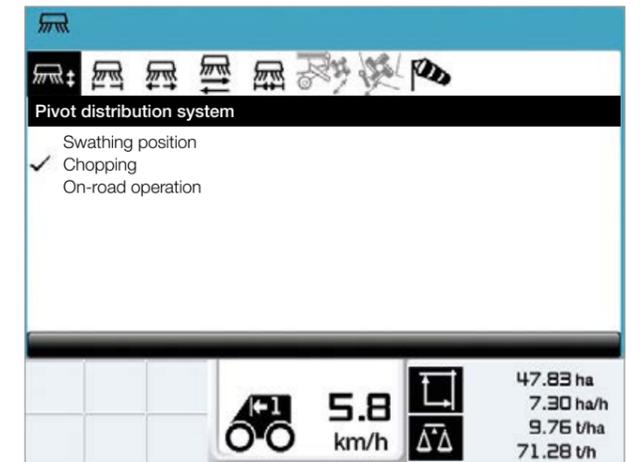


More performance. More convenience. The straw chopper.



Convenient optimisation of chopping quality.

In the straw chopper, both the swivelling grating element and the static knife array can be adjusted hydraulically. This means that the chopping quality can be adjusted in CEBIS while the machine is working, thereby enabling a flexible reaction to field conditions. A mechanical adjustment system, which is operated by two levers without the need for any tools, is also available.



Switchover to swathing from the cab.

Getting out the cab is now history, at least when it is a matter of switching over the straw chopper from swathing to spreading chopped material. This task can be performed effortlessly from the cab via CEBIS. If chopping is required for only certain parts of a field, the operator can switch the machine over in a matter of seconds.

For more throughput.

Sometimes, bigger is better. Crop intake and transport are improved significantly by the increased diameter of the straw chopper. The extended floor of the straw chopper increases the duration of the transit of the chopped material and accelerates it to a significantly greater degree. When used with the standard deflector, this increases the projection distance and spreading quality drastically.

CLAAS straw management. With SPECIAL CUT.

From the straw walkers, the straw moves directly to the chopper, which can be varied in intensity depending on the operating conditions. Up to 88 closely arranged dual bladed knives, a cross blade and a static knife array 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 Knife
- 4 Rasp bar
- 5 Swivelling grating element
- 6 Adjustable static knife array



Mechanical adjustment of static knife and grating element



Hydraulic adjustment of static knife and grating element

More efficiency. More precision. The power spreader.



Mechanically driven power spreader.

Perfect straw spreading of the highest quality is guaranteed by the mechanically driven power spreader. The two counter-rotating spreading rotors are driven by a belt and therefore always run at a constant speed. This unique drive concept ensures consistent spreading quality.

Precise spreading of chopped material and chaff.

Both the chopped material and the chaff from the cleaning system are caught in motion by the power spreader and accelerated again. This arrangement, together with the mechanical drive, keeps the power requirement down and makes for low fuel consumption.

Performance-map-controlled spreading.

Each spreading rotor has two movable deflectors whose spreading width can be adjusted either together or separately. This allows the system to be adjusted to any conditions encountered in practice. In this way, the LEXION is able to spread straw efficiently using minimal energy – even under such unfavourable conditions as extremely high straw volumes, differing degrees of straw moisture, strong crosswinds or sloping terrain.



The power spreader in chopping mode.

The straw chopper feeds the material straight to the power spreader. The power spreader accelerates the crop flow again and spreads the material across the entire working width.

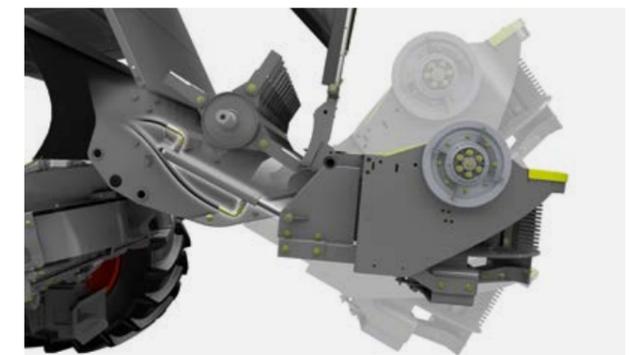
Combination of power spreader and chaff fan.

Short straw and chaff are routed from the sieve pan to the chaff fan. The chaff fan feeds the material straight to the power spreader. In this way, the mixture of chaff and short straw, which can account for up to 25% of the total throughput, is fed into the active spreading system which spreads it across the entire working width.



The power spreader during swathing.

When swathing is being performed, the power spreader is simply folded away downwards and the drive is completely disengaged. The power spreader is now stationary and no longer requires any power. Chaff and short straw from the sieve pan are now spread by the chaff fan.



Power spreader positions: transport, chopping, swathing

More effective spreading.

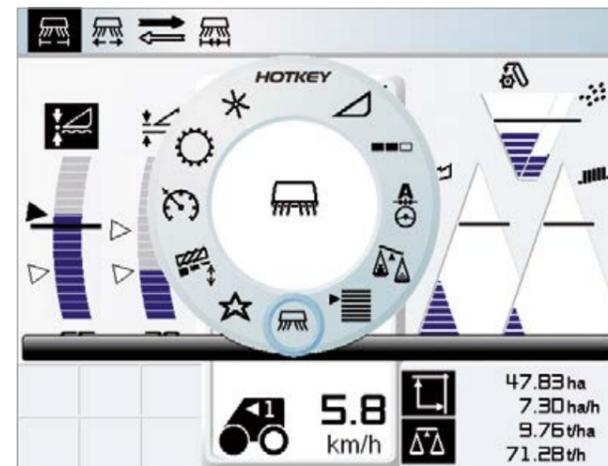
Automatic discharge direction adjustment.

All LEXION models with a power spreader can be equipped with two sensors for automatic adjustment of the direction in which the chopped material is discharged. The sensors are fitted on the light brackets at the left and the right of the machine. The operator can adjust the sensitivity of the sensors easily in CEBIS.

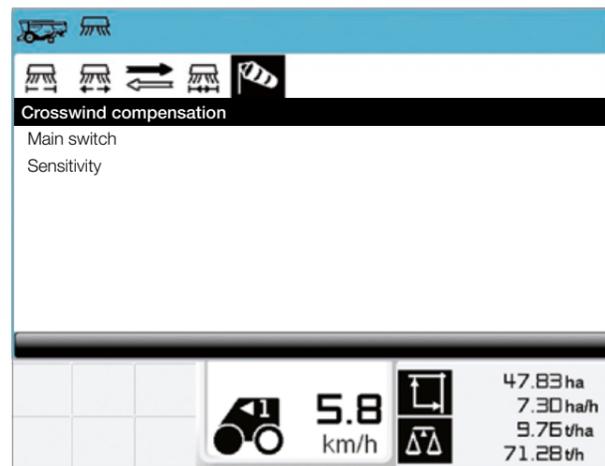


Even chaff distribution.

From the sieve pan, 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.



Manual setting of the direction and width of spreading in CEBIS



Settings in CEBIS

Automatic crosswind compensation.

Crosswinds affect the discharge direction of the chopped material. This results in inconsistent straw distribution and chopped material at the crop edge which can inhibit the crop flow in the cutterbar (A). The remedy: sensors at the rear of the machine detect the strength of the crosswind and the discharge direction of the chopped material is adjusted to compensate. The advantages are therefore automatic, uniform distribution of the chopped material and a reduced workload for the operator (B).

Automatic discharge direction adjustment when operating on sloping terrain.

When the machine is operating on sloping terrain, gravity keeps the sensors at the rear vertical at all times. The automatic discharge direction adjustment also enables uniform distribution of the chopped material across the entire working width (D) when operating on sloping terrain, thereby reducing the operator's workload in crosswinds and when working on sloping terrain.

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 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.

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



CPS | CLAAS
POWER
SYSTEMS

More power reserves. The engines.



Planar dust extraction.

A reliable system: with planar dust extraction, the LEXION 650, 630 and 620 models benefit from high-performance cooling and comfortable reserves of cooling capacity. 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.



Good accessibility for maintenance and care tasks.

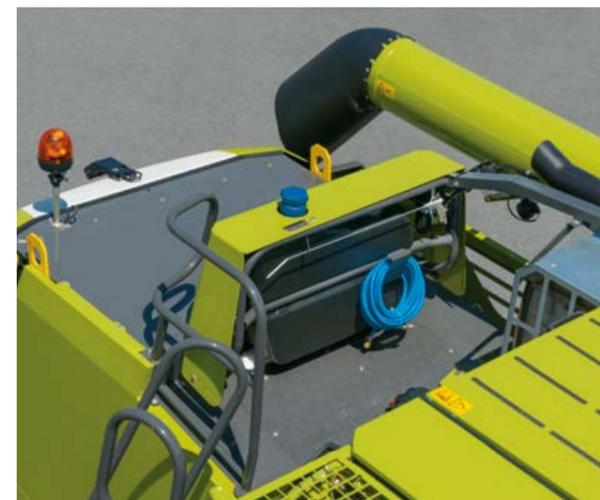
The engine platform can be reached easily via the access ladder. The radiator package can be folded up for cleaning. It is also possible to remove the air filter without tools. As a result, daily engine maintenance can be performed quickly. Service lighting on the ladder, the tank filling point and under the engine cover allows maintenance tasks to be carried out safely at night, too.

Power and intelligence in one.

The Mercedes-Benz engines with a displacement of up to 10.7 l deliver top performance for the LEXION while keeping operating costs down. With these engines, all LEXION 600 models meet the requirements of exhaust emissions level Stage IV (Tier 4). The LEXION 670 and 660 models have a displacement of 10.7 l and are now also equipped with DYNAMIC COOLING.

The facts.

- LEXION 670 / 660: Mercedes-Benz OM 470 LA, 10.7 l
- LEXION 650 / 630 / 620: Mercedes-Benz OM 936 LA, 7.7 l
- Six-cylinder in-line layout
- Emissions standard Stage IV (Tier 4)
- DYNAMIC COOLING for LEXION 670 / 660
- Fuel tank with 800 l capacity
- High torque
- Low fuel consumption
- Optimal power transmission



Everything in its place.

Situated at the rear of the engine platform are the AdBlue tank and a holder for an air hose as well as an air gun. If the machine is equipped with a compressor, there is a compressed air connection on the engine platform which can be used to clean the machine.

More cool intelligence. DYNAMIC COOLING.



DYNAMIC COOLING for LEXION 670 and 660.

The LEXION 670 and 660 models are now also equipped with the revolutionary, horizontal cooling system. Having proved itself comprehensively in the LEXION 700 over the past few years, it is now also being adopted in the LEXION 600 series. It is optimally situated in a horizontal position behind the engine compartment. A large rotating sieve with a diameter of 1.6 metres ensures that it is able to take in sufficient fresh air at all times. Permanent cleaning is performed by an automatic dust extraction system. The large radiator package has sufficient reserves to ensure continuous cooling while also providing the benefit of extended cleaning intervals.

Save fuel through variable fan drive.

Unique among combine harvesters, all LEXION models are equipped with a variable fan drive whose speed is adjusted automatically in accordance with the degree of cooling required. This makes it possible to save power which the rest of the machine can call on. This intelligent system only draws power when it really requires it.

It's curtains for heat build-up.

The design of the cooling system provides an ideal air flow. Air is drawn in at the top, passes downwards through the radiator and is then vented through the engine compartment and side cooling fins.

This creates a particularly useful curtain effect. The air flow actively inhibits dust from rising, thus preventing soiling of the radiator and effectively functioning as a permanent cleaning system. This has two advantages for you: sufficient cooling at all times and long maintenance intervals.



The working hydraulics: more lifting power, faster response.

The outstanding performance of the LEXION can now also be taken to new heights on steep slopes. The 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



Effective threshing just like on level ground.

The drive axle is the key component of the LEXION MONTANA. Hydraulic swing rams 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%. As a result, it is able to operate effectively on steep terrain and deliver a high threshing output, just like on level ground. The operator is in an optimal, comfortable seated position on any slope, enabling even long working days to be handled without stress.

MONTANA feeder housing.

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 MONTANA feeder housing is equipped with a horizontal ram for cutting angle adjustment as well as two vertical rams for AUTO CONTOUR control and side slope levelling. The reinforced design enables harvesting with a VARIO cutterbar up to 9.0 metres wide.



Operating panel with MONTANA control system



MULTI CONTOUR.

As well as performing all the familiar AUTO CONTOUR functions, the innovative MULTI CONTOUR system moves the pivoting frame and adjusts the cutting angle on the basis of the axle position.

3D-cleaning system for extra reliability.

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

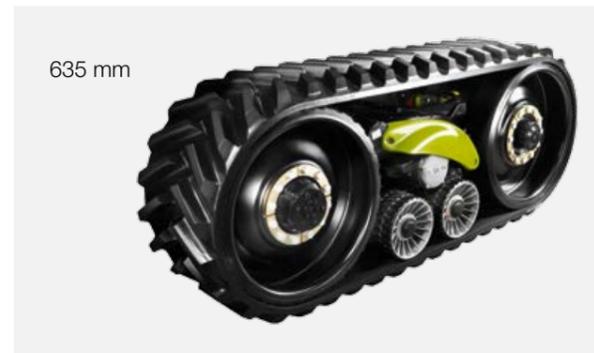
The advantages of MONTANA at a glance:

- 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
- Car-like driving characteristics
- 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.





635 mm

Automatic level compensation.
Hydropneumatic suspension.

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



735 mm

At a glance:
the TERRA TRAC crawler track assembly.

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 (side slopes)
- Less drive resistance, less slippage, lower fuel consumption
- Longer operating times, better seasonal performance
- Fully suited to road travel at 30 km/h



890 mm

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

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.

LEXION 670 and 660 with TERRA TRAC.

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 in three widths are available for the LEXION 670 and 660 models. 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 corners.

Large contact area, compact transport width.

More time to work.

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 quickly with a high level of driving safety, excellent 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.

Hydrostatic ground drive.

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 series of hydrostatic drives is characterised by increased efficiency. You benefit because the power saved is available for use by the rest of the machine, the overall result being more efficient operation.

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

LEXION 670 / 660



Drives like a car.

When driving in road traffic, the LEXION 670 model automatically reduces 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 when moving off.

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 significantly 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	bar	2.9	1.8
800/70 R 32	bar	2.4	1.6

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



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

POWER TRAC.

A touch of a button is all that is required to summon up the full power of the LEXION to ensure that it can continue to operate in the most challenging ground conditions: with maximum pulling power, yet reduced fuel consumption. The all-wheel drive operates reliably and is maintenance-free.

The drive concept:

- Additional traction is provided by a central hydrostatic drive on the rear axle
- All-wheel drive with intelligent control technology can be engaged while on the move
- Classic two-wheel drive possible by mechanically disengaging rear-wheel drive:
 - For increased efficiency during on-road operation
 - More pulling power



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



30 km/h, fully suited to road travel



Reduced transport width with increased contact area

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.

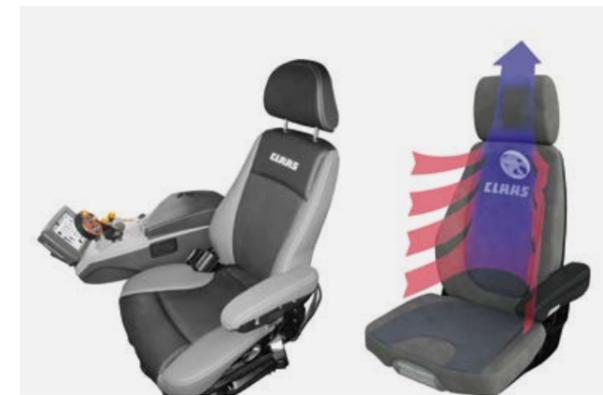


More space. More comfort.
A more productive workplace.



For optimal working conditions.

The LEXION gives the operator freedom of movement, a clear control layout and excellent visibility on all sides. The air conditioning maintains a consistent, comfortable atmosphere, which, together with superb soundproofing and a three-position adjustable steering column, provides first-class working conditions.

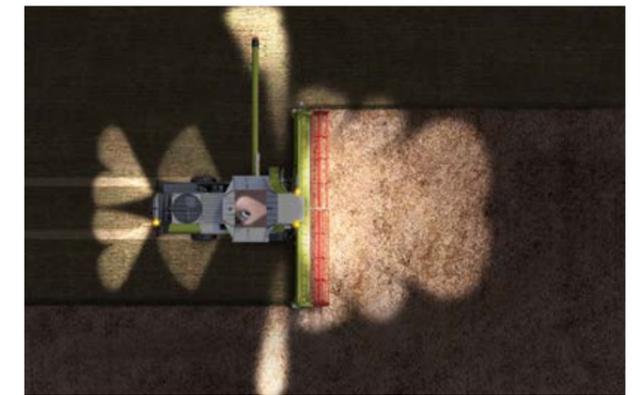


Cushions, supports, ventilates and keeps you warm: the deluxe operator's seat.

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 attenuates vibrations by 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. The leather seat is also air-suspended, heated and ventilated.

Fully featured: passenger seat with integrated refrigerator box.

- Integrated armrest at left on door
- Foldable backrest acts as a table
- Larger refrigerator box with capacity of 43 litres and a bottle holder
- Many other stowage compartments



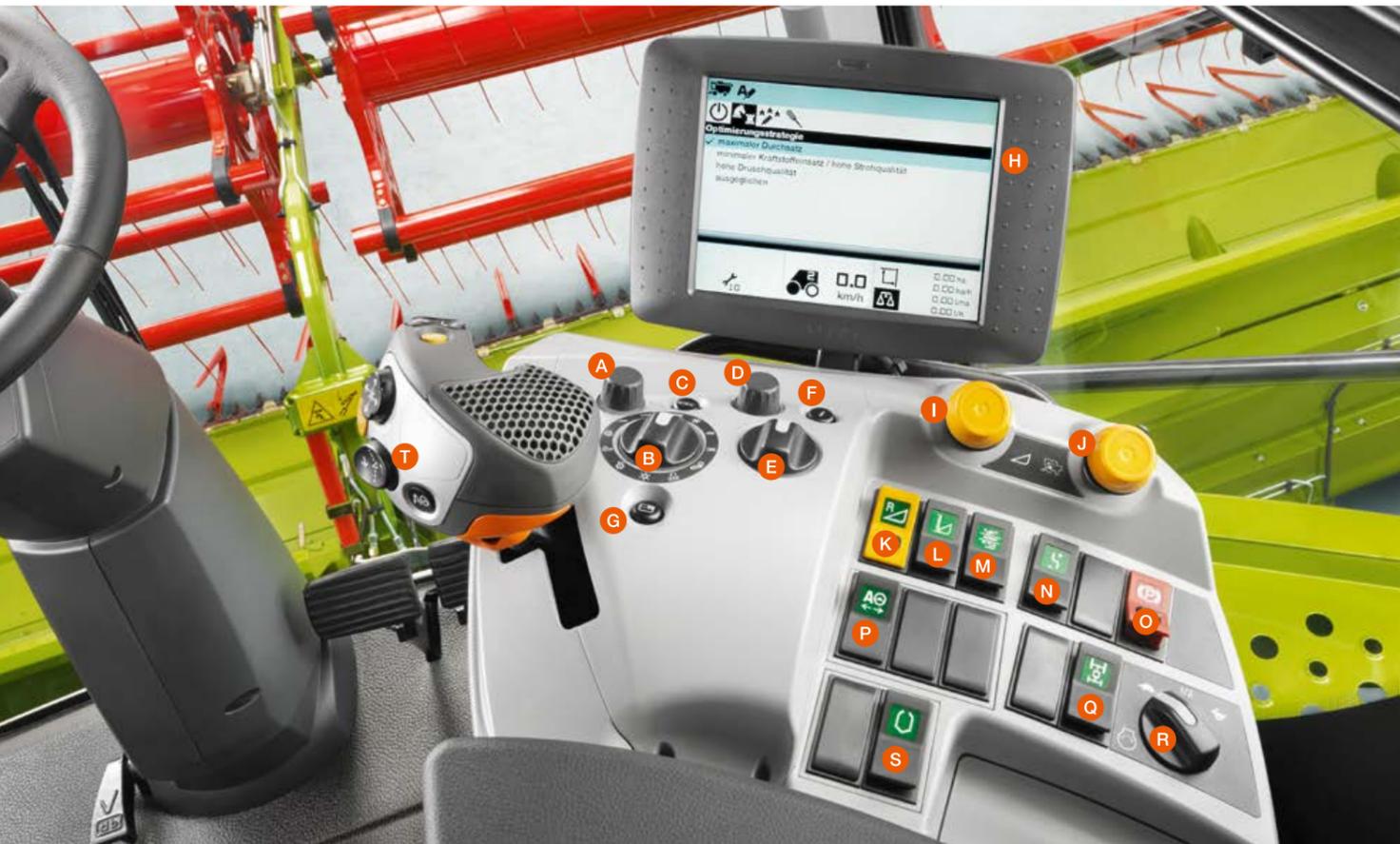
NEW: Long-range work light.

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. The LED light packages turn night into day.

- Up to twelve work lights on the cab roof
- Long-range work light with extended range for illumination of large areas
- Lighting for folding front attachments
- Side lights, stubble lights, steering axle lights
- Automatic lighting of the discharge auger tube
- Automatic reversing lights
- Lighting for the cleaning system, grain tank and returns
- Service lights beneath the side panels, in the tool compartment, on the steps to the engine compartment and in the engine compartment itself
- Mobile work light



Refrigerator box integrated in passenger seat



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 Menu selection rotary/push switch
- B CEBIS direct menu rotary switch
- C Escape button
- D HOTKEY rotary/push switch
- E HOTKEY direct menu rotary switch
- F Information button
- G DIRECT 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
- T CMOTION multifunction control lever



CEBIS controls and HOTKEY

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.

An eye-catching 21 cm 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 angle as well as horizontally and vertically.

Clear, simple and fast operation.

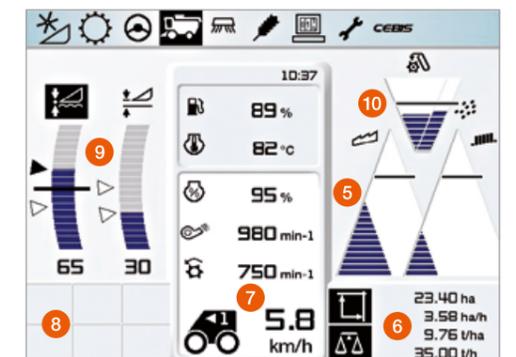
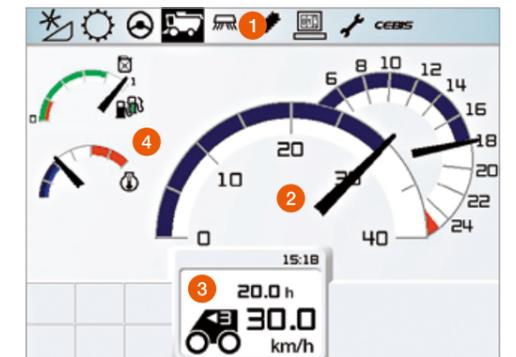
- The basic machine settings in working mode are made via the CEBIS rotary switch (B)
- An additional HOTKEY rotary switch allows fast access to other functions (E)
- The position of the rotary switch is shown on the CEBIS display (H)
- The CEBIS and HOTKEY rotary/push switches (A / D) are used for menu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

CEBIS on the road.

- 1 Menu bar
- 2 Travel speed and rpm
- 3 Operating hours
- 4 Fuel level and temperature display as well as urea level

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)





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

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



Toggle switch (8) with triple function

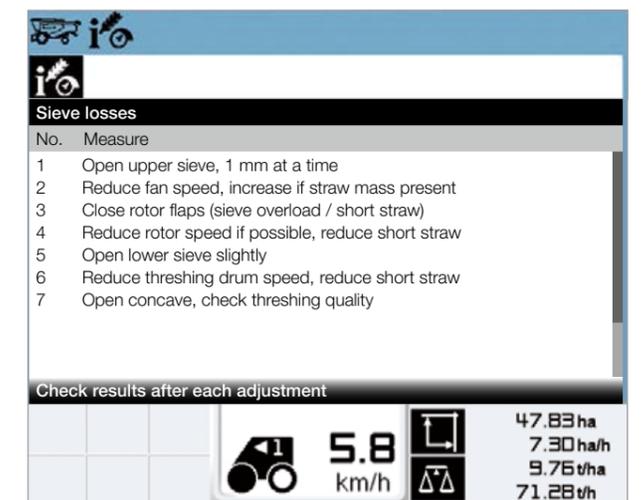


Performance optimisation in CEBIS.

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

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

In this way, the operator is provided with comprehensive assistance to get the most from the installed capacity of the machine.





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 anytime, anywhere via the internet. Enjoy the benefits of TELEMATICS.

Fleet View app.

The Fleet View app from CLAAS makes it possible to coordinate the grain transport team of a harvesting fleet so that the combine harvesters can keep on working without idle time. The app continuously informs all the drivers in near real time about the positions of the combine harvesters in the fleet and their current grain tank fill levels.

Improve work processes.

A report with the operating time analysis and other important evaluations of the machine is sent to you 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 work again. In addition, the working tracks of the machine can be viewed together with the event log in order to optimise the transport logistics. TELEMATICS enables planned fleet management and helps avoid unprofitable idle time.

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.

Optimise your settings.

Use your personal access to the TELEMATICS web server to quickly compare the performance and harvesting data for your machines so that you can fine tune the settings for the best results under all conditions every day.

Automatic documentation.

This function automatically documents and processes all process data. As an extension to TELEMATICS, automatic documentation transfers (without any intervention by the machine operator) the work data relating to the specific field deployment to the server, where they are interpreted and processed. Data interpretation and processing are based on the field boundaries previously uploaded from your system. Further processing is straightforward, as all machine-relevant data can be exported in IsoXML format.



Job management.

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

- 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

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.



Fast data processing.

With its extremely fast on-board network, the LEXION is already prepared to meet the far-reaching challenges of the future.

A wealth of information can be printed whenever required



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 sensor bands, 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.

Choose from three automatic guidance systems.

All the LEXION models can be equipped with three automatic guidance 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

The way you want it.

Portable displays from CLAAS offer a flexible control option for ISOBUS and guidance systems. The terminal can also be moved from one tractor or self-propelled harvester to another, depending on the season or job in hand. Fit your LEXION with the equipment you need, straight from the factory or as a retrofit option:

- S10: high-resolution 10.4" touchscreen terminal with guidance and ISOBUS functions: up to four cameras can be viewed
- S7: high-resolution 7" touchscreen terminal with guidance functions



Support on the headlands.

TURN IN makes it easier for the machine to line up correctly. As the combine approaches the intended track, the automatic guidance takes over from an angle of 90° (where the direction of travel of the machine is the only reference parameter) or even 120° (where there is a field boundary). TURN IN allows the operator to concentrate on the attachment and the machine without also having to attend to lining up correctly. TURN IN is standard with both guidance system terminals (S10 / S7 terminal).

Automatic guidance at the headland too.

The AUTO TURN function takes care of turning manoeuvres at the headland. The direction of the turn and the next track to be worked are pre-selected on the terminal. The guidance system does the rest.

GPS PILOT FLEX.

The GPS PILOT can be used not only with hydraulically actuated steering, but also with the GPS PILOT FLEX automatic steering wheel. This steering wheel allows you to operate the machine with a high degree of accuracy. The great advantage of the GPS PILOT FLEX is its versatility.

- No need to touch the hydraulics
- Guidance system can quickly be moved between different machines

The electric steering wheel transfers steering commands from the terminal and navigation controller to the steering axle in order to steer the machine.

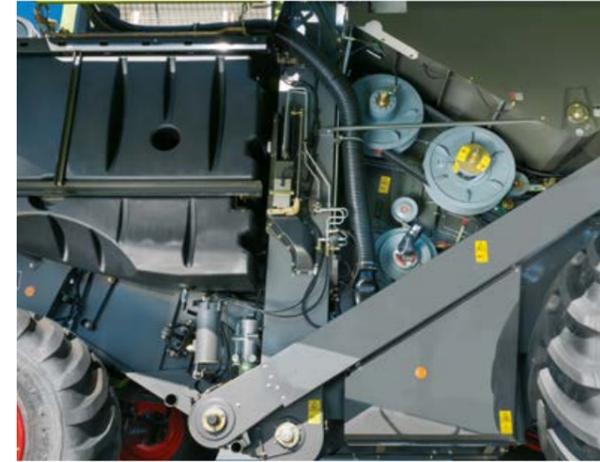
NEW: Maintenance made easy.



NEW: The convenient maintenance package.

The daily maintenance tasks should also be convenient and user-friendly. The new convenient maintenance package features a number of smart solutions:

- Water tank with 15-litre capacity, separate shut-off valve for hand washing on side of tool compartment, can be removed for filling
- Compressed air hose reel with 15 m hose and integrated automatic system for rolling up the hose
- Bracket for grease gun in tool compartment



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 and DYNAMIC COOLING systems 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



The central lubrication system.

The central lubrication system supplies grease to practically all lubrication service points as required. Lubrication points and intervals only need to be programmed once. In contrast to individual manual lubrication, the grease is transported from the central reservoir and distributed to the lubrication service points.

How you benefit:

- Reliable and controlled lubrication of all points while machine is running
- Service life of pins and bearings is extended
- Cost savings through reduced grease consumption and reduced wear
- Reduced maintenance work and costs



The oil drain maintenance point is right next to the tool compartment

Whatever it takes. CLAAS Service & Parts.



Your requirements count.

You can always rely on us: we'll be there whenever you need us. Everywhere. Quickly. Reliably. 24 hours a day if necessary. With a complete solution for your machine or business. Whatever it takes.

ORIGINAL parts and accessories.

Specially matched to your machine: precision-manufactured parts, high-quality consumables and useful accessories. We will supply exactly the right solution from our comprehensive product range to ensure that your machine is 100% reliable. Whatever it takes.

For your business: CLAAS FARM PARTS.

CLAAS FARM PARTS offers one of the most comprehensive ranges of parts, regardless of brand and sector, for all agricultural applications on your farm. Keeping you up and running.

Always up to date.

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. Whatever it takes.

Reliability can be planned.

Our service products help you to increase machine reliability, minimise the breakdown risk and base your calculations on predictable costs. CLAAS MAXI CARE offers planned reliability for your machine. Whatever it takes.

Worldwide coverage from Hamm.

Our central spare parts warehouse delivers all ORIGINAL parts quickly and reliably all over the world. Your local CLAAS partner can supply the right solution for your harvest or your business within a very short time. Whatever it takes.

Problem solving by remote diagnostics: CLAAS TELEMATICS.

CLAAS TELEMATICS on your machine brings two important advantages: fast assistance from CLAAS service technicians plus economic benefits for your work thanks to wireless networking. We can solve your problems on the spot – even when you can't see us. Whatever it takes.



The CLAAS Parts Logistics Center in Hamm, Germany, stocks more than 155,000 different parts and has a warehouse area of over 100,000 m².



- 1 GPS PILOT
- 2 Comfort cab
- 3 CEBIS
- 4 Folding dividers
- 5 LASER PILOT
- 6 MultiCoupler
- 7 VARIO cutterbar table
- 8 Hydrostatic reel drive
- 9 AUTO CONTOUR
- 10 Mercedes-Benz engines for all LEXION 600 models, DYNAMIC COOLING for LEXION 670 and 660
- 11 MULTIFINGER SEPARATION SYSTEM (MSS)
- 12 High-performance straw walker
- 13 APS threshing system
- 14 PROFI CAM
- 15 Power spreader with automatic discharge direction adjustment
- 16 SPECIAL CUT chopper
- 17 Chaff fan
- 18 All-wheel-drive axle
- 19 3D-cleaning system
- 20 Separate returns pan
- 21 Tyre technology / TERRA TRAC
- 22 Turbine fan

Built on experience. The new LEXION.

Cab.

- The new soundproofed comfort cab provides an exceptionally quiet environment to enable you to focus on your work
- CEBIS colour screen for machine configuration
- CMOTION multifunction control
- NEW: CEBIS MOBILE touchscreen for controlling CEMOS DIALOG and CEMOS AUTOMATIC
- CEMOS AUTO CLEANING
- AUTO SLOPE
- AUTO CROP FLOW
- TELEMATICS
- GPS PILOT
- CRUISE PILOT
- Job management

Cutterbars.

- VARIO cutterbars in widths up to 12.30 m facilitate up to 10% better performance by optimising the crop flow
- All VARO cutterbars with integrated rapeseed plates and a table with an adjustment range of 70 cm
- MAXFLEX 930 and 770 with knife bar which can flex up to 18 cm
- The AUTO CONTOUR intelligent cutterbar control system automatically compensates for surface irregularities in the direction of travel as well as those in the transverse direction
- The standard and VARIO cutterbar, CERIO cutterbars, rice cutterbar, rapeseed cutterbar, folding cutterbar, MAXFLEX, SUNSPEED, SWATH UP and MAXFLO ensure high flexibility

Threshing technology.

- Up to 20% more throughput with the APS threshing system
- NEW: 12.000 l grain tank for LEXION 670 TERRA TRAC, discharging rate of up to 130 l/s
- 3D-cleaning system for slopes up to 20%
- Professional straw processing with SPECIAL CUT and power spreader with automatic discharge direction adjustment for even spreading of straw over the entire working width

CPS – CLAAS POWER SYSTEMS.

- NEW: Mercedes-Benz engines provide reliable reserves of power, even under the toughest field conditions
- High-performance working hydraulics for even faster operation of the AUTO CONTOUR cutterbar control
- TERRA TRAC and tyre technology for optimal ground protection
- NEW: LEXION 660 TERRA TRAC
- Easy and convenient access to maintenance points
- NEW: Side access to straw walker compartment

LEXION		670/ 670 TERRA TRAC/ 670 MONTANA	660 / 660 TERRA TRAC	650	630/ 630 MONTANA	620
Threshing system						
APS acceleration and pre-separation		●	●	●	●	●
MULTICROP		●	●	●	●	●
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	m ²	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	No.	6	6	6	5	5
Straw walker length	m	4.4	4.4	4.4	4.4	4.4
Straw walker area	m ²	7.48	7.48	7.48	6.25	6.25
Separation area	m ²	9.85	9.85	9.85	8.23	8.23
MULTIFINGER SEPARATION SYSTEM						
Crop cleaning						
Plastic preparation floor (divided, removable from the front)		●	●	●	●	●
Fan		6-turbine	6-turbine	6-turbine	4-turbine	4-turbine
Fan adjustment, electric		●	●	●	●	●
Dual ventilated step		●	●	●	●	●
Divided, counterdirectional sieve pan		●	●	●	●	●
3D-cleaning system		○	○	○	○	○
Total sieve area	m ²	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						
Capacity (as per ANSI/ASAE S312.2)	l	11000/ 10000 (MONTANA) ○ 12000 (TERRA TRAC)	10000/ ○ 11000	9000/ ○ 10000	9000	8000/ ○ 9000
Unloading auger swivel angle	degrees	101	101	101	101	101
Discharge rate	l/s	110 (○ 130)	110 (○ 130)	110	80 (○ 110)	80 (○ 110)
QUANTIMETER yield meter		○	○	○	○	○
Automatic chain lubrication for grain tank unloading		○	○	○	○	○

● Standard ○ Option □ Available – Not available

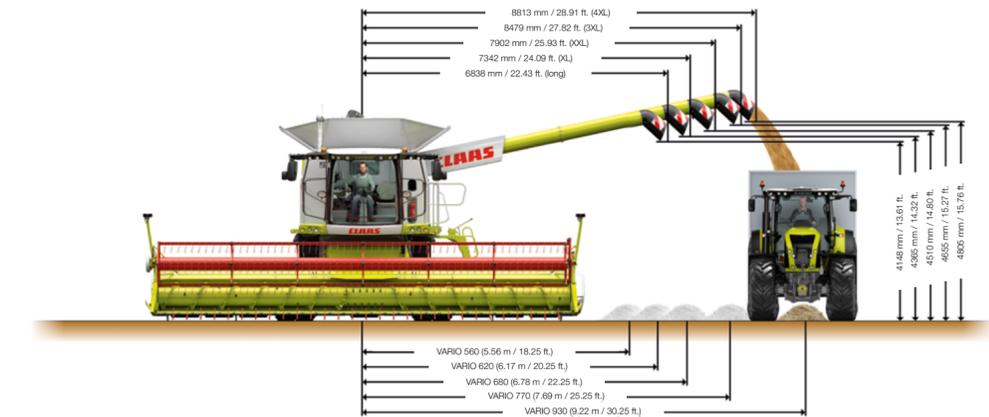
LEXION		670/ 670 TERRA TRAC/ 670 MONTANA	660 / 660 TERRA TRAC	650	630/ 630 MONTANA	620
Chopper						
SPECIAL CUT 88-blade straw chopper		○	○	○	–	–
SPECIAL CUT straw chopper, 72 knives		–	–	–	○	○
STANDARD CUT 64-blade chopper		○	○	○	–	–
STANDARD CUT 52-blade straw chopper		–	–	–	○	○
Power spreader		○	○	○	–	–
Hydraulic changeover from cab (road travel, swathing, chopping)		●	●	●	●	●
Hydraulic adjustment static knife and grating element		○	○	○	○	○
Chaff spreader		○	○	○	○	○
Chaff fan with power spreader		○	○	○	–	–
Automatic discharge direction adjustment		○	○	○	–	–
Running gear						
Side slope levelling up to 17%		● (MONTANA)	–	–	● (MONTANA)	–
Longitudinal levelling up to 6%		● (MONTANA)	–	–	● (MONTANA)	–
TERRA TRAC crawler tracks with hydropneumatic suspension		● (TERRA TRAC)	● (TERRA TRAC)	–	–	–
POWER TRAC all-wheel drive		○	○	○	○	○
2-speed manual transmission		● (MONTANA)	–	–	● (MONTANA)	–
30 km/h		○	○	–	● (MONTANA)	–
Car-like driving characteristics		●	●	–	● (MONTANA)	–
Engine						
Manufacturer		Mercedes-Benz	Mercedes-Benz	Mercedes-Benz	Mercedes-Benz	Mercedes-Benz
Model		OM 470 LA	OM 470 LA	OM 936 LA	OM 936 LA	OM 936 LA
Cylinders / displacement	No./l	S 6/10.7	S 6/10.7	S 6/7.7	S 6/7.7	S 6/7.7
Engine control		Electronic	Electronic	Electronic	Electronic	Electronic
Maximum output (ECE R 120)	kW/hp	320/435	300/408	260/354	260/354	230/313
Emissions standard Stage IV (Tier 4)		●	●	●	●	●
Fuel consumption measurement		○	○	○	○	○
Fuel tank capacity	l	800	800	800	800	800
Planar radiator screen cleaning		–	–	●	●	●
DYNAMIC COOLING		●	●	–	–	–
Electronics expertise						
CEBIS		●	●	●	●	●
TELEMATICS (professional, advanced, basic)		○	○	○	○	○
Job management		○	○	○	○	○
Yield mapping		○	○	○	○	○
CRUISE PILOT		○	○	○	–	–
GPS PILOT, LASER PILOT, AUTO PILOT		○	○	○	○	○
AUTO CLEANING, AUTO SLOPE		○	○	○	○	○
AUTO CROP FLOW		○	○	○	○	○
GRAIN QUALITY CAMERA		□	□	–	–	–
Weights						
Wheeled machine without front attachment, straw chopper and chaff spreader, full fuel tank (can vary depending on equipment)	kg	15400	15400	14900	14300	14300

● Standard ○ Option □ Available – Not available

LEXION		670/ 670 MONTANA	660	650	630/ 630 MONTANA	620	LEXION		670 MONTANA	660	650	630 MONTANA	620
Tyres on the drive axle							Tyres on the steering axle						
Tyre size		ø cat.		External width			Tyre size		ø cat.		External width		
900/60 R 32	m	1.95	3.90	3.90	3.90	3.62	600/65 R 28 IMP	m	1.50	3.80	3.80	3.80	3.49
VF 620/70 R 26	m	1.95	3.78/3.80	3.78	3.78	3.49	VF 620/70 R 26	m	1.50	–	–	–	3.49
IF800/70 R 32 MI	m	1.95	3.80	3.80	3.62	3.49	VF520/75 R 26 MI	m	1.50	3.49	–	3.49	3.22
800/70 R 32 CHO	m	1.95	3.78/–	3.78	3.78	3.49/–	500/85 R 24 IMP	m	1.50	3.49	–	3.49	3.22
800/70 R 32	m	1.95	3.78	3.78	3.78	3.49	600/55-26.5 IMP	m	1.35	3.80	3.80 ¹	3.80	3.49
710/75 R 34 MI	m	1.95	3.65/–	3.65	3.65	3.37/–	500/70 R 24 IMP	m	1.35	3.49	3.49	3.49	3.22
IF680/85 R 32 MI	m	1.95	3.50	3.50	3.50	3.22/3.29							
680/85 R 32	m	1.95	3.50/3.60	3.50	3.50	3.22/3.29							
800/65 R 32	m	1.85	3.86/–	3.86	3.86	3.58/–							
650/75 R 32	m	1.85	3.49	3.49	3.49	3.20							
30.5L R 32	m	1.85	–	–	–	3.49							
TERRA TRAC 635 mm	m	–	3.49	3.49	–	–							
TERRA TRAC 735 mm	m	–	3.79	3.79	–	–							
TERRA TRAC 890 mm	m	–	3.99	3.99	–	–							

¹ Machine height greater than 4 metres

More height and reach for easy offloading.



As CLAAS continually develops its products to meet customers' requirements, 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. To avoid hazards, never remove these protective panels yourself. Please refer to the relevant instructions in the operator's manual in this regard. All technical specifications relating to engines are based on the European emission regulation standards: Stage. Any reference to the Tier standards in this document is intended solely for information purposes and ease of understanding. It does not imply approval for regions in which emissions are regulated by Tier.

● Standard ○ Option □ Available – Not available

Cutterbars		
Front attachments		
VARIO cutterbars		VARIO 1230 ¹ , VARIO 1080, VARIO 930, VARIO 770, VARIO 680, VARIO 620, VARIO 560, VARIO 500
CERIO cutterbars		CERIO 930, CERIO 770, CERIO 680, CERIO 620, CERIO 560
Rapeseed equipment		For all standard and VARIO cutterbars, not available for CERIO cutterbars
Folding cutterbars		C 540, C 450
SUNSPPEED	rows	16, 12, 8
MAXFLEX		MAXFLEX 930, MAXFLEX 770, MAXFLEX 620, MAXFLEX 560
MAXFLO		MAXFLO 1050, MAXFLO 900
VARIO rice cutterbars		Available as HD version with rice harvesting accessory pack
CERIO rice cutterbars		Available as HD version with rice harvesting accessory pack
SWATH UP		SWATH UP 450
Variable speed drive front attachment (electrohydraulic)	rpm	284-420
Front attachment step drive	rpm	332, 420
Instant cutterbar brake		○

Standard cutterbars		
Effective cutting widths		CERIO 930 (9.22 m), CERIO 770 (7.70 m), CERIO 680 (6.78 m), CERIO 620 (6.17 m), CERIO 560 (5.56 m)
Drive		Single-side gear drive
Folding dividers		●
Spacing: knife bar – intake auger	mm	490-680, manually adjustable
Cutting frequency	strokes/min	1218
Multifinger intake auger		●
Reverser, hydraulic		●
120Automated cutterbar control		
CONTOUR		●
AUTO CONTOUR		○
Reel speed control		●
Reel height adjustment		●
Parked position		●
Automatic operating position		●
Replacement knife bar		●
Crop lifters		●

¹ Only for LEXION 670 TERRA TRAC

Cutterbars			
VARIO cutterbars			
Effective cutting widths		VARIO 1230 (12.27 m), VARIO 1080 (10.74 m)	VARIO 930 (9.22 m), VARIO 770 (7.70 m), VARIO 680 (6.78 m), VARIO 620 (6.17 m), VARIO 560 (5.56 m), VARIO 500 (4.95 m)
Drive		Synchronised gear drives on both sides	Single-side gear drive
Folding dividers		●	●
Spacing: knife bar – intake auger	mm	490-1135, 700 mm continuously adjustable travel range	490-1135, 700 mm continuously adjustable travel range
Knife bar		Divided, synchronised drive on both sides	Undivided
Cutting frequency	strokes/min	1218	1218
Reel and auger bearing		Divided reel and intake auger with central bearing	Undivided reel and auger
Intake auger diameter		660	660
Automated cutterbar control			
CONTOUR		○	●
AUTO CONTOUR		●	○
Reel speed control		●	●
Reel height adjustment		●	●
Reel levelling system		●	●
Table positioning		●	●
Parked position		●	●
Replacement knife bar		●	●
Crop lifters		●	●



Ensuring a better **harvest.**

CLAAS UK
Saxham
Bury St. Edmunds
Suffolk
IP28 6QZ
Tel 01284 763100
claas.co.uk
info-uk@claas.com

365FarmNet enables you to manage your entire agricultural business by means of a single, non-proprietary software solution. Interfaces to intelligent applications created by partners in the agricultural sector offer expert support for your business 365 days a year.

CLAAS is a 365FarmNet partner.

www.365farmnet.com



365FarmNet