
Combine harvesters

# AVERO

240 160

CLAAS

# AVERO 240 / 160.



## The compact class from CLAAS.

The time is right. Everything indicates perfect harvest quality. The AVERO from CLAAS is the ideal machine for smaller and mid-sized operations with a desire for their own equipment.

Compact, high-performance, reliable and equipped with all the features you're accustomed to in CLAAS machines: easy operation, economical upkeep and simple maintenance.

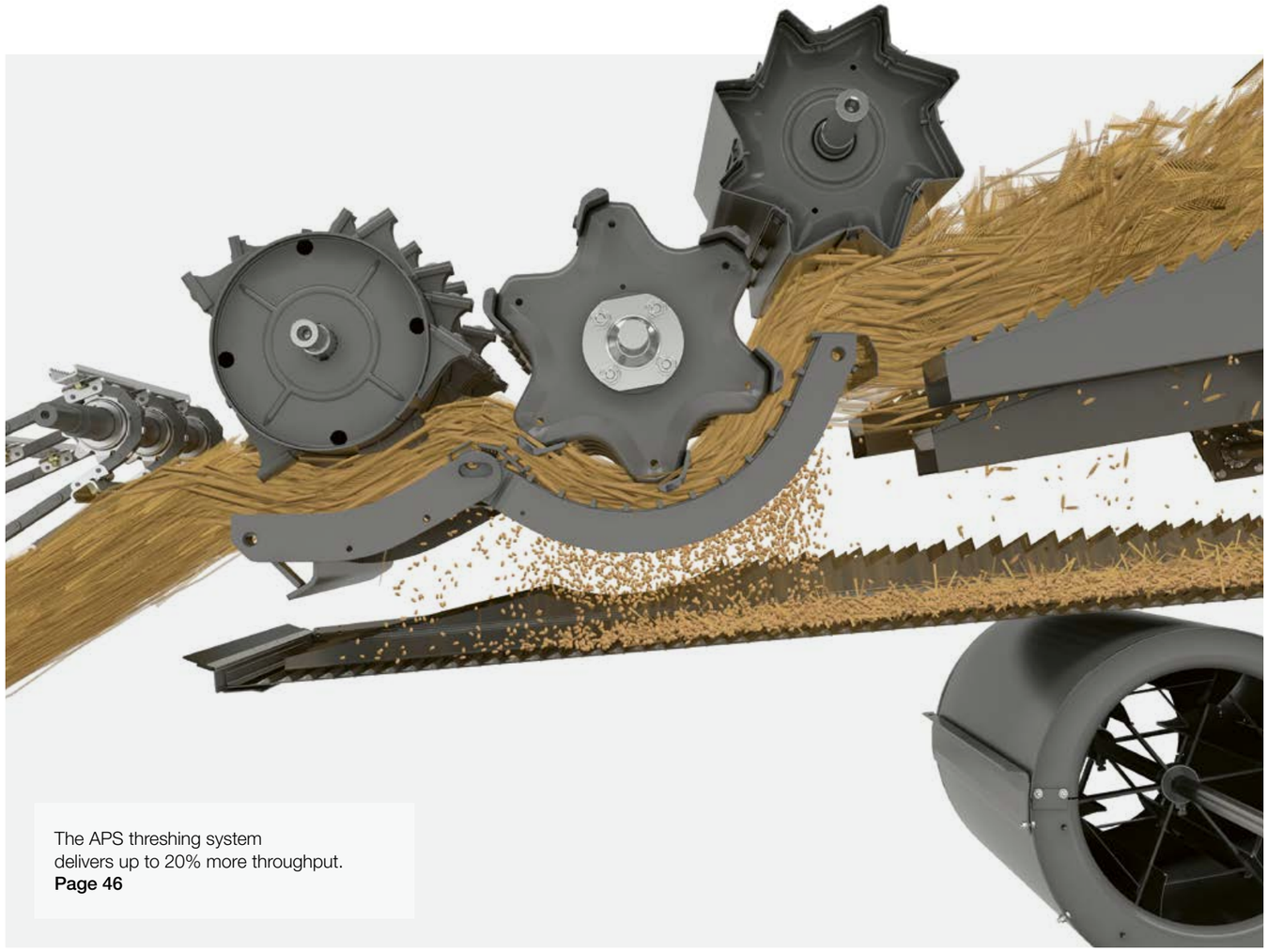
**It's all yours.**
You can start work whenever you want without having to twiddle your thumbs waiting for someone else. Investment in your own technology is an investment in your own independence.

**The first in its class with APS. AVERO 240.**
The APS threshing and separation system already performs beautifully in the LEXION and the TUCANO. Now, this proven threshing technology from CLAAS is available for the first time in the compact class.

For your harvest, APS means:
- Significantly faster crop flow
- Significantly greater separation
- The MULTICROP concave for all crops
- Up to 20% more throughput with no increase in fuel consumption

**Proven threshing technology. AVERO 160.**
The AVERO 160 uses a conventional CLAAS threshing unit which has an excellent track record in practical use.

# Innovating by listening.



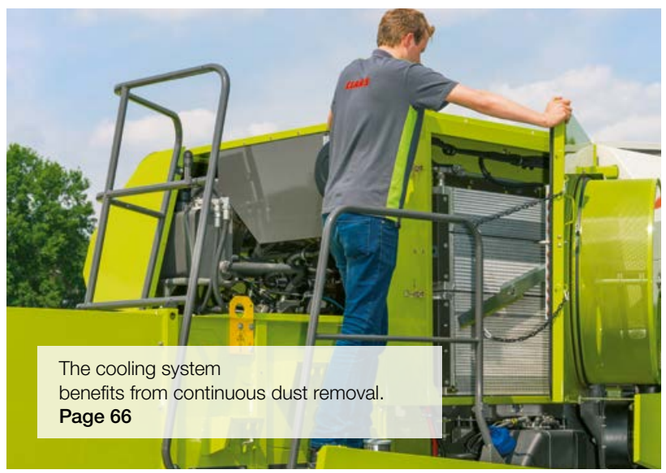
The APS threshing system
delivers up to 20% more throughput.
**Page 46**

The Cummins engines
meet the Stage V emission standard.
**Page 60**

The straw walker technology
extracts every residual grain.
**Page 50**



Comfort cab and CIS
make operators more productive.
**Page 10**



The cooling system
benefits from continuous dust removal.
**Page 66**

The interface accepts
the large models' front attachments.
**Page 14**

The first in its
class with APS.
Discover the
details here.

**avero.claas.com**

# The compact class meets your needs.

A comfortable workplace that leaves nothing to be desired.

- Spacious cab
- Well-designed lighting system
- Easy-to-use multifunction lever
- CLAAS INFORMATION SYSTEM (CIS)

# Everything that makes good operators better.

## Spacious cab.

It was a long working day, but it didn't feel like one. When this is what crosses your mind as you park your AVERO for the night, our engineers have achieved their goal.

They have created a cab that is so comfortable and ergonomic that the operator can focus entirely on his or her work. Attractive design, plenty of space, good visibility on all sides and easy-to-operate instruments make a day harvesting in the AVERO as stress-free as it gets.

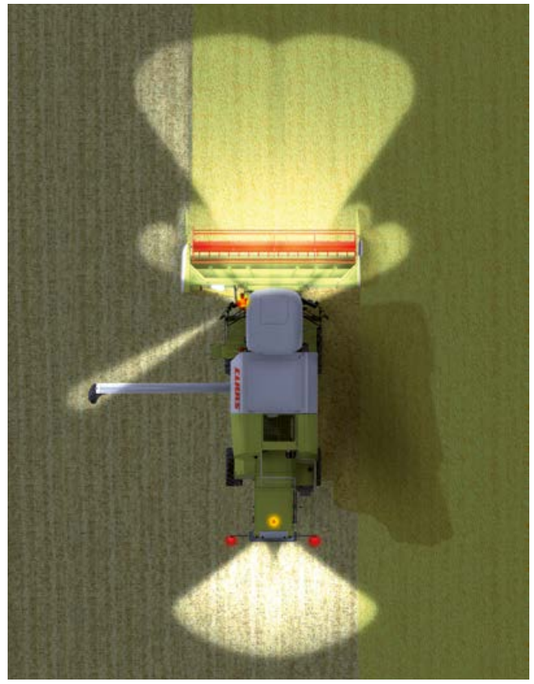
The steering column is adjustable three ways.

Electrically adjustable rear-view mirrors as well as front and side roller blinds for an optimal view.

## Spacious, exceptionally quiet cab:

- A well-organised operating panel with superior ergonomics
- Steering column with three-way adjustment
- Comfortable passenger seat
- A/C MATIC automatic climate control
- In-cab master terminal compartment
- Illuminated inspection window for monitoring returns
- Threshing concave controls
- Cooler compartment
- Windscreen washer system

The AVERO also offers the same easy, convenient operation as the LEXION and the TUCANO. For example, the cutterbar, threshing unit and grain tank offloading are activated via electrohydraulic circuits.



## Powerful lighting.

The lighting in the AVERO ensures excellent visibility during the twilight hours and in the dark. Up to eight work lights ensure optimal lighting of your immediate work environment. In addition to the legally required lighting for on-road use, the AVERO can also be equipped with extra lighting for folding front attachments.

Furthermore, the following functional areas are equipped with spotlights to ensure the best visibility night and day:

- Returns check
- Grain tank
- Grain tank unloading tube
- Sieve pans

# Intelligent harvest aids at work.


## Versatile multifunction control lever.

The productivity of a harvest job is determined by how well an operator controls the combine. With its ergonomically shaped multifunction lever, the AVERO offers outstanding driving comfort and ease of operation.

The multifunction lever is used to regulate ground speed and control many other functions conveniently:

- Direction of travel
- Cutterbar and reel settings
- Cutterbar brake
- Grain tank offloading ON / OFF
- Pivoting the grain tank unloading tube


## Lost grain calculation with CEMOS Advisor.

The free CEMOS Advisor smartphone app is a valuable adjustment aid for the operator. It comes with an integrated lost grain calculation function. The operator can request suggestions to optimise the performance on the basis of the current settings.

## Well-organised information terminal.

The compact CIS terminal is ergonomically integrated in the operating panel and gives the operator a quick overview of a wide variety of important machine data. Thus the interaction between the operator and the machine can be continuously optimised during a job.

1 Fan and threshing drum speed
2 Fuel tank level
3 Temperature display
4 Cutting positions and height
5 Throughput monitoring
6 Machine information window
7 Information field

# The compact class is versatile.

## It takes the crops as they come.

Grain, rapeseed, rice, maize, soybeans, clover, peas, sunflowers ...

# Designed to use the successful LEXION and TUCANO attachments.

## Standardised front attachments.

The compact AVERO was developed to unite a wide variety of options at a high standard, offering optimal throughput performance and long-term reliability combined with great versatility and minimal setup time.

The AVERO has the same front attachment interface as the LEXION and TUCANO. Our top machines also served as the model for the development of further high quality performance and equipment features.

## The feeder housing.

Metal strips on the floor of the feeder housing and wooden strips in the upper area protect the feeder housing against wear.

## Practical central locking.

A single lever on the left side of the front attachment operates all locking points simultaneously.

– Reliable, fast locking mechanism
– Front attachment can be fitted and removed easily

## Central multicoupler.

The AVERO has only one connector to link all hydraulic and electric functions to the front attachment.

– Saves time with fewer tasks for attachment and removal
– No danger of confusion thanks to the integrated design
– Easy to connect, even under pressure
– Environment-friendly with no oil leakage

## Replacement knife bar and crop lifters.

All CLAAS cutterbars are equipped with a replacement knife bar ex factory. The knife sections are made of hardened material and are therefore extremely durable. The use of crop lifters enables pickup of lodged crops in particular without loss while reducing the intake of stones. Crop lifter replacements can be carried conveniently on the back of the cutterbar.

## Hydrostatic reel drive.

A variable displacement pump on the basic machine supplies a maximum torque of 1,000 Nm at the reel.

– Plenty of pulling power thanks to high torque
– Greater efficiency than gear pumps
– Closed hydraulic circuit for optimal reel rotation
– Fast adjustment of the reel speed


## Hydraulic reverse.

Blockages are cleared easily: the hydraulic system 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.

## Adjustable stripper rails.

The spacing between the stripper rails and the intake auger can be conveniently set externally on the C 490, C 430 and C 370 cutterbars.

## Robust trailer for road transport.

Everything to save you time: The CLAAS transport trailer provides compact, convenient and safe storage for the cutterbar. It is locked in seconds with two bolts. Made-to-measure compartments are designed for carrying the accessories you need for harvesting rapeseed. The rubber-coated floor provides non-slip, protective, theft-proof storage.

# Top cutting quality – automatically.

## Optimum ground contour following.

In order to ensure optimum following of the ground contours, CLAAS cutterbars are equipped with the CLAAS CONTOUR and AUTO CONTOUR automatic cutterbar control systems for ideal results at all times.


Sensor bands immediately behind the knife bar detect the position of the cutterbar.

## CLAAS CONTOUR.

The cutterbar with CLAAS CONTOUR adapts automatically to uneven ground along the direction of travel. Choose a ground pressure and CONTOUR keeps it constant. Every time the cutterbar is lowered, the pre-set cutting height mechanism automatically moves to the preselected cutting height.

## CLAAS AUTO CONTOUR.

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

## A more cost-effective way to work.

With fully automated comparison of the current status and the setpoint, 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 lodged crops, on side slopes and rocky ground. AUTO CONTOUR helps increase performance and make the use of the combine pay even greater dividends.

## Automatic reel control.

The reel speed – and thus the circumferential reel speed is adjusted automatically in proportion to the ground speed. The operator can set and store different ratios of ground speed to reel speed.

## Infinitely variable reel speed.

The reel speed can be adjusted infinitely between the feed, synchronised, and run-on speeds. A digital speed sensor enables precise speed adjustment. A variable displacement pump on the AVERO supplies a maximum torque of 1,000 Nm at the reel. The result: plenty of pulling power thanks to high torque. A hydraulic overload protection system provides protection against damage.

AUTO CONTOUR is activated simply by pressing the height adjustment button on the multifunction control lever.

# VARIO cutterbars.


## VARIO cutterbars.

VARIO cutterbars from CLAAS represent the optimum cutterbar table adjustment system available in the market. With its VARIO 560 and 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 tools
- Automatic parking and transport position
- Automatic operating position

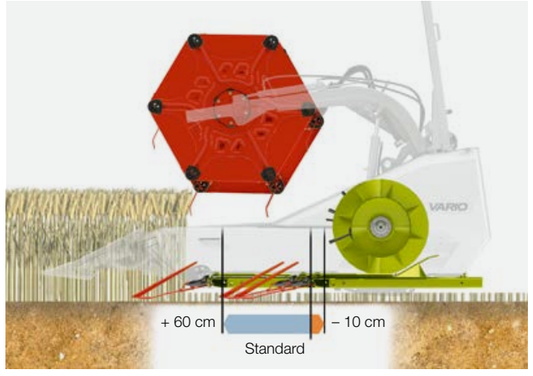
# VARIO cutterbars.

## Field of 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%.

## 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
- 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 tools
- Crop lifters with quick-release mounting system, tool-free fitting and removal




Cutterbar table retracted – grain (– 100 mm).

Cutterbar table extended – grain (+ 600 mm).

Cutterbar table retracted – with rapeseed knives (+ 450 mm).

Cutterbar table extended – with rapeseed knives (+ 600 mm).

Easy connection of the hydraulic hoses for the rapeseed knife drive.

The crop dividers and rapeseed knives can be secured without 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 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

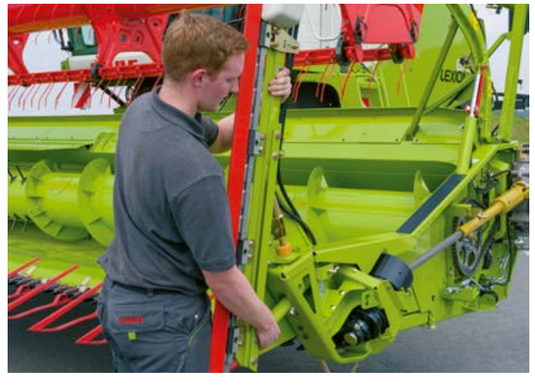
## Use in rice.

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.

A planetary gear system ensures that 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.

# CERIO cutterbars.


## CERIO cutterbars.

CLAAS has a new cutterbar model series in the form of the CERIO 620 to 560 models. It is based on the VARIO cutterbars and represents an optimal alternative for grain harvesting.

**The highlights at a glance:**

- Cutterbar table has an overall manual adjustment range of 200 mm
- Large, 660 mm diameter intake auger for optimal crop flow
- Reel optimised to reduce stalk take-up
- MULTIFINGER intake auger
- Crop dividers adjustable for height without tools

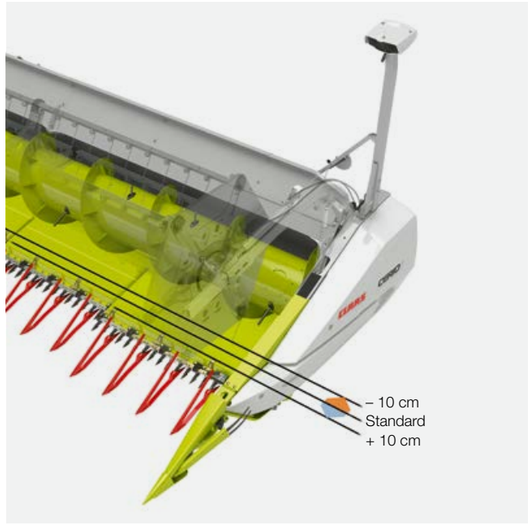
# CERIO cutterbars.

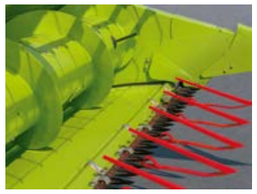
## Field of use.

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.

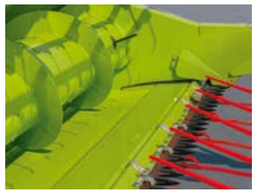
## Technology.

- 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 tools
- Automatic parking and transport position
- Automatic operating position
- Crop lifters with quick-release mounting system, tool-free fitting and removal

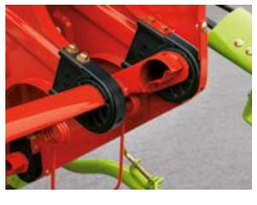


Cutterbar table retracted – grain (– 100 mm).

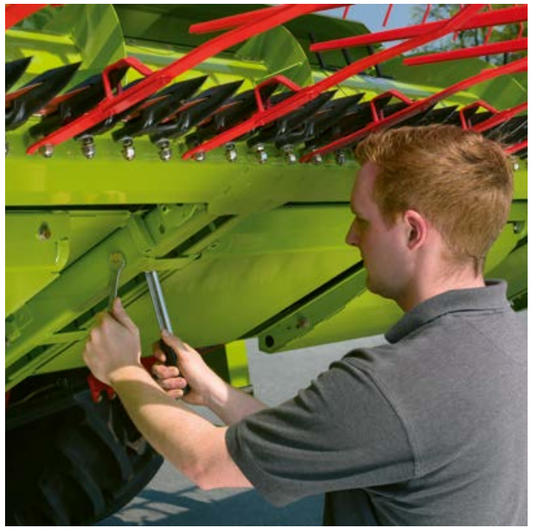


Cutterbar table extended – grain (+ 100 mm).



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

Replacement knife bar stored underneath the cutterbar.



## Cutterbar adjustment.

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

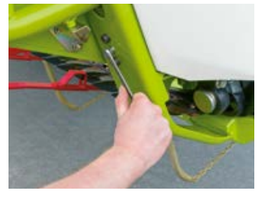
## Use in rice.

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.

Replacement crop lifters immediately behind the cutterbar.

The crop dividers can be secured without tools thanks to the quick-release mounting system.

Quick and easy replacement of dividers.



Easy adjustment of divider height using the panel key.

# Standard cutterbars.


## Standard cutterbars.

The C 490 to C 370 standard cutterbars are equipped with the tried and trusted rigid cutterbar table. They impress with their excellent manageability and remarkable qualities.

**The highlights at a glance:**

- Intake auger diameter of 480 mm for excellent crop flow
- Robust knife drive
- Proven rigid cutterbar table
- MULTIFINGER intake auger
- Hydraulic reel drive
- Coated intake auger, twin knife system or cutting system with special knife guards available for rice harvesting

# Standard cutterbars.

## Field of use.

The standard cutterbars from CLAAS deliver excellent grain harvesting results. The compact standard cutterbars represent a reliable cutterbar choice for the AVERO which is ideal for harvesting in small areas and compact field patterns.


## Technology.

- Proven rigid cutterbar table
- Robust knife drive via oil-bath transmission
- 1,120 strokes/min
- Automatic tensioning of drive belts
- MULTIFINGER intake auger
- 480 mm diameter intake auger
- Intake auger height is infinitely adjustable

Replacement knife bar.

Stripper bars adjustable from outside (C 490, C 430, C 370).

Smooth drive.


## CORIO.

The new CORIO maize pickers are equipped with established technologies as well as unique new features.

**The highlights at a glance:**

- 17° operating angle to prevent cob losses
- Linear snapping rollers
- New, robust drive train
- New hood shape for more gentle crop handling
- Unique folding system to move hoods into transport position
- Feeder chain is easy to change and tension
- Replaceable wear parts integrated in hoods
- CORIO maize picker as a 5 and 4-row unit
- Row widths of 75 and 70 cm

# CORIO.

## Field of use.

The CORIO models are the right maize pickers for harvesting grain maize or corn cob mix. Whether working in high-yield crops or very dry maize stems, the CORIO maize pickers ensure a clean, effective picking process.

## Functional principle.

The hoods ensure that the maize stalks are fed evenly and gently into the snapping rollers. The stalks are captured by the rollers and pulled downwards. At the same time, snapping plates separate the maize cobs cleanly from the stalks.

Horizontal choppers operating at a constant speed chop up the maize stalks which have been pulled down. The intake auger then transports the maize cobs to the feeder housing.

The linear snapping rollers are the key component of the CORIO maize pickers.

## Technology.

- Efficient, free-running drive for all CORIO models
- Quick and easy speed adjustment by changing the combination of gears
- Spiral intakes on the snapping rollers improve stalk intake
- Mechanically or hydraulically adjustable snapping plates allow the cobs to be separated cleanly
- Each snapping roller is individually protected against overload and foreign objects
- The drives for the snapping rollers and knives are integrated in the robust gear housing
- AUTO PILOT and AUTO CONTOUR optionally available for all models


## 17° operating angle.

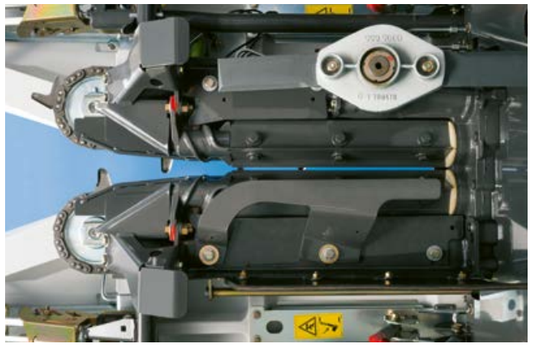
At 17° the CORIO models have the flattest operating angle in the market.

- The operating angle has been reduced by approximately 10%
- Reduction in cob losses, especially those resulting from “cob jump-off”
- Consistent performance, especially in lodged maize, is ensured

## Top form.

The front section of the hoods has been given a new and unique shape. The characteristics of the surface have also been improved.

- Even more gentle crop handling thanks to the optimised shape of the hoods
- The flanks of the hoods have been designed in such a way that maize stalk capture is delayed and takes place at a more flexible point in order to avoid cob losses
- Improved performance in lodged maize



## Horizontal chopper.

Each picking unit is equipped with a horizontal chopper integrated in the transmission unit. This delivers improved chop quality in dry conditions.


## Precise chopping.

Precise chopping encourages the rotting of the crop residues and helps create a consistent seedbed for the following crop.

## Maintenance position.

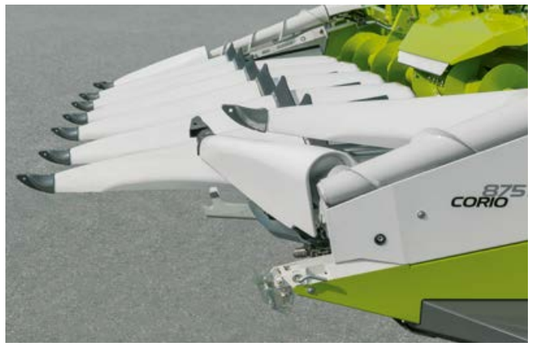
A new concept for opening the hoods provides quick and easy access for maintenance or cleaning. Only a few simple steps are required to put a hood into the maintenance position without tools.

## Easy handling.

The conveyor chains can be tensioned and changed easily, conveniently and quickly. Once the hoods have been put in the maintenance position, a simple assembly lever is all that is required to release a chain, tension or replace it.


## New folding mechanism.

A new design allows the hoods to be folded easily into a compact transport position.




## Road travel.

As well as being easy to use, the new arrangement makes for better visibility during road travel as it allows the front attachment to be shortened by 80 cm.

## Rubber cob retainer.

All models are equipped as standard with small rubber cob retainers to prevent the cobs from sliding back. A large rubber cob retainer is available as an option. Fitting and removal can be performed without tools.

## Integrated wear parts.

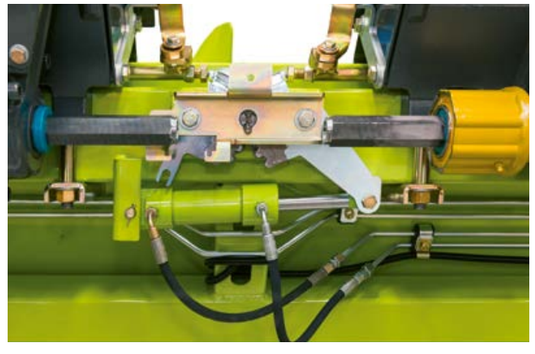
Replaceable wear parts are integrated on the right and left sides of the hoods. When worn, the individual parts can be replaced instead of the entire hood.

## Sunflower kit.

Simply changing the intake chain enables a quick switch-over to sunflower harvesting. In addition, special knives are fitted on the snapping rollers along with side hood extensions and a special rear wall panel.


## Snapping plate adjustment.

Depending on the model, a mechanical or hydraulic snapping plate adjustment system is fitted as standard. The hydraulic variant, which allows convenient adjustment from the operator's seat, can also be added as an option.



# Folding cutterbar C 450.


## Folding cutterbar C 450.

The folding cutterbar makes the AVERO more flexible than any other machine available in the market.

**The highlights at a glance:**

- Ready for use with just a few simple steps at the entrance to the field
- No additional space is required for fitting and removing the cutterbar
- Cutterbar remains within 3.00 m transport width, or 3.30 m with 800-size tyres
- Good visibility in transport position, safe travel on public roads
- Ideal weight distribution maintained during road travel

# Folding cutterbar C 450.

## Field of use.

The folding cutterbars do away with the need to attach and detach the cutterbar. At the same time, they ensure optimal handling during travel with outstanding visibility and enable transfers from field to field with practically no interruption. During transport, too, whether on field tracks, narrow roads or in dense traffic, the folding cutterbar offers outstanding visibility and transport characteristics.

## Technology.

- Divided knife bar and reel
- Front attachment mechanical drive on one side
- Intake auger and knife bar mechanically driven via gearbox and drive shaft
- Intake auger height is infinitely adjustable

**Transport.**
The compact design ensures optimum visibility and excellent manoeuvrability in severely restricted spaces while taking into account the permissible transport width.

**Folding.**
The fully automatic folding function is activated at the touch of a button. The strong, sectional frame construction makes for precise actuation and ensures long-term operating reliability.

**Harvesting.**
The folding cutterbar is ready for action in a matter of seconds. Move the dividers into position, engage the drive shaft and you are ready to go.

# SUNSPEED.


## SUNSPEED.

The SUNSPEED sunflower cutterbars impress with their unique picking concept, very high output per unit area with the lowest losses and ease of operation.

**The highlights at a glance:**

- SUNSPEED sunflower front attachment available as an 8-row unit
- Harvests flower heads exclusively – stalk-free picking concept
- The height and speed of the reel can be controlled in synchronisation with the ground speed conveniently from the cab
- Adjustable guide plates keep the stalks securely in position
- The gap between the seed pans can be set to the stalk thickness
- The seed pans can be adjusted for tilt

# SUNSPEED.

## Field of use.

The SUNSPEED sunflower cutterbar is the optimal solution for sunflower harvesting. The unique functional principle enables a significant reduction in both the load on the threshing system and the degree of cleaning required to remove non-grain constituents.

Its high degree of versatility with regard to different row widths and stalk thicknesses makes the SUNSPEED the universal front attachment for sunflowers.

## Technology.

- Knife drive features a low-maintenance oil-bath transmission
- High cutting frequency of 1,200 strokes per minute
- Snapping roller and intake auger are driven by chains and belts
- Seed pan width adjustable by up to 20 mm
- Seed pans up to 1,800 mm long for even stalk guidance
- Adjustable circumferential reel speed
- Adjustable intake auger speed
- Automatic adjustment of reel speed based on ground speed

Adjustable seed pans.

Adjustable guide plates.

Snapping roller.

Proven drive.

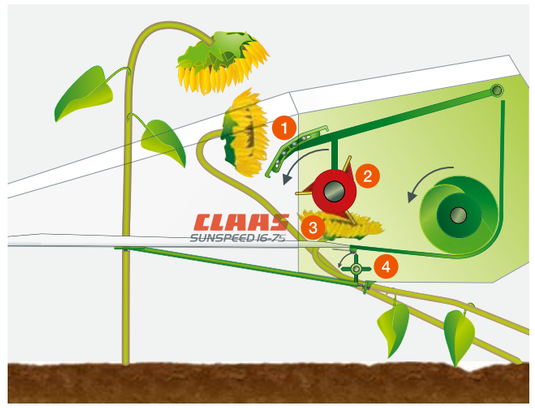

Replacement knife bar.


## Functional principle.

Once the sunflowers are collected by the seed pans, the adjustable guide plate ensures that the flower heads are pushed forwards. At the same time, the snapping roller below the knife bar pushes the stalks downwards. In this way, the guide plate and snapping roller prevent the stalks from being cut too soon. The cut is not performed until the sunflower heads are captured by the reel. As a result, only the flower heads reach the intake auger which finally delivers them to the feeder housing.

This unique functional principle makes for:

- Lower fuel consumption
- Increased threshing and cleaning performance
- Low wear of all components




1 Adjustable guide plate
2 Reel
3 Knife bar
4 Snapping roller

# The compact class makes you productive.

## CLAAS threshing technology.

- Outstanding throughput with the APS threshing system
- Effective residual grain separation system
- High-performance 3D cleaning system
- Perfect straw management

# 20% more throughput, 0% more fuel.


## Unique APS threshing system.

The AVERO 240 is the first in its class with APS. The distinct competitive edge of this trend-setting threshing system is revealed well before the threshing drum as the dramatic acceleration of the crop flow from 3 m/s to 20 m/s triggers a chain of extremely efficient processes:

- The accelerator drum 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. APS really pays.

## Uniform pick-up.

The accelerator drum receives the material from the feeder housing and conveys it to the threshing drum without any feed noise. The cab remains pleasantly quiet as a result.

## Versatile pre-separation concave.

The pre-separation concave is designed as a MULTICROP concave and can therefore handle any crop. The option of quickly changing two concave sieves minimises setup time and maximises efficiency.

## Long threshing channel.

In the CLAAS APS threshing system, we have succeeded in wrapping the main concave much farther around the threshing drum than in conventional machines. No other threshing unit offers a contact angle of 151°. You benefit from gentle but thorough threshing with a large concave clearance and low drum speed with reduced fuel consumption.

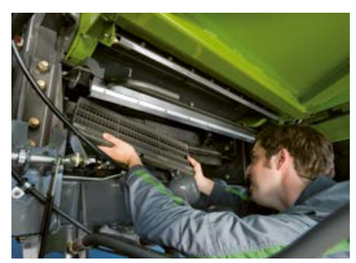
## Large stone trap.

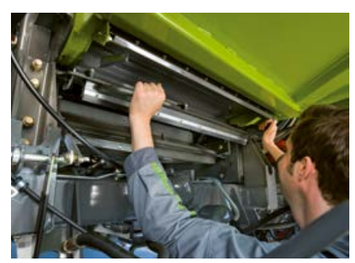
The large stone trap ensures a high degree of safety. It is easy to open from the side and is self-emptying.

## Improved grain quality.

For optimal deawning and decortication, the APS threshing system is equipped with multi-level adjustment options and additional components. These include, for example, the intensive threshing unit and the preconcave flaps. The preconcave flaps are activated in mere seconds with a lever next to the feeder housing.

Together with the other APS benefits, the result is impressive: optimal separation efficiency combined with outstanding harvest quality.





The MULTICROP concave / stone trap.

# Outstandingly versatile and absolutely reliable.

## Fit for any crop.
## The AVERO 160 with MULTICROP concave.

The concave below the threshing drum is designed as a MULTICROP concave with individual segments that can be changed easily. You can switch the concave quickly for a wide assortment of crops – always ensuring the right combination of clean threshing, protective handling of the crop and a high separation rate.

The AVERO 160 is equipped with the conventional CLAAS threshing unit.


## Large stone trap.

The AVERO 160 also ensures outstanding safety thanks to the large stone trap. The stone trap is easy to open from the side and is self-emptying.

## The champion in all fields.

The AVERO 160 uses the conventional CLAAS threshing unit which consistently provides impressive proof of its ability to handle the two key threshing tasks of removing and separating grains reliably in all harvest conditions. Regardless of the harvesting challenges you face, you will be impressed by the versatile performance it delivers across the full threshing drum width of 1.06 m.

- The threshing unit can be accessed easily from the front via the feed rake and from both sides through large openings
- The extremely robust design of all the drives, and of the threshing drum drive in particular, ensures top reliability during the harvest

MULTICROP concave.

Self-emptying stone trap.

# Savings that make sense.


## The CLAAS compact principle.

The APS threshing system works so efficiently that the residual grain separation system in the AVERO 240 requires fewer straw walkers than you would expect. Thanks to APS, 90% of the grain is already separated from the straw. Four straw walkers with four steps take care of the remaining 10%.

The AVERO 240 processes as much as a comparable machine with five straw walkers without APS, but has the compact dimensions of a machine with four straw walkers. This has noticeable economic benefits. The AVERO 160 also delivers above-average performance for its size: the conventional CLAAS threshing unit works perfectly in combination with the four straw walkers.

Loss sensors.

## Four straw walker steps.

The four straw walkers of the AVERO are matched precisely to the high-performance APS threshing system. Residual grain separation is accomplished over a total length of 3,900 mm across four straw walker steps. Centre and side extensions are available. Even large volumes of straw are transported rapidly and loosely. During swathing, the straw falls directly on the stubble so that you can count on a reliable crop flow even when handling large quantities of straw or operating on slopes.

## Active fluffing.

In addition, the straw undergoes intensive separation with controlled agitator tines. Agitator tines located above each straw walker dig deep into the straw, loosening and fluffing it to ensure a rapid straw flow and a thin layer of straw for the last grains to escape and effectively increase separation efficiency.


## Complete control.

The AVERO provides you with numerous monitoring aids to support optimal utilisation of the installed features of the machine and to achieve the best possible threshing quality:

- Throughput monitor for the residual grain separation system and cleaning in the CIS
- Yield recording and fuel consumption measurement with CIS
- Returns fed back to threshing unit
- Illuminated inspection window for monitoring returns
- Crop monitoring in the grain tank via a large inspection window

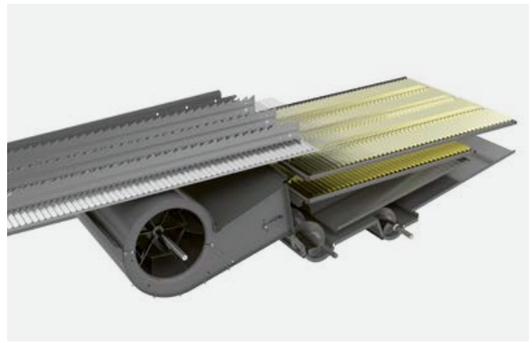
# A look into the grain tank: clean work.

## Large grain tank.

Once the threshing unit, straw walker and cleaning section have done their work, the cleaned grain is collected in the grain tank. A particularly impressive feature of the AVERO is its capacity of up to 5,600 litres. However, this is but one of its many strengths.

- Easy grain sampling
- High overhead discharge height
- Ideal weight distribution
- Good view into grain tank
- Grain tank cover can be operated from operator's platform
- Fast, direct offloading
- Smooth surfaces for fast, complete emptying
- Large grain tank window allows monitoring of fill level from 0-100%

Large grain tank capacity
AVERO 240: 5,600 l
AVERO 160: 4,200 l



## Powerful fan.

The AVERO has a rotary fan for optimal grain cleaning. Its speed can be controlled from the cab, providing constant air pressure and even distribution of air across the sieves to handle varying crop loads. Forced air guidance prevents the formation of crop mats.

The impressive benefits of the 3D cleaning system developed by CLAAS are also part of the package:

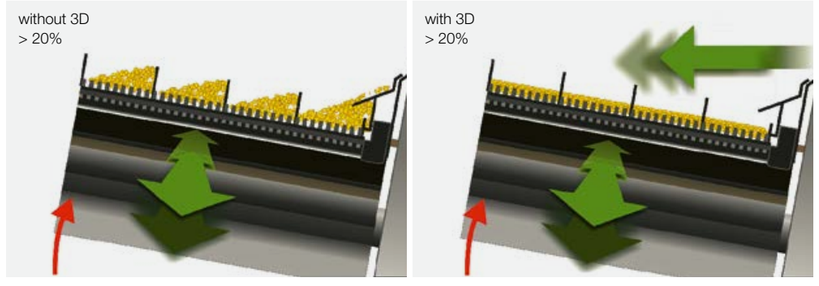
- Dynamic side slope levelling via active control of the upper sieve
- Responds to even the smallest irregularities
- Completely consistent performance on side slopes up to 20%
- No wear – completely maintenance free
- Fast, simple retrofitting

## Direct view.

Sometimes a glance into the grain tank can tell you more than any number of sensors. A large inspection window in the back of the AVERO cab enables visual yield monitoring, so the returns can be viewed conveniently from the operator's seat. The inspection window is illuminated for better visibility.

## Removable preparation floor.

Pre-sorting of the grains (bottom) and the chaff and broken straw (top) takes place on the preparation floor. The resulting reduction of the load on the upper sieve increases cleaning capacity. The preparation floor can be removed easily for cleaning when the harvest is completed.




3D cleaning system.

# From small and short to long and loose.



## Top-quality straw.

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

## Short chopped material.

The AVERO distributes the uniformly short-chopped straw over the entire cutterbar width and blows it deep into the stubble. The discharge width is easily adjustable.

The CLAAS choppers are also equipped with a shear bar. Both components can be individually adjusted and thus adapted to the varying straw conditions. This ensures that no stalk is left uncut. Chopping takes place using rotating knives and a stationary cutting comb.

Easy switchover from chopping to swathing.

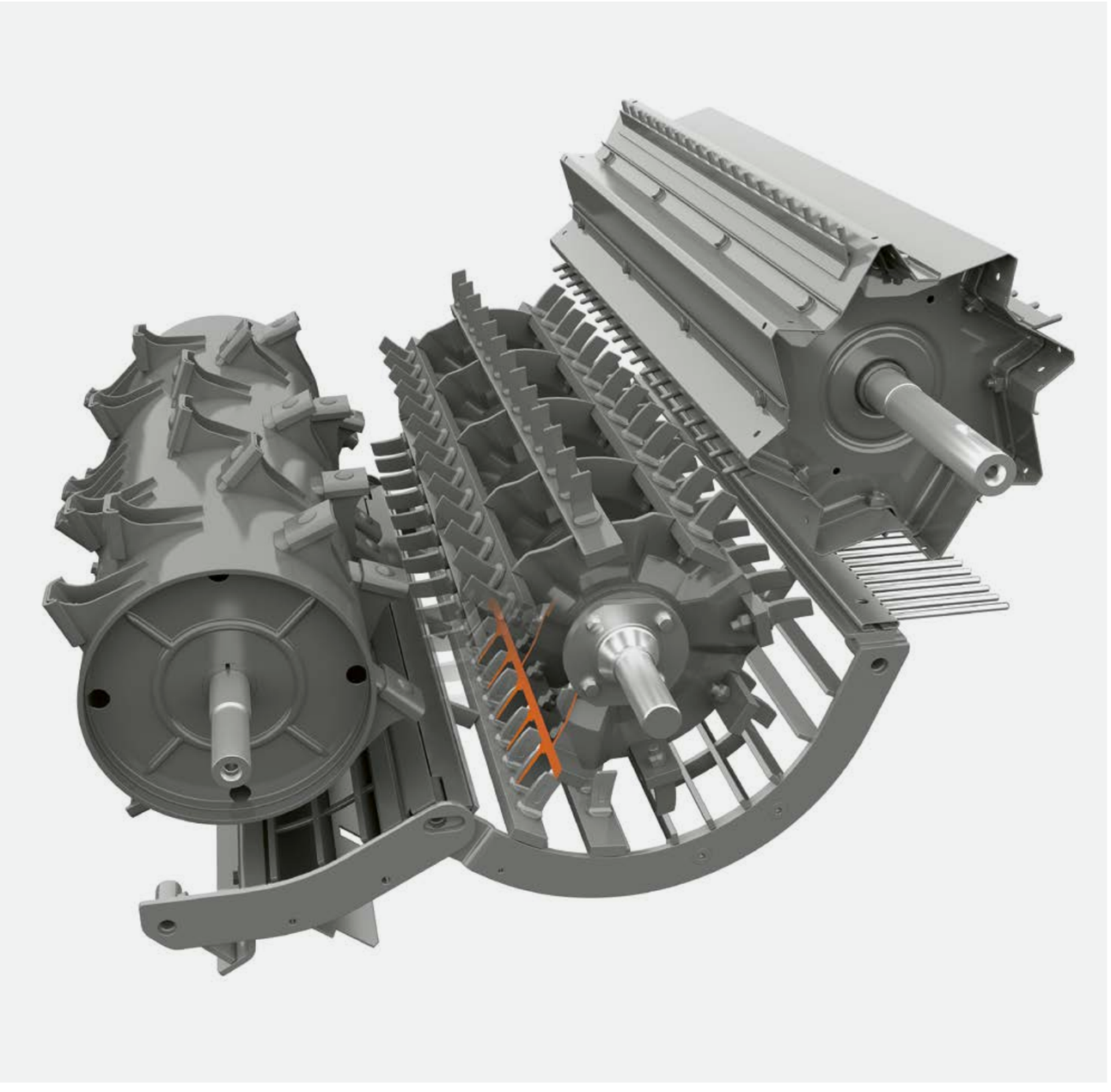
## PROFI CAM – everything in view.

All AVERO models can be equipped with a PROFI CAM on the rear hood. This camera position has been chosen precisely to allow two areas to be monitored simultaneously on a colour display from the comfort of the cab:

– Distribution of chopped material / straw deposition
– Rear of machine when reversing

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

# AVERO 240.
# Tough enough to cope with rice.



## Takes rice in its stride: the APS threshing unit.

As rice grains are delicate, a spike-toothed threshing drum is used instead of the usual rasp bar threshing drum. The spike teeth on the threshing drum rub the rice grains out of the plant's panicles. The spike teeth are offset on the bars of the threshing drum and pass between the stationary spike teeth on the threshing concave.

Additional toothed bars are bolted to the impeller to direct the heavy rice straw onto the straw walkers reliably under all conditions.

## The chassis of the AVERO 240.

The more difficult harvesting conditions in rice fields make great demands on the machine. Specially sealed axles are available for use in very wet conditions. These ensure reliability and durability, under even the most adverse conditions.

## Grain tank HD.

Rice grains are particularly aggressive and cause a high degree of wear during grain collection and grain tank unloading. This is why there is a particularly wear-resistant version of the grain tank, in which the augers for filling and unloading the grain tank as well as the auger in the grain tank unloading tube have a special coating.

## C490 and C430 standard cutterbars for rice harvesting.

The intake auger of these cutterbars is also available as an HD version whose auger thread is specially coated to reduce wear by plants and dirt adhesion. These cutterbars can be equipped with two different cutting systems to ensure that t he crop is cut cleanly:

– Special knife guards and crop guards for the knife bar (crop lifters can be used)
– Twin knife system (crop lifters cannot be used)

## Rice harvesting with VARIO and CERIO cutterbars.

The VARIO and CERIO cutterbars are also available with special equipment for rice harvesting. As in the case of the C490 and C430 cutterbars, the intake auger is coated to reduce any wear as much as possible. Here, too, a special cutting system is available for trouble-free cutting of the rice plants. The short knife guards and the optimised crop guards ensure a precise cut and blockage-free operation.

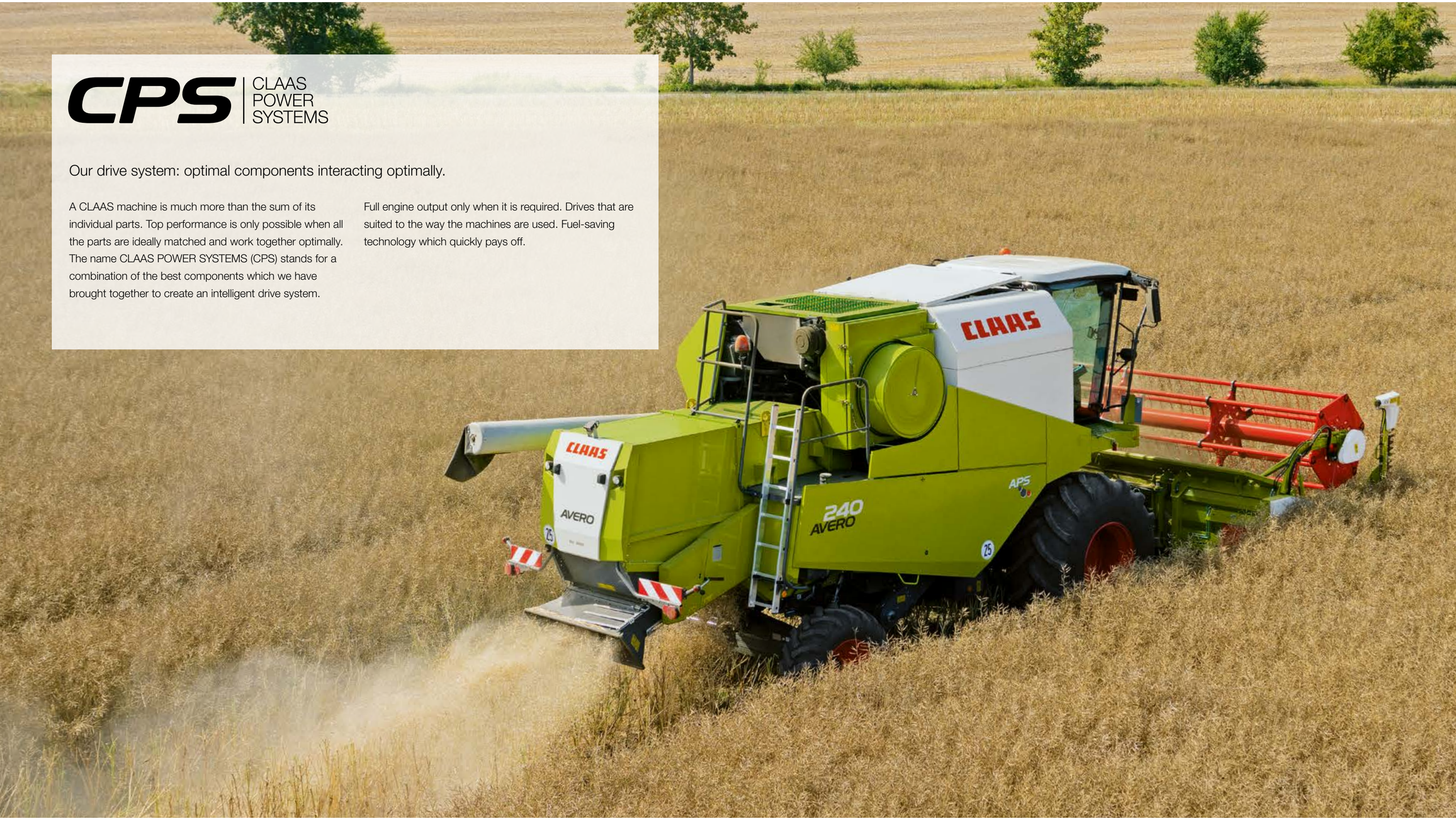
# High performance in a compact package.

CPS | CLAAS POWER SYSTEMS

## Our drive system: optimal components interacting optimally.

A CLAAS machine is much more than the sum of its individual parts. Top performance is only possible when all the parts are ideally matched and work together optimally. The name CLAAS POWER SYSTEMS (CPS) stands for a combination of the best components which we have brought together to create an intelligent drive system.

Full engine output only when it is required. Drives that are suited to the way the machines are used. Fuel-saving technology which quickly pays off.



NEW

# Cummins engines comply with Stage V.

## Protection for the environment.

The AVERO is now equipped with the latest Cummins engine: the Cummins B6.7 complies with the Stage V emission standard and develops a powerful 213 hp or 167 hp with a displacement of 6.7 litres. As it operates without EGR technology, the degree of cooling it requires is reduced. This, in turn, increases the efficiency of the engine.

The exhaust gas aftertreatment system consists of a diesel particulate filter and an SCR catalytic converter. Although situated in the engine compartment, this unit has a compact design which allows you unimpeded access to the engine for maintenance and cleaning tasks. The fill level of the high-capacity urea tank, which holds 49 litres, is indicated in the cab.

## Engines for tomorrow.

When it comes to trend-setting engine technology, Cummins is one of the frontrunners. Cummins engines are in use in over 1,000,000 agricultural machines around the world. Their outputs range from 55 to 4,400 hp.

**Advantages for you.**

- The 400-litre fuel tank allows you to work through long days without interruption
- The 49-litre urea tank extends refill intervals
- The exhaust gas aftertreatment system takes up only a small amount of space
- The engine and radiator can be accessed easily
- The absence of EGR technology reduces the cooling requirement
- AVERO 240 with 213 hp
- AVERO 160 with 167 hp

NEW

# Perkins engines comply with Stage IIIA.

## Top performance.

The new generation of Perkins engines with common-rail technology delivers 158 hp in the AVERO 160 and 205 hp in the AVERO 240. As the combustion process has been optimised by Perkins, no additional exhaust gas aftertreatment systems are required in order to comply with the Stage IIIA (Tier 3) emission standard.

The cooling system is cleaned continuously by an automatic dust extraction system which results in a significant reduction in dirt build-up on the cooling fins. When periodic cleaning of the radiator screen is required, it is simply pivoted to the side. All the important maintenance points can be accessed quickly and easily by means of the mobile folding ladder.

Perkins
1106 D-E70TA

## Real reserves.

The rugged Perkins engine provides the AVERO with all the power you need to operate it productively for extended periods under difficult harvesting conditions. Advanced engine technology means that its diesel consumption is surprisingly low.

**Impressive advantages.**

- The 400-litre fuel tank allows you to work through long days without interruption
- Improved engine running characteristics and optimal power transmission reduce fuel consumption to a significant degree
- The good accessibility makes maintenance and cleaning tasks easy
- AVERO 240 with 205 hp
- AVERO 160 with 158 hp

# Soil is precious.


## Precision working.

No engaging and disengaging the clutch, no shifting gears – just full concentration on the harvest. You control the hydrostatic ground drive of the AVERO conveniently and comfortably with the multifunction lever. The high pump capacity ensures responsive handling under all conditions. Whether you are operating in difficult terrain or on the road, the full tractive power is always on tap and can be controlled precisely and sensitively with the multifunction control lever. You benefit from this precision in particular when attaching the cutterbar, for example, or when filling the transport vehicle.


## Reduces soil compaction in the field.

The wide range of tyres allows the AVERO to be matched ideally to your requirements. For maximum soil protection and traction, the AVERO can be equipped with 800 mm wide tyres. The added advantage of the low operating weight of the machine means that it leaves no deep tracks and so avoids causing compaction damage. Every available harvesting day can be used. Harvesting can also be resumed quickly after long periods of rain.

## Narrow on the road.

Even with 800 mm wide tyres, the AVERO maintains an external width of less than 3.30 m. This makes the AVERO the ideal partner in smaller-scale settings. Flexible and manoeuvrable, it can be deployed easily to different sites.

## Below 3.00 m if required.

If the area of deployment is within a particularly densely populated area or if the criteria for obtaining special authorisation are very stringent, the AVERO can remain within a maximum external width of 3.00 m. The 650 mm wide tyres represent an ideal compromise between transport width, ground pressure and traction.

# Compact, but big on user-friendliness.


## Fast access.

Maintenance is very simple, requiring little effort or time, while the service intervals for the AVERO are long. All important maintenance points are easily accessible, and the best part is that much of the work can be done quickly by the operator.


## Easy maintenance.

- Pivoting radiator frame for fast manual cleaning
- Large, continuous side panels for unimpeded access
- Easy access to the engine compartment and other maintenance areas with a mobile, foldable ladder
- Rear hood opens if necessary
- Long service intervals
- Lubrication banks
- Storage box for tools

Large side panels for easy access.

The engine compartment is easily accessible.

## Intelligent cooling system with automatic dust extraction.

The AVERO works with an extremely efficient common cooling system for the engine, hydraulics and climate control system. Automatic dust extraction continuously cleans the hydraulically rotating radiator frame and provides optimal cooling while it significantly reduces soiling of the cooling ribs. The radiator frame can be pivoted for better cleaning.

# Whatever it takes – CLAAS Service & Parts.

MAXI CARE | Maintenance | Protect | Plus

**Safeguard your machine's reliability.**
Increase your operating reliability, minimise the repair and breakdown risk. MAXI CARE offers you predictable costs. Create your own individual service package to meet your particular requirements.

**Specially matched to your machine.**
Precision-manufactured parts, high-quality consumables and useful accessories. Choose our comprehensive product range to be certain of receiving exactly the right solution to ensure 100% operating reliability for your machine.


**For your business: CLAAS FARM PARTS.**
CLAAS FARM PARTS offers one of the most comprehensive ranges of multi-brand parts and accessories for all agricultural applications on your farm.

**Global supply.**
The CLAAS Parts Logistics Center in Hamm, Germany, stocks almost 200,000 different parts and has a warehouse area of over 140,000 m². This central spare parts warehouse delivers all ORIGINAL parts quickly and reliably all over the world. This means that your local CLAAS partner can supply the right solution for your harvest or your business within a very short time.

**Your local CLAAS distributor.**
Wherever you are, you can count on us to always provide you with the service and the contact persons you need. Your CLAAS partners are on hand in your local area, ready to support you and your machine around the clock. With know-how, experience, commitment and the best technical equipment. Whatever it takes.

# Outstanding technology.

The AVERO 240.


1 Comfort cab
2 Intensive separation system
3 Cummins engine (Stage V) / Perkins engine (Stage IIIA)
4 PROFI CAM
5 Straw chopper
6 3D cleaning system
7 High-performance straw walker
8 Rotary fan
9 APS
10 Hydrostatic reel drive
11 Folding dividers
12 VARIO table
13 Multicoupler
14 CIS

# Outstanding technology.

The AVERO 160.


1 Comfort cab
2 Intensive separation system
3 Cummins engine (Stage V) / Perkins engine (Stage IIIA)
4 Straw chopper
5 3D cleaning system
6 High-performance straw walker
7 Rotary fan
8 Hydrostatic reel drive
9 Folding dividers
10 VARIO table
11 Multicoupler
12 CIS

# The compact class gives you flexibility. The advantages.


## Cab.

- Large, soundproofed cab for a quiet environment which allows you to focus on your work
- Visual returns checked from the operator's seat through the illuminated inspection window
- Multifunction control lever and CLAAS Information System (CIS) for optimal interaction between operator and machine

## Cutterbars.

- VARIO cutterbars provide up to 10% better performance by optimising the crop flow
- Folding C450 cutterbar for fast transfers between fields
- Versatile deployment options with CORIO and SUNSPEED cutterbars
- CERIO and standard cutterbars for grain harvesting

## Threshing technology.

- Up to 20% more throughput with APS without any increase in fuel consumption
- MULTICROP concaves are quick and easy to change to match harvesting conditions
- 3D cleaning system for slopes up to 20%
- The highly effective CLAAS Intensive Separation System

## CPS – CLAAS POWER SYSTEMS.

- Engines from Cummins and Perkins with high power and performance reserves
- Intelligent cooling system with automatic dust extraction
- Easy and convenient access to maintenance points
- Ground drive with state-of-the-art hydrostatic technology
- Highly manoeuvrable through reduced external width: with 800 mm tyres less than 3.30 m, with 650 mm tyres less than 3.00 m
- Low ground pressure through low operating weight and wide tyres
- FIRST CLAAS SERVICE around the clock

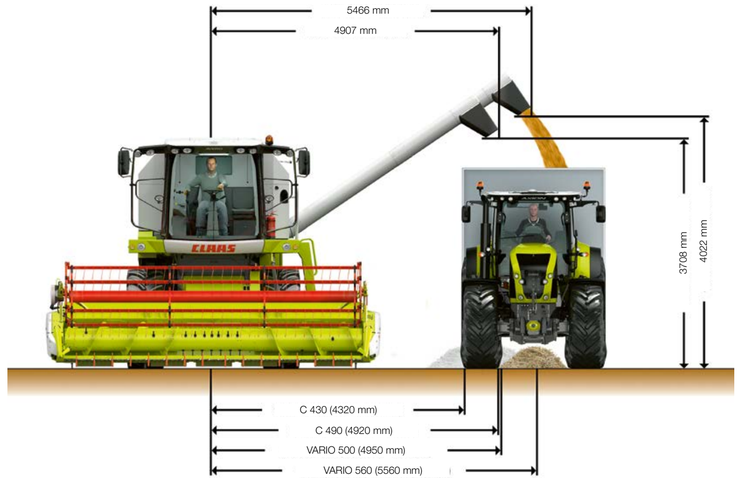
| AVERO | | 240 | 160 |
|---|---|---|---|
| **Threshing system** | | | |
| APS acceleration and pre-separation | | ● | – |
| Accelerator rpm | | 80% of the threshing drum | – |
| MULTICROP | | ● | ● |
| Threshing drum width | mm | 1060 | 1060 |
| Threshing drum diameter | mm | 450 | 450 |
| Threshing drum speed 650-1500 | rpm | ● | ● |
| Threshing drum speed 500-1400 | rpm | ● | ● |
| Speed reduction threshing drum | rpm | 300, 430, 550 | 300, 430, 550 |
| Preconcave wrap angle | degrees | 60 | – |
| Threshing concave wrap angle | degrees | 151 | 117 |
| Preconcave flaps foldable from outside | | ● | – |
| Concave adjustment from the cab, 1 lever, proportional adjustment of both concaves | | ● | – |
| Concave adjustment from the cab, 1 lever, proportional adjustment | | – | ● |
| Large stone trap | | ● | ● |
| **Residual grain separation** | | | |
| Straw walkers | No. | 4 | 4 |
| Straw walker steps | No. | 4 | 4 |
| Length of straw walkers | mm | 3900 | 3900 |
| Straw walker area | m² | 4.13 | 4.13 |
| Separation area | m² | 4.8 | 4.8 |
| 1 intensive separation system | | ● | ● |
| **Crop cleaning** | | | |
| Preparation floor, removable | | ● | ● |
| Fan | | Rotary fan | Rotary fan |
| Fan adjustment, electric | | ● | ● |
| Divided, counterdirectional sieve pan | | ● | ● |
| 3D cleaning system | | ○ | ○ |
| Sieves | | 2-track | 2-track |
| Total sieve area | m² | 3.00 | 3.00 |
| Chaffer sieve | | ● | ● |
| Returns feed to threshing system | | ● | ● |
| Returns visible from the cab on the go | | ● | ● |
| **Grain tank** | | | |
| Capacity | l | 5600 | 4200 |
| Unloading auger swivel angle | degrees | 101 | 101 |
| Unloading rate | l/s | 51 | 51 |
| **Chopper** | | | |
| STANDARD CUT chopper, 40 knives | | ● | ● |
| **Engine** | | | |
| Emissions standard Stage V | | | |
| Manufacturer | | Cummins | Cummins |
| Exhaust aftertreatment SCR and DPF | | ● | ● |
| Model | | B6.7 | B6.7 |
| Cylinders / displacement | No./l | S 6/6.7 | S 6/6.7 |
| Maximum output (ECE R 120) | kW/hp | 157/213 | 123/167 |
| Urea tank 49 l | | ● | ● |
| Fuel tank capacity | l | 400 | 400 |
| Emissions standard Stage IIIA (Tier 3) | | | |
| Manufacturer | | Perkins | Perkins |
| Model | | 1106 D-E70TA | 1106 D-E70TA |
| Cylinders / displacement | No./l | S 6/7.0 | S 6/7.0 |
| Maximum output (ECE R 120) | kW/hp | 151/205 | 116/158 |
| **Weights** | | | |
| Without cutterbar, chopper[1] | | 8700 | 8250 |

[1] Can vary according to equipment

● Standard ○ Option □ Available – Not available

| AVERO | | 240 | 160 |
|---|---|---|---|
| **Tyres on the drive axle** | | | |
| **Threshing system width** | mm | 1060 | 1060 |
| **Tyre size** | | **External width** | |
| 23.1-26 12 PR R1 KB F20 | m | 3.03 | 3.03 |
| 23.1-26 12 PR R1 KB F16 | m | 2.82 | 2.82 |
| 620/75 R 26 | m | 3.03 | 3.03 |
| 620/75 R 30 | m | 2.96 | 2.96 |
| 650/75 R 32 | m | 2.98 | 2.98 |
| 750/65 R 26 | m | 3.14 | 3.14 |
| 800/65 R 32 | m | 3.28 | 3.28 |

| AVERO | | 240 | 160 |
|---|---|---|---|
| **Tyres on the steering axle** | | | |
| **Threshing system width** | mm | 1060 | 1060 |
| **Tyre size** | | **External width** | |
| 12.5/80-18 | m | 2.68 | 2.68 |
| 14.5/75-20 | m | 2.71 | 2.71 |
| 440/65 R 24 | m | 2.93 | 2.93 |
| 500/60-22.5 | m | 2.89 | 2.89 |




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

| AVERO | | 240 | 160 |
|---|---|---|---|
| **Front attachments** | | | |
| VARIO cutterbars | | VARIO 620, VARIO 560, VARIO 500 | VARIO 560, VARIO 500 |
| CERIO cutterbars | | CERIO 620, CERIO 560 | CERIO 560 |
| Standard cutterbars | | C 490, C 430, C 370 | C 490, C 430, C 370 |
| Rapeseed equipment | | For all VARIO cutterbars | |
| Folding cutterbars | | C 450 | – |
| CORIO | | 575 C, 570 C, 475 C, 470 C | 575 C, 570 C, 475 C, 470 C |
| SUNSPEED | | 8-70, 8-75 | 8-70, 8-75 |
| **Standard cutterbars** | | | |
| Effective cutting widths | m | C 490 (4.92 m), C 430 (4.32 m), C 370 (3.71 m) | C 490 (4.92 m), C 430 (4.32 m), C 370 (3.71 m) |
| Folding dividers | | ● | ● |
| Spacing of knife bar to intake auger (min. / max) | mm | 580 | 580 |
| Cutting frequency | strokes/min | 1120 | 1120 |
| Multifinger intake auger | | ● | ● |
| Reverser, hydraulic | | ● | ● |
| Reel speed adjustment, electrohydraulic | | ● | ● |
| Reel height adjustment, electrohydraulic | | ● | ● |
| Horizontal reel adjustment, electrohydraulic | | ● | ● |
| Automated cutterbar control | | | |
| CONTOUR | | ● | ● |
| AUTO CONTOUR | | ○ | ○ |
| **VARIO cutterbars** | | | |
| Effective cutting widths | m | VARIO 620 (6.17 m), VARIO 560 (5.56 m), VARIO 500 (4.95 m) | VARIO 560 (5.56 m), VARIO 500 (4.95 m) |
| Folding dividers | | ● | ● |
| Spacing: knife bar – intake auger | mm | 493 / 1134 | 493 / 1134 |
| Multifinger intake auger | | ● | ● |
| Reverser, hydraulic | | ● | ● |
| Reel drive, hydrostatic | rpm | 8-60 | 8-60 |
| Reel speed adjustment, electrohydraulic | | ● | ● |
| Reel height adjustment, electrohydraulic | | ● | ● |
| Horizontal reel adjustment, electrohydraulic | | ● | ● |
| Automated cutterbar control | | | |
| CONTOUR | | ● | ● |
| AUTO CONTOUR | | ● (○ for V500) | ● (○ for V500) |

● Standard ○ Option □ Available – Not available

Ensuring a better **harvest**.

CLAAS KGaA mbH
Mühlenwinkel 1
33428 Harsewinkel
Deutschland
Tel. +49 5247 12-0
claas.com

HRC / LRC / 121012000420 KK LC 0520 / 00 0256 372 8