



Combine harvesters

AVERO

240 160



The compact class from CLAAS.

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.





AVERO 240 / 160.





Comfort cab	6
Comfort cab, Lighting	8
Multifunction lever, CIS	10
Front attachments	12
Front attachment interface	14
Automated cutterbar control	16
VARIO 560 / 500	18
CERIO 930 to 560	22
Standard cutterbars	
C 490 / 430 / 370	26
CONSPEED LINEAR 5-row, 4-row	30
Folding cutterbar C 450	36
SUNSPEED 8-row unit	38
Threshing technology	42
APS threshing system	44
CLAAS threshing system	46
Residual grain separation, Straw walker technology	48
Cleaning, grain tank	50
Straw management, PROFI CAM	52
CLAAS POWER SYSTEMS	54
Engine, drive train	56
Cooling system, Maintenance	58
CLAAS Service & Parts	60
Equipment	62
Advantages	66
Technical data	67

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 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.



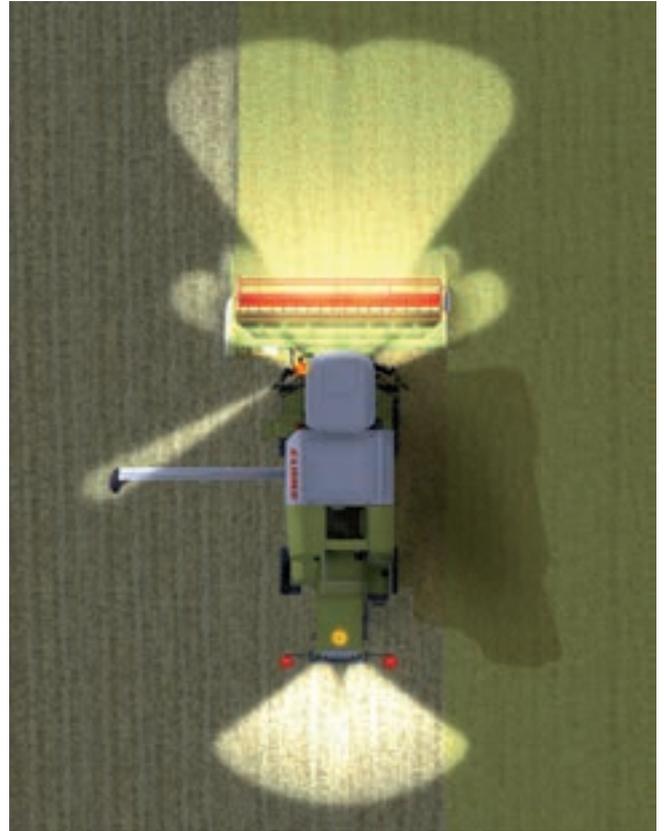
Electrically adjustable rear-view mirrors as well as front and side roller blinds for an optimal view



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

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 discharge auger 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 discharge auger



Well-organised controls



Yield recording in CIS



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, maize, soybeans, clover, peas,
sunflowers and more.





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.

Practical central locking.

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

- Safe, 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
- Environmentally 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 laid 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 1000 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 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 transporting the accessories you need for harvesting rapeseed. The rubber-coated floor provides non-slip, protective, theft-proof storage.



Standard cutterbar with front rapeseed attachment

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.

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 laid 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 1000 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.



Sensor bands detect the position of the cutterbar.



The automated reel control is activated by means of a toggle switch on the side console.

NEW

The new VARIO cutterbars.





VARIO cutterbars.

VARIO cutterbars from CLAAS represent the optimum cutterbar table adjustment system available in the market. With its new VARIO 930 to VARIO 500 models, CLAAS has made systematic enhancements to its proven VARIO cutterbar range.

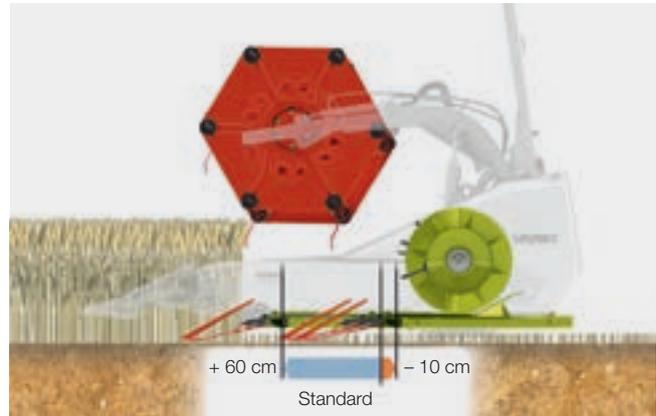
The highlights at a glance:

- 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

The new VARIO cutterbars.

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 the need for tools



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)



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.



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



Replacement knife bar stored underneath the cutterbar



Replacement crop lifters immediately behind the cutterbar



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



Rapeseed knives fitted by means of quick-release mounting system

NEW

The new CERIO cutterbars.





CERIO cutterbars.

CLAAS has a new cutterbar model series in the form of the new CERIO 930 to 560 models. It is based on the VARIO 930 to 500 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

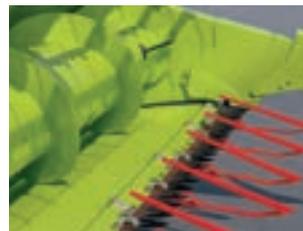
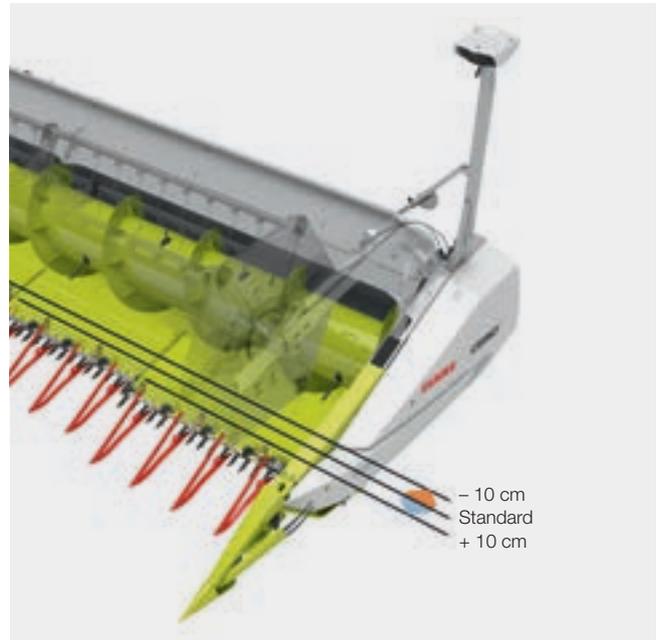
The new CERIO cutterbars.

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, despite the absence of a hydraulic adjustment function, 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 the need for tools
- Automatic parking and transport position
- Automatic operating position



Cutterbar table retracted – grain (- 100 mm)



Cutterbar table extended – grain (+ 200 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
- 10 screw fixings allow adjustment of cutterbar table
- 5 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 dividers can be secured without the need for 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 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 very good crop flow
- Robust knife drive
- Proven rigid cutterbar table
- MULTIFINGER intake auger
- C 490, C 430 and C 370 suitable for rapeseed
- Hydraulic reel drive

Standard cutterbars.

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.

The ability to extend the C 490, C 430 and C 370 cutterbars with a rapeseed table allows these units to be used for rapeseed harvesting, too.

Technology.

- Proven rigid cutterbar table
- Robust knife drive via oil-bath transmission
- 1120 strokes/min
- Automatic tensioning of drive belts
- MULTIFINGER intake auger
- 480 mm diameter intake auger
- Intake auger height is infinitely adjustable



Rapeseed table.

For rapeseed harvesting, a rapeseed table with rapeseed knives can be fitted ahead of the cutterbars without any tools. This is a very straightforward operation involving only the removal of the crop dividers before the table is locked in place with quick release fasteners. Integrated transport wheels allow the rapeseed table to be moved easily.



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



Smooth drive

CONSPEED LINEAR.





CONSPEED LINEAR.

The picking characteristics of the CONSPEED LINEAR maize pickers have a major influence on the throughput of the combine during maize harvesting.

The highlights at a glance:

- CONSPEED LINEAR maize picker as a 5 and 4-row unit
- Row widths of 75 and 70 cm
- Linear snapping rollers
- Rigid version
- Easy mechanical or hydraulic snapping plate adjustment using multifunction control lever

CONSPEED LINEAR.

Use.

The CONSPEED LINEAR models are the right maize pickers for harvesting grain maize or corn cob mix. Whether working in high-yield crops with a large number of cobs per plant or very dry maize stems, the CONSPEED LINEAR maize pickers ensure a clean, effective picking process.

What's more, the folding maize pickers do away with the need for removal and refitting when moving from one field to the next or during road transport.

Functional principle.

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

The chopper blades chop up the stalks which have been pulled down. The intake auger then transports the maize cobs to the feeder housing.

The snapping rollers are the key components of the CONSPEED LINEAR maize pickers:

- CONSPEED LINEAR: linear snapping rollers



Technology – CONSPEED LINEAR.

- Linear snapping rollers (forward mounted bearings)
- Snapping roller knives along entire length
- Four bolt-on knives per snapping roller
- 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 bodies
- The drives for the snapping rollers and knives are integrated in the robust gear housing
- Horizontal chopper is driven continuously
- Rigid version available



Gears are changed to adjust the speed



CONSPEED LINEAR.



Horizontal chopper.

Each picking unit is equipped with a horizontal chopper integrated in the transmission unit.

- Chopper blades sharpened on three sides ensure precise chopping, fast rotting of the stem constituents and optimal field hygiene
- Tungsten-carbide coating provides optimal protection against wear
- The knives can be changed quickly and easily



Hoods.

- Robust plastic hoods ensure that the cobs are handled gently
- Can be raised and adjusted for maintenance
- The flat picking angle makes for low cob losses ("cob jump-off")



Hood extensions.

- Side hood extensions prevent the cobs from falling out when harvesting overripe crops



Laid maize augers.

- Hydraulically driven laid maize augers ensure reliable take-up of laid maize



Snapping plate adjustment.

- Snapping plates can be adjusted to a narrower or wider setting mechanically or hydraulically by means of the multifunction control lever



Stubble breakers.

- Stubble breakers are fitted to the frame of the picker
- These break off the maize stubble to provide optimal tyre protection and so extend the service life of the tyres
- Additional stubble breakers are available

CONSPEED LINEAR sunflower kit.

The CONSPEED LINEAR can also be converted for sunflower harvesting in next to no time. The conversion involves fitting special knives above the snapping roller in order to cut off the sunflowers. This ensures that the combine is not contaminated with stalk fragments unnecessarily. Side hood extensions are also fitted to the CONSPEED LINEAR along with a special rear wall panel in order to avoid losses. The intake chains are turned round so that the sunflower heads can reach the feed rake unharmed.

- Fast, easy conversion of the front attachment for use in sunflower harvesting
- Wider range of applications and increase in the cost-efficiency of the combine and the front attachments



The kit at a glance:

- 1 Rear wall panel to minimise losses
- 2 Knife carrier
- 3 Knife between the snapping plates
- 4 Right-hand chain guide
- 5 Left-hand chain guide

Folding cutterbar.

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.

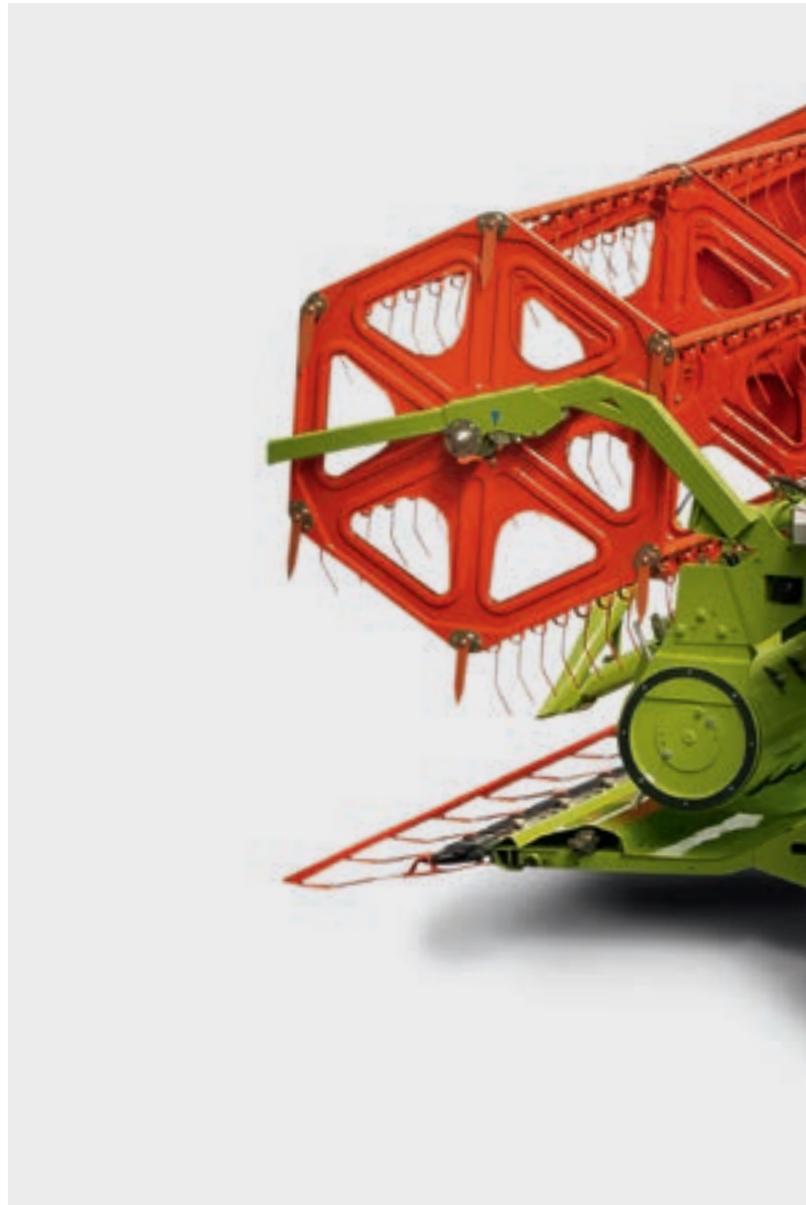
The compact design ensures optimum visibility and excellent manoeuvrability in severely restricted spaces while taking into account the permissible transport width.

Pivot.

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.

Harvest.

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.





SUNSPPEED.





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 shuttles can be set to the stalk thickness
- The shuttles can be adjusted for tilt

SUNSPEED.

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 1200 strokes per minute
- Snapping roller and intake auger are driven by chains and belts
- Shuttle width adjustable by up to 20 mm
- Shuttles up to 1800 mm long for even stalk guidance
- Adjustable circumferential reel speed
- Adjustable intake auger speed
- Automatic adjustment of reel speed based on ground speed



Adjustable shuttles



Adjustable guide plates



Snapping roller



Proven drive



Replacement knife bar

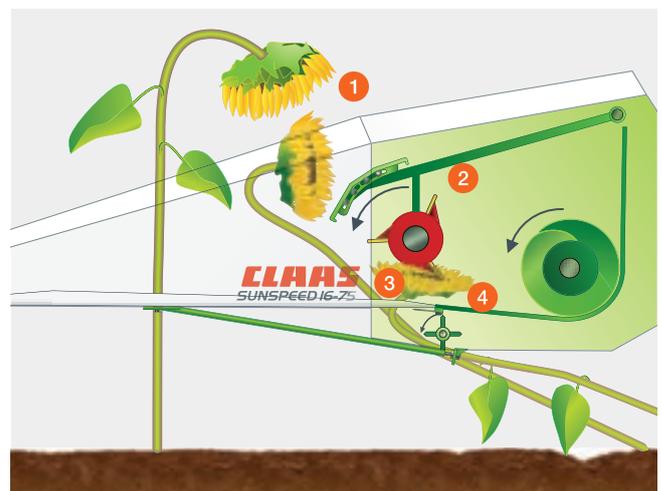


Functional principle.

Once the sunflowers are collected by the shuttles, 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 appears 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 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. APS really pays.

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've succeeded in wrapping the main concave much farther around the threshing drum than in conventional machines. No other threshing unit offers an angle of wrap 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.

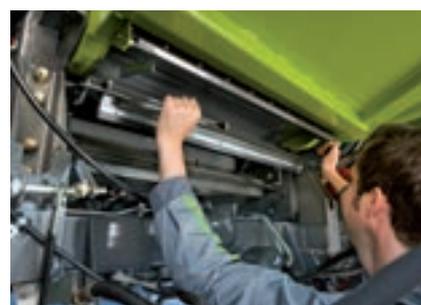
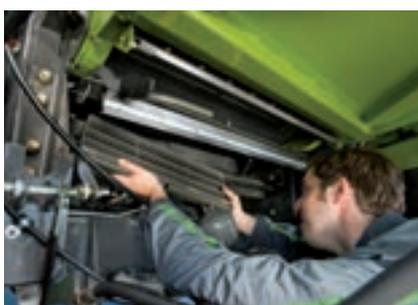
The large stone trap ensures a high degree of safety. It is easy to open from the side and is self-emptying.



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 deawning plates. The deawning plates are activated in mere seconds with a lever above 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'll be impressed by the versatile performance it delivers across the full threshing drum width of 1.06 m.



The MULTICROP concave

Self-emptying stone trap



- The threshing unit can be easily accessed 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



Saving the right way.



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'd 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 a noticeable economic impact. 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.



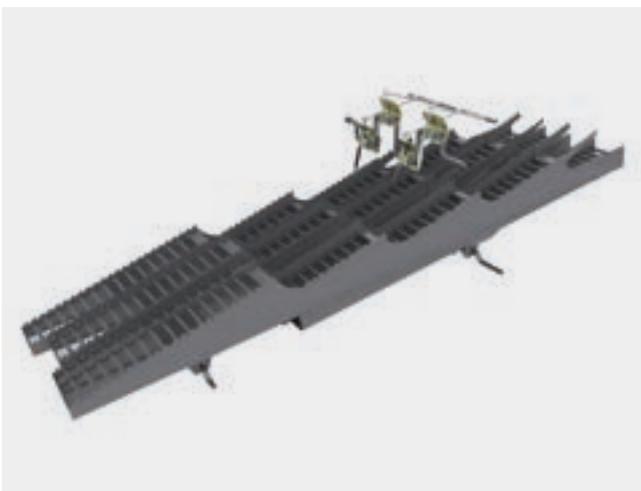
Loss sensors

Four straw walker steps.

The four straw walkers of the AVERO have been completely redesigned and adapted to the high-performance APS threshing system. Residual grain separation is accomplished over a total length of 3900 mm across four straw walker steps. Centre and side extensions are available. Even large volumes of straw are transported rapidly and loosely.

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.

AVERO provides you with numerous monitoring aids for 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.



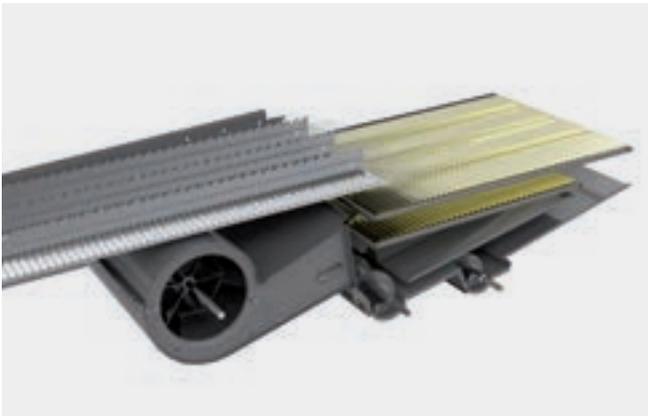
Large grain tank.

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 5600 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 capacity
AVERO 240: 5600 l
AVERO 160: 4200 l



Powerful fan.

The AVERO has a rotary fan for the best 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
- Completely consistent performance on side slopes up to 20%
- No wear – completely maintenance free
- Fast, simple retrofitting



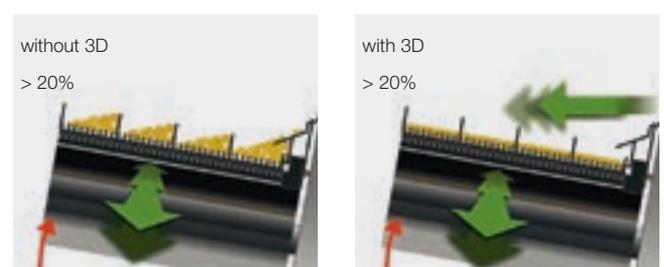
Direct view.

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.



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



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.

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.

PROFI CAM



High performance in a compact package.

Optimal drive for best results.

Equipment development at CLAAS means an ongoing effort for even greater efficiency and reliability as well as optimal 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 (CPS), we have brought together the best components in a drive system in a class of its own. One that always delivers the greatest power when needed. Ideally matched to the work systems, with fuel-saving technology that quickly pays for itself.



Using brawn and brains to get the job done.

Top performance.

The rugged Perkins engine offers plenty of reserve capacity and powers the AVERO through long, productive work sessions even under tough field conditions. State-of-the-art technology keeps diesel consumption remarkably low.

The AVERO complies with the Stage IV (Tier 4) emissions standard thanks to SCR (selective catalytic reduction) in combination with EGR (exhaust gas recirculation) and a diesel particulate filter. The urea solution required for the SCR reaction is carried in a 30-litre tank. No additional exhaust aftertreatment equipment is required for compliance with the Stage IIIA (Tier 3) emissions standard.

The new generation of Perkins engines with outputs of 116 kW / 158 hp (AVERO 160) and 151 kW / 205 hp (AVERO 240) allows the machines to be operated productively for extended periods, even under difficult field conditions.

- Optimised combustion process
- Improved engine running characteristics
- Low fuel consumption
- Optimal power transmission
- Up to 400 l fuel tank capacity



AVERO 240: 400-litre fuel tank capacity
AVERO 160: 400/320-litre fuel tank capacity



Intelligent ground drive.

No engaging and disengaging the clutch, no shifting gears – just full concentration on the harvest. You control the innovative, hydrostatic ground drive of the AVERO conveniently and comfortably with the multifunction lever.

Such operating comfort enhances performance. You can turn faster and adapt the ground speed immediately to the changing field conditions. The high pump volume ensures responsive handling under all conditions.



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.

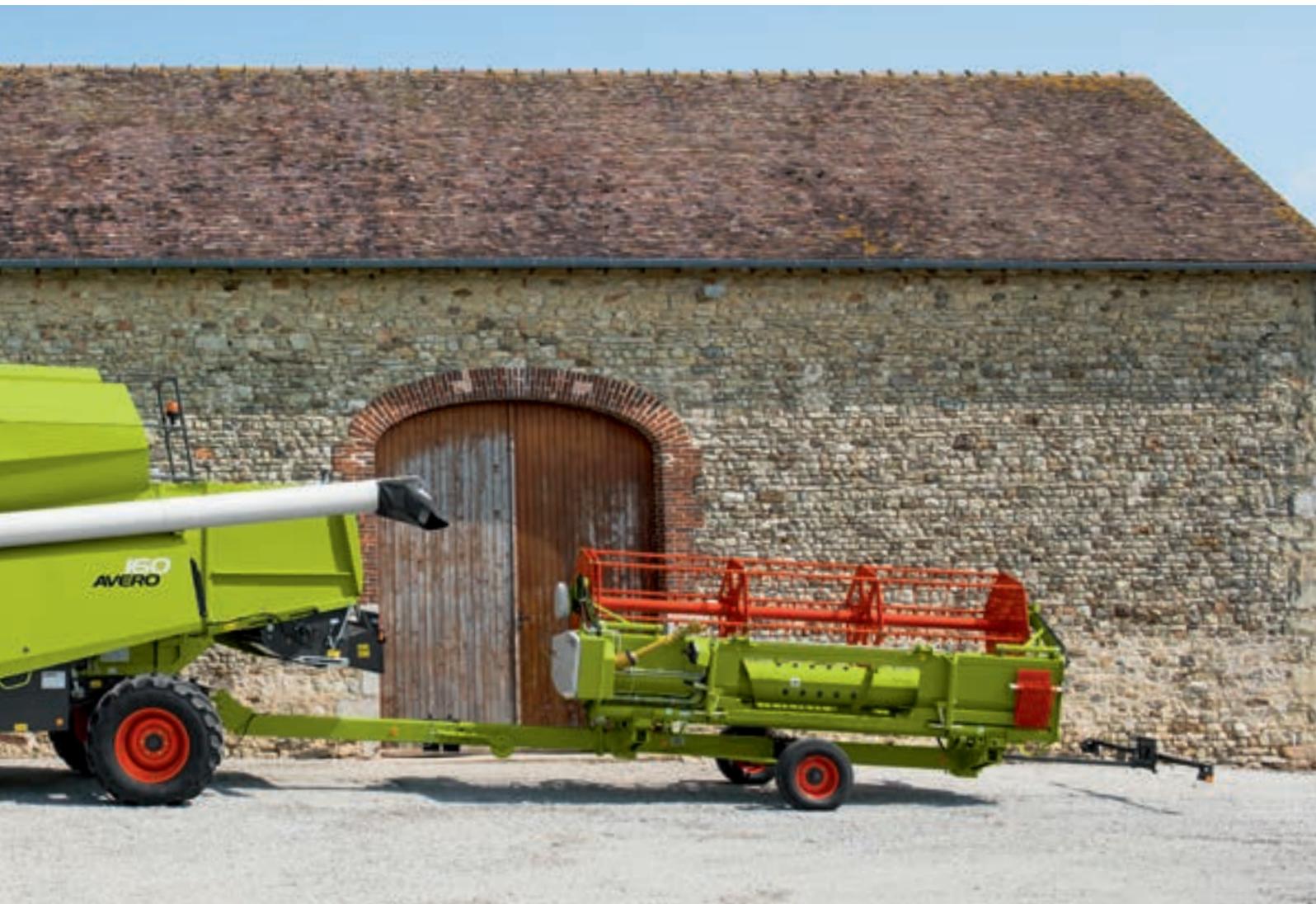
- Pivoting radiator frame for fast manual cleaning
- Large, continuous side panels for unimpeded access
- Easy access to the engine compartment and other maintenance areas with a mobile, foldable ladder
- Rear hood opens if necessary
- Long service intervals
- Lubrication banks
- Storage box for tools



Large side panels for easy access



The engine compartment is easily accessible



NEW: 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.



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.



Always quick on the scene.

A tight-knit service network and personal contact partners ensure that we are always easily accessible – from sales staff to technical support and customer service. Whatever it takes.

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.



Outstanding technology.

The AVERO 240.





- 1 Comfort cab
- 2 Intensive separation system
- 3 Perkins engine
- 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 Perkins engine
- 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
- Versatile multifunction control lever and CLAAS Information System (CIS) for optimal interaction between operator and machine

Cutterbars.

- VARIO cutterbars improve performance by up to 10% due to even crop flow
- CONSPEED LINEAR and the folding cutterbar or the FLEX cutterbar provide versatile harvesting solutions

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.

- Perkins engines with high power and performance reserves
- Ground drive with state-of-the-art hydrostatic technology
- Easy and convenient access to maintenance points
- FIRST CLAAS SERVICE around the clock

AVERO		240	160
-------	--	-----	-----

Threshing system

APS acceleration and pre-separation		●	–
Accelerator rpm		80% of the threshing drum	–
MULTICROP		●	●
Drum width	mm	1060	1060
Drum diameter	mm	450	450
Drum speed 650-1500 rpm	rpm	●	●
Drum speed 500-1400	rpm	●	●
Threshing drum speed reduction	rpm	300, 430, 550	300, 430, 550
Pre-cleaning concave wrap angle	degrees	60	–
Concave wrap angle	degrees	151	117
Externally folding deawner plates		●	–
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
Straw walker length	mm	3900	3900
Straw walker area	m ²	4.13	4.13
Separation area	m ²	4.8	4.8
1 intensive separation system		●	●

Crop cleaning

Removable preparation floor		●	●
Fan		Rotary fan	Rotary fan
Fan adjustment, electric		●	●
Divided, counterdirectional sieve pan		●	●
3D-cleaning system		○	○
Sieves		2-track	2-track
Total sieve area	m ²	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
Offloading rate	l/s	51	51

Chopper

STANDARD CUT chopper, 40 knives		●	●
---------------------------------	--	---	---

Engine

Manufacturer		Perkins	Perkins
Emissions standard Stage IV (Tier 4)			
Exhaust aftertreatment SCR and EGR with DPF		●	●
Model		1206 F-E70TA	1206 F-E70TA
Cylinders / displacement	No./l	S 6/7.0	S 6/7.0
Maximum output (ECE R 120)	kW/hp	151/205	116/158
Urea tank, 30 l		●	●
Fuel tank capacity	l	400	400
Emissions standard Stage IIIA (Tier 3)			
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

AVERO		240	160
-------	--	-----	-----

Tyres on the drive axle

Threshing system width mm 1060 1060

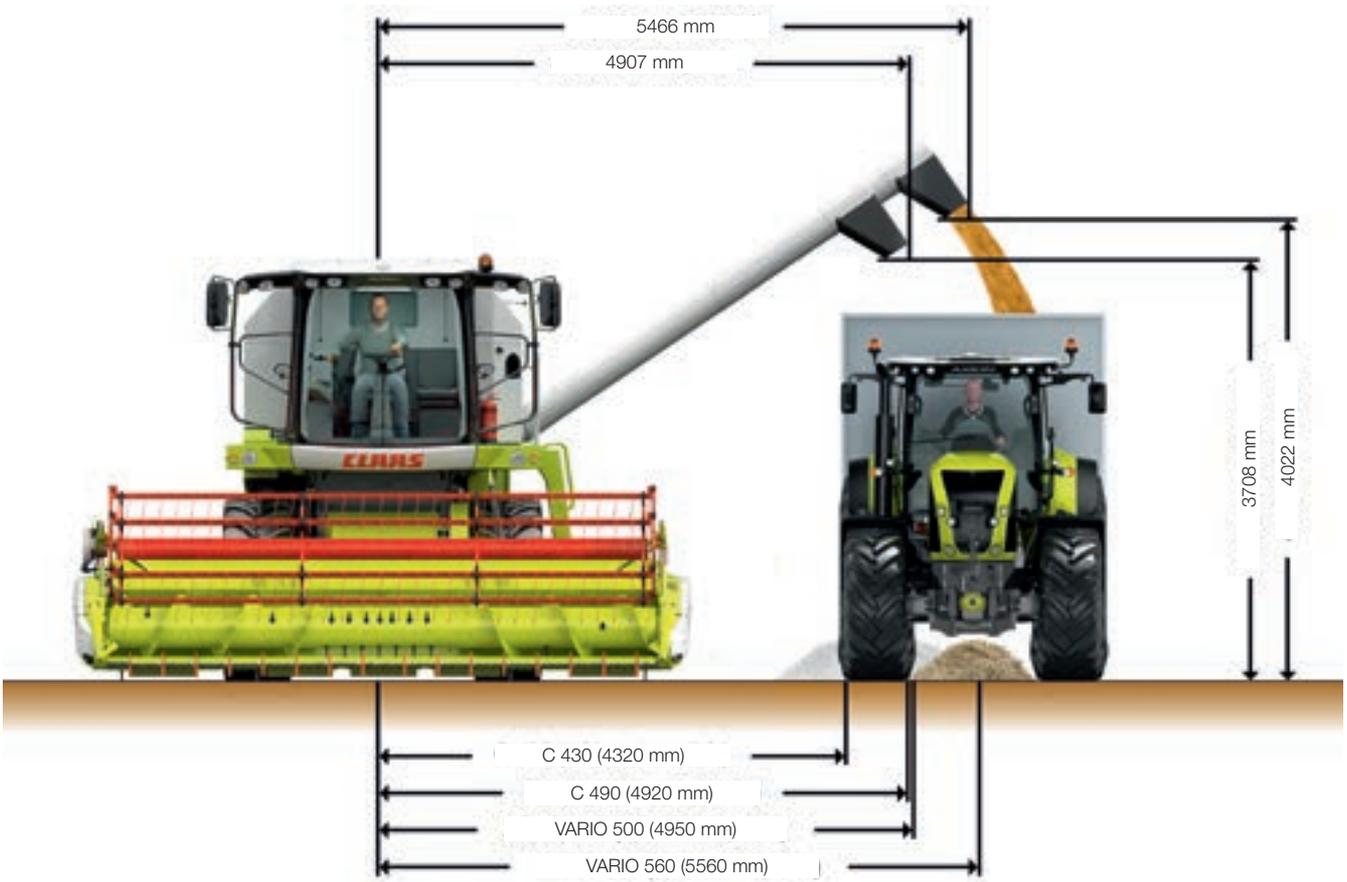
Tyre size		External width	
18.4-30 12 PR	m	2.68	2.68
23.1-26 12 PR R1 KB F20	m	3.03	3.03
23.1-26 12 PR R1 KB F16	m	2.82	2.82
620/75 R 26	m	3.03	3.03
620/75 R 30	m	2.96	2.96
650/75 R 32	m	2.98	2.98
24.5-32 R-2 (rice)	m	3.18	–
750/65 R 26	m	3.14	3.14
800/65 R 32	m	3.28	3.28

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.

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 standard and VARIO cutterbars	
Folding cutterbars		C 450	–
CONSPEED LINEAR		4-70 C, 4-75 C, 5-70 C, 5-75 C	4-70 C, 4-75 C, 5-70 C, 5-75 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: knife bar – intake auger	mm	580	580
Cutting frequency	strokes/min	1120	1120
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		○	○
Automatic reel speed control		○	○
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	480-780, for rapeseed 1080	480-780, for rapeseed 1080
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		○	○
Automatic reel speed control		○	○



CLAAS UK
Saxham
Bury St. Edmunds
Suffolk
IP28 6QZ
Tel 01284 763100
claas.co.uk
info-uk@claas.com
HRC / LRC / 121012130216 KK KP 0316

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