Combine harvesters

**TUCANO**

580  570  560  550
450  440  430  340  320
The natural choice.
The new TUCANO.

The new TUCANO is now even more intuitive to operate. Long periods of instruction are history. Simply get in and drive off – the most important machine functions are adjusted via the CEBIS touchscreen and the switches on the new armrest.

It’s the natural choice.
**Contents**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLAAS POWER SYSTEMS</td>
<td>56</td>
</tr>
<tr>
<td>Engine</td>
<td>58</td>
</tr>
<tr>
<td>All-wheel drive</td>
<td>60</td>
</tr>
<tr>
<td>Comfort cab</td>
<td>62</td>
</tr>
<tr>
<td>Control concept</td>
<td>64</td>
</tr>
<tr>
<td>Cab equipment</td>
<td>66</td>
</tr>
<tr>
<td>Business and data management</td>
<td>72</td>
</tr>
<tr>
<td>Fleet View, TELEMATICS</td>
<td>72</td>
</tr>
<tr>
<td>Job management, yield mapping</td>
<td>74</td>
</tr>
<tr>
<td>Operator assistance systems</td>
<td>76</td>
</tr>
<tr>
<td>Threshing system</td>
<td></td>
</tr>
<tr>
<td>APS threshing unit</td>
<td>30</td>
</tr>
<tr>
<td>APS HYBRID SYSTEM</td>
<td>32</td>
</tr>
<tr>
<td>AUTO CROP FLOW</td>
<td>34</td>
</tr>
<tr>
<td>ROTO PLUS</td>
<td>36</td>
</tr>
<tr>
<td>Conventional threshing unit</td>
<td>38</td>
</tr>
<tr>
<td>Straw walker technology</td>
<td>42</td>
</tr>
<tr>
<td>Crop cleaning</td>
<td>44</td>
</tr>
<tr>
<td>AUTO SLOPE</td>
<td>46</td>
</tr>
<tr>
<td>Grain tank, QUANTIMETER, PROFI CAM</td>
<td>48</td>
</tr>
<tr>
<td>Maintenance, central lubrication</td>
<td>50</td>
</tr>
<tr>
<td>CLAAS Service &amp; Parts</td>
<td>52</td>
</tr>
<tr>
<td>Technology in detail</td>
<td>54</td>
</tr>
<tr>
<td>Straw management</td>
<td>52</td>
</tr>
<tr>
<td>Rice harvesting</td>
<td>54</td>
</tr>
<tr>
<td>Features</td>
<td>90</td>
</tr>
<tr>
<td>Technical data</td>
<td>91</td>
</tr>
</tbody>
</table>
More comfort, more performance, reduced losses.

Our assistance systems make good operators even better.

There is no substitute for your experience. Only with it can you react quickly and, above all, appropriately to the challenges you face in your daily work. Whether these take the form of difficult terrain or changing crop moisture levels, many decisions have to be taken very quickly to get the job done to the right standard. That’s why it’s good to be able to count on a combine harvester that can reduce your workload. From automatically setting the machine up to helping guide it accurately down to the last centimetre, CLAAS operator assistance systems draw on the experience of thousands of customers and working hours which we incorporated into the development process. Because there are many factors which are impossible to calculate scientifically and which call for practical experience.

The TUCANO provides you with a wealth of operator assistance systems which make your work easier:

- AUTO CROP FLOW
- AUTO SLOPE
- GPS PILOT
- LASER PILOT
A real all-rounder. Top performance with all crops.

The TUCANO can handle whatever work you’ve got planned.
VARIO cutterbars from CLAAS are synonymous with the best cutterbar table adjustment system in the market. With its 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 tools
- Automatic parking and transport position
- Automatic operating position
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%.

The wide range of models, from the VARIO 930 to the VARIO 500 allows the LEXION, TUCANO and AVERO to use VARIO cutterbars.

Technology.

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

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.

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

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

Rapeseed knives fitted by means of quick-release mounting system
CLAAS has a new cutterbar model series in the form of the new CERIO 930 to 560 models. It is based on the VARIO 900 to 560 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.**

**Use.**

The CERIO model series 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.

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

**Technology.**

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

**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

**Rugged drive train.**

As the knife bar is driven via a planetary transmission, it runs very 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 arrangement allows the CERIO cutterbar to withstand the most adverse conditions and ensures reliable operation.

**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.

---

**Use.**

The CERIO model series 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.

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

**Technology.**

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

**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

**Rugged drive train.**

As the knife bar is driven via a planetary transmission, it runs very 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 arrangement allows the CERIO cutterbar to withstand the most adverse conditions and ensures reliable operation.

**Use in rice.**

The CERIO cutterbars are equipped ex factory — or can easily be converted — with a coated feed roller and a rice harvesting system for optimal performance in rice.
The new CORIO and CORIO CONSPEED 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
- Straight (CORIO) and conical snapping rollers (CORIO CONSPEED)
- New, robust drive train in all CORIO models
- 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 CONSPEED maize picker as 12, 8 and 6-row unit
- CORIO maize picker as 8, 6, 5 and 4-row unit
- Row widths of 90, 80, 75 and 70 cm
Use.

The CORIO CONSPEED and CORIO model series 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 stalks, the CORIO CONSPEED and CORIO maize pickers ensure a clean, effective picking process, from the LEXION to the AVERO.

What’s more, the maize pickers, which can now be monitored even more easily thanks to the new hood folding mechanism, 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 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 central elements of the CORIO CONSPEED and CORIO maize pickers are the snapping rollers which also embody the main difference between the two models.

- CORIO CONSPEED: conical snapping rollers
- CORIO: straight snapping rollers

Technology.

- Efficient, free-running drive for all CORIO CONSPEED and 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 clearly
- 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
- Available in rigid or folding versions
- AUTO PILOT and AUTO CONTOUR optionally available for all models

17° operating angle.

At 17° the CORIO CONSPEED and 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 laid maize, is ensured

Top form.

The front section of the hoods has been given a new and unique shape. Furthermore, the characteristics of the surface have 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 laid 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.

The precise chopping encourages the rotting of the crop residues and helps create a consistent seedbed for the following crop.
CORIO CONSPeed / CORIO.

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.

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 having to replace 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.

New folding mechanism.
A new design allows the hoods to be folded easily into a compact transport position. As well as being easy to use, the new arrangement makes for better visibility during on-road travel as it allows the front attachment to be shortened by 80 cm.

On-road travel.
Warning stickers, covers and a light bar make for safe on-road travel in accordance with the relevant traffic regulations.

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.

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.
Conical – CORIO CONSPEED.

- Conical snapping rollers
- Hybrid or standard snapping rollers available
- Four bolt-on knives are fitted on the front section of each hybrid snapping roller
- Tungsten-carbide coating ensures high wear resistance
- Horizontal chopper can be switched off

Straight – CORIO.

- Straight snapping rollers (forward mounted bearings)
- Snapping roller knives along entire length
- Four bolt-on knives per snapping roller
- Horizontal chopper is driven continuously

Recommended uses.

Depending on the region and climate, the maturity of the maize plants varies at the time of harvest. CLAAS therefore offers a range of snapping rollers in order to enable the best possible picking performance.

1 With a uniform profile.
This roller shape is particularly suited to dry conditions. The profiles of the two rollers engage and the plants are pulled downwards very gently. In dry conditions, in particular, this arrangement prevents early detachment of the plants.

2 Hybrid snapping rollers.
The special snapping rollers are particularly suited to green crops. Four knives, which aggressively pull the thick stalk sections downwards, are bolted to the front end of each hybrid snapping roller. The rear end of the hybrid snapping rollers has the standard profile.

3 Straight – CORIO.
The straight snapping rollers can be used universally. The throughput speed of the maize stalks remains constant during picking.

Operating principle of conical rollers.

The key characteristic of the conical snapping rollers is that the speed with which each maize plant is pulled through the rollers increases as the diameter of the roller increases. In this way, even at higher ground speeds, the plant is drawn in gently at first and then more quickly. This means that it is possible to avoid cob losses as well as unnecessary plant residues in the machine resulting from the plants being broken off.

How you benefit.

- Top chop quality thanks to the low throughput speed at the lower end of the maize stalk
- Avoidance of cob losses and damage through breakage thanks to the gradual increase in throughput speed
- Fewer straws and plant residues in the machine mean higher throughput and, therefore, make it possible to attain a higher ground speed
It's all about higher throughput.

The leader in versatility and flexibility.
The TUCANO was developed to unite a wide variety of features at the highest level. Offering optimal throughput performance and long-term reliability combined with great versatility and minimal setup time, the TUCANO is simply unbeatable. Our top combine harvesters were the prototypes for this model. Take advantage of a unique combination of sophisticated performance features and equipment.

The V feeder housing.
With the flexible positioning of the cutterbar mount, the V feeder housing facilitates fast, easy adjustment of the cutting angle. This ensures optimal adaptation to all field conditions and different types of tyres.

MultiCoupler.
The central coupling for all hydraulic and electrical cutterbar functions.
- You gain valuable time due to shorter attachment and removal procedures
- No danger of confusion thanks to the integrated design
- Easy to connect, even under pressure
- Environmentally friendly with no oil leakage

Central locking system.
A single lever on the left side of the cutterbar operates all locks simultaneously.
- Reliable, fast locking mechanism
- Fast, easy cutterbar attachment and removal

Replacement knife bar and crop lifters.
All CLAAS cutterbars are factory-equipped with a replacement knife bar. The knife sections are made of hardened material and are therefore extremely durable.
The use of crop lifters enables loss-free pickup of laid crops in particular while reducing the intake of stones. Crop lifter replacements can be carried conveniently at the rear of the cutterbar.

Hydrostatic reel drive.
A variable displacement pump on the basic machine delivers a maximum torque of 1000 Nm to the reel. The reel speed is adjusted automatically on the basis of the ground speed.
- Plenty of pulling power thanks to high torque
- Greater efficiency than gear pumps
- A closed hydraulic circuit ensures better reel rotation
- Fast adjustment of the reel speed

The trailer for road transport.
Everything to save you time: The trailer provides compact, convenient and safe stowage for the cutterbar. It is locked in seconds with two bolts.
Made-to-measure compartments with a rubber-coated floor ensure non-slip, protective, theft-proof stowage for the accessories you need for the rapeseed equipment.

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

That familiar comfort and convenience.
Convenient front attachment features.

Automated reel control.
- Circumferential reel speed is adjusted automatically in proportion to the ground speed
- Infinitely variable adjustment and storage of reel speed (between forward, synchronous and after-running settings) relative to the ground speed in CEBIS
- Speed settings can be stored in CEBIS
- Hydraulic overload protection prevents damage

VARIO automation.
- VARIO automation can be switched on or off in CEBIS
- The table length and reel level are then activated or deactivated together

How you benefit.
- Reduction in operator workload through automatic application of multiple settings for front attachment
- Optimal adaptation to conditions by means of up to four combinations of settings – for changing crop conditions (such as laid crops / standing crops) or headland operation and edge mowing – which can be saved separately
- Can be overridden by the operator at any time

Automatic front attachment configuration.
The operator can use the multifunction control lever to store up to five separate combinations of settings. The currently active and the stored combinations of settings can be viewed continuously in CEBIS.

Each combination of settings consists of:
- Reel height
- Reel levelling setting (VARIO cutterbar)
- Reel forward running setting
- Table length (VARIO cutterbar)
- Cutting height (with AUTO CONTOUR)

All the individual parameters can be overridden manually by the operator at any time, either by a direct input with the multifunction control lever or via CEBIS.

Automatic parking and transport mode.
- Pressing the cutting height adjustment button causes the cutterbar to move automatically into position for stowage on the trailer
- Table moves to 0 mm position (without rapeseed knives)
- Table moves to 450 mm position (with rapeseed knives)
- Reel moves all the way down and to the rear
- In the case of MAXFLEX cutters, the knife bar is set to a rigid configuration electrohydraulically (grain harvesting)
- Activation procedure, which takes place with the threshing unit switched off, varies depending on speed:
  - Above 2 km/h: cutting height adjustment button is pressed once
  - Below 2 km/h: AUTO CONTOUR button is held down

Automatic operating position.
- Pressing the cutting height preselection button causes the cutterbar to move to the last operating position automatically
- Table moves to last operating position
- Reel moves to last operating position
- In the case of MAXFLEX cutters, the knife bar is released (no longer set to rigid configuration) electrohydraulically (soybean harvesting)
- Activation procedure varies depending on speed:
  - Above 2 km/h: cutting height adjustment button is pressed once
  - Below 2 km/h: cutting height adjustment button is held down
- Reel moves to last operating position
- Table moves to last operating position

How you benefit.
- Transport and operating positions are reached quickly and easily
- No need to take account of mechanism dependencies

The CMOTION multifunction control lever is used to adjust reel parameters (reel height, reel level) and the snapping plate distance of the maize picker

The CMOTION multifunction control lever is used to activate cutting height adjustment (AUTO CONTOUR), ground pressure control and cutting height preselection as well as to raise / lower the front attachment

The operator in the cab has a perfect view of the position indicator for the cutterbar tray

Direct inputs with the multifunction control lever are used to activate cutting height adjustment (AUTO CONTOUR), ground pressure control and cutting height preselection as well as to raise / lower the front attachment
Three different threshing systems are available for the TUCANO. The choice is yours.

CLAAS threshing technology.

APS + ROOTO PLUS = APS HYBRID SYSTEM
TUCANO 580 / 570 / 560 / 550

APS + straw walkers
TUCANO 450 / 440 / 430

Conventional threshing unit + straw walkers
TUCANO 340 / 320
More pre-acceleration. APS.
TUCANO 500 / 400.

Unique APS threshing system.

The distinct competitive edge of CLAAS appears well before the threshing drum. The dramatic acceleration of the crop flow from 3 m/s to 20 m/s enables a series of extremely efficient processes:

- The pre-accelerator separates the crop
- 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 separated 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.

Long threshing channel with a large grain separation area.

In the CLAAS APS threshing unit, we have 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 yet thorough threshing with a large concave clearance and low drum speed with reduced fuel consumption.

Versatile pre-separation concave.

The pre-separation concave is designed as a MULTICROP concave so it can handle all types of crops. The ability to change the three concave segments rapidly minimises changeover times between crops and maximises efficiency and profitability.

Hydraulic concave adjustment.

The concave is adjusted hydraulically from the operator’s seat. This allows immediate and extremely convenient adaptation to changing harvesting conditions in the course of the day. The parallel concave control ensures that optimum threshing quality is maintained.

Overload protection increases daily output.

Integrated hydraulic overload protection reliably prevents damage from foreign bodies and allows the machine to be used at full capacity without risk. The concaves are pre-tensioned hydraulically and open when pressure peaks arise. The concaves then return automatically to the set working position.

Optimal grain quality is purely a matter of the right settings.

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

Synchronised function.

The accelerator and threshing drum are driven by a central variator. Each change in drum speed causes a corresponding adjustment of the speed of the accelerator. An additional synchronised drive for the feed drum is available for the APS HYBRID models TUCANO 580, 570 and 560. This provides extra gentle handling of grain and straw in very dry conditions.
An impressive combination: the APS HYBRID SYSTEM.

The APS HYBRID SYSTEM – threshing technology by CLAAS – represents the combination of two outstanding technologies: the tangential APS threshing system and the extremely efficient ROTO PLUS residual grain separation system.

This powerful duo offers you unbeatable advantages:

- The speed adjustment of the drums in the threshing system is independent of the rotor speed
- Individual adaptation of the entire process to changing field conditions over the course of the day
- Protective threshing with top separation performance

Only CLAAS brings both systems together in one machine, giving you a significant competitive edge over other systems.

Far superior to straw walkers.

With its effective residual grain separation system, the tenfold increase in crop flow speed between the rotor and concaves and the high centrifugal force, the TUCANO with the APS HYBRID SYSTEM offers separation qualities that differ fundamentally from straw walkers.

Take advantage of the unbeatable combination of APS + ROTO PLUS.

With conventional combine harvesters, the percentage losses increase sharply above a certain level of throughput because the residual grain separation is the factor limiting performance. The effective residual grain separation of the ROTO PLUS system in the TUCANO 500 enables much higher operating capacities without increased loss rates.
More safety and reliability. AUTO CROP FLOW.

Monitoring risks.

What can we do to make harvesting operations safer and more reliable? In extreme harvesting conditions, the operator needs to concentrate fully at all times in order to guarantee trouble-free operation. Often there are only a few days when grains can be harvested while at optimum quality – and it is precisely then that every minute of operation counts.

Early warning.

The speeds of the following components of the machine are monitored to provide early warning of critical peak loads:
- APS threshing unit
- ROTO PLUS rotor in the residual grain separation system
- Engine

The engine speed is used as the reference value.

In the straw management area, the system detects if the straw chopper and straw blockage flap are stationary.

Fast response.

If a preset slip limit is exceeded or if the engine speed drops below a critical level, the following measures are triggered automatically:
- Feeder unit and front attachment are switched off
- Grain tank unloading is switched off if it is active

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

If AUTO CROP FLOW detects that one of the monitored components is stationary once the overload protection has been triggered, the threshing unit is also turned off. All these measures reduce downtime and drive system wear.

Matched to harvesting conditions.

The AUTO CROP FLOW function can be switched on and off in CEBIS. This allows the operator to choose whether to use the system or not. The sensitivity of the slip limits can be set at three levels to match the system optimally to the conditions in the field.

Operate at the performance limits.

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

Harvesting is made more difficult by unevenly matured or laid crops.
ROTO PLUS makes the most of your work.

The powerful, pivotal component.
The principle behind the ROTO PLUS residual grain separation system is simple but extremely effective. The impeller of the APS threshing unit concentrates the material flow of the straw and feeds it to the rotary impeller. The axial direction of rotation facilitates the development of extraordinarily high centrifugal forces which are used to separate the residual grains from the straw.

Sizeable advantage: the high-performance rotor.
Thanks to the enormous rotor diameter of 570 mm, the high centrifugal forces and the corresponding energy-saving residual grain separation are achieved even at low speeds.

Rotor variator for continuously variable speed adjustment.
In order to allow maximum flexibility throughout the course of the day or to enable adaptation to different crops, the rotor speed can be adjusted continuously via CEBIS across a range of 920-480 rpm. As a result, it is possible to exert a major influence on the straw quality in a matter of seconds – when the straw is to be harvested, for example. Similarly, a low speed can be used in dry conditions in order to reduce the sieve loading caused by short straw. If the machine is called on to deliver its full throughput, the rotor speed is simply increased again.

Step drive.
It is also possible for the machines to be equipped with a step drive. Eight rotor speeds can be set in this way.

<table>
<thead>
<tr>
<th>Rotor speed (rpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>920</td>
</tr>
</tbody>
</table>

Mechanical rotor flaps.
The rotor separation area can be varied to meet changing requirements by closing the first and second rotor concaves with shutters. The adjustment lever is easily accessible on the left side of the machine. It is possible to close both concaves or just the first one. This means that you can reduce the sieve loading in very dry conditions while under wet conditions you can use the large separation area for effective residual grain separation. Variable adjustment of the rotor separation area therefore ensures maximum throughput under all operating conditions.

Sixth rotor concave.
The residual grain separation system of the TUCANO 580 and 570 has been optimised to increase the throughput. An additional (sixth) concave installed under the rotor increases the separation area and so enables higher separation performance compared with the TUCANO 560 with its five rotor concaves.
TUCANO 500 with APS HYBRID SYSTEM.

More flexibility in every situation.

Harvest conditions change all the time. The threshing characteristics of grain harvested in the morning or evening differ from those of grain harvested in bright sunshine. The different varieties also have a major influence on how the grain responds to the threshing process.

There are also differences in customer requirements. If the straw is to be harvested, it should be as intact as possible when it leaves the combine. The threshing and residual grain separation systems therefore need to be configured accordingly. If the straw is to be left in the field, it needs to be spread as evenly as possible across the full width of the cutterbar. The TUCANO 500 is ideally equipped to meet all these differing requirements.

The TUCANO handles straw very gently.

Take long straw, for example. Thanks to the protective APS threshing system and the large 570 mm rotor diameter, the straw retains its full original structure, making it ideal for use as high-quality bedding straw. The straw quality can be further enhanced to a significant degree by reducing the rotor speed. When the chopper is switched off, the swath is layered loosely, allowing it to dry quickly and be compacted easily into firm bales.

Requiting and separating: the heart of the matter.

It is when conditions are challenging that the strengths of the APS HYBRID SYSTEM really make a difference. The separately adjustable APS threshing system and ROTO PLUS residual grain separation system make it possible to match the machine performance precisely to the prevailing conditions. All speeds and settings can be monitored conveniently in CEBIS.

Higher performance with ROTO PLUS.

If the straw is green and tough, the residual grain separation stage can quickly become a factor which limits the system’s performance. It is precisely here that the ROTO PLUS forced separation delivers the extra performance that makes all the difference by maintaining the high throughput of the TUCANO 500. If the opposite conditions apply, the first two rotor concaves can be closed by means of shutters, thereby reducing the amount of short straw produced. This measure reduces the load on the sieves and ensures that the throughput of the TUCANO 500 is also maintained at a constant level in dry conditions.

TUCANO 560 / 550.

The TUCANO 560 and 550 combine the performance of a 6-walker with the dimensions of a 5-walker. Equipped with 800 mm tyres, they have a transport width of less than 3.50 m, while 680 mm tyres bring them below 3.30 m. As a result, the TUCANO 560 / 550 is able to operate optimally both on the road and in the field.

The TUCANO handles straw very gently. Take long straw, for example. Thanks to the protective APS threshing system and the large 570 mm rotor diameter, the straw retains its full original structure, making it ideal for use as high-quality bedding straw. The straw quality can be further enhanced to a significant degree by reducing the rotor speed. When the chopper is switched off, the swath is layered loosely, allowing it to dry quickly and be compacted easily into firm bales.

ROTPLUS
Conventional threshing unit.
TUCANO 340 / 320.

The champion in all fields.

A high-quality threshing unit must remove and separate grains reliably in all harvest conditions. The classic CLAAS threshing mechanism provides impressive proof of its abilities time and again. Regardless of the harvesting challenges you face, it has the versatility to take them in its stride with the full threshing drum width of 1.58 m (TUCANO 340) as well as with the smaller 1.32 m version (TUCANO 320).

- 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.

From field beans to clover seeds: the MULTICROP concave can handle anything.

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, different varieties or various stages of ripeness – always ensuring the right combination of clean threshing, protective handling of the crop and a high separation rate.

NEW: Plastic preparation floor.

The preparation floor feeds the separated grains from the threshing system and the returns pan to the upper sieve and so enables initial pre-sorting of grain and chaff. Very moist conditions or a very high proportion of green growth place a heavy load on the preparation floor. The individual floor steps can be pulled out to the front through the stone trap for checking and cleaning. In this way, the even loading of the cleaning system can be ensured at all times.

Hydraulic concave adjustment and overload protection.

In the TUCANO 340 and 320 models, the concave gap is also set in CEBIS.

The hydraulic overload protection also protects the conventional threshing unit from damage by foreign bodies and blockages.

Hydraulic adjustment of the concave outlet.

In order to adjust the machine for different crop types, the concave outlet can be set to two different positions: wide for crops such as maize and beans, narrow for grain. The adjustment is made by actuating a valve near the cab door.
Straw walker technology.

Cleanly separated over 4.40 metres length.
Grains this way, straw that way. The even flow of the straw on the 4.40 metre long, open-bottomed straw walker ensures that practically all the grains are separated from the straw. A separate returns pan sends the grains on their way to the preparation floor. Even large volumes of straw are moved with ease by the system.

Resistance is futile!
The CLAAS intensive separation system.
Mounted above every straw walker are two guide-controlled agitator tines which actively loosen the straw from the top to ensure that it flows quickly in a thin layer. As a result, the remaining grains fall easily out of the straw, through the walker floor and onto the returns pan.

Work safely at the capacity limit with the throughput monitor.
It’s easy to keep an eye on the separation and cleaning from the cab, as if through a “rear view mirror”, with the CLAAS throughput monitor. It works with high-precision adjustments to adapt automatically to crops of different weights and display the results accurately.

How you benefit:
− In parallel viewing mode, you can fine-tune the combine faster by optimising the balance of the cleaning and residual grain separation functions
− The throughput monitor indicates whether you are threshing at the best forward speed
− You work safely at the performance limit of the combine
Clean work pays better.

A clean crop in the grain tank and easy adjustment of the cleaning system are priorities for every operator. To make this a reality, we optimised the cleaning system of the entire TUCANO model series in 2016 in a process which involved the modification of the both the lower sieve and its oscillation angle. The result: clean grain, less material in the returns, easy adjustment.

Visual returns monitoring from the operator’s seat.

The illuminated inspection window allows the operator to monitor the returns auger from the cab. In this way, users can quickly identify the combine settings which work best for them.

Rotary or turbine fans.

– Depending on the model, there are six or four turbines or a rotary fan to ensure a consistent, uniformly distributed airflow pressure, even with variations in the sieve loading
– Forced air flow control prevents crop mat formation
– Reliable air flow even at low air speeds
– Continuously adjustable from the cab

Preparation floor.

Pre-sorting of the grains (bottom) and chaff and broken straw (top) takes place on the preparation floor. The resulting reduction in the load on the upper sieve increases the cleaning capacity. All TUCANO models have a plastic preparation floor that can be pulled out towards the front.

Single or double steps.

– Two straw walker steps: TUCANO 500 and 400
– One straw walker step: TUCANO 300
– These significantly reduce the load on the upper sieve
– Result in increased performance, especially in the case of dry and brittle straw

Electric sieve adjustment.

Developed by CLAAS, copied by the competition.

Electric sieve adjustment from the cab:

– Easy and convenient
– No need to exit the cab
– Immediate monitoring of results

3D cleaning system.

– Dynamic side slope levelling – active control of the upper sieve
– Completely consistent performance on side slopes with an incline of up to 20%
– No wear – completely maintenance free
– Fast, simple retrofitting
– Ideal “hillside package” in combination with AUTO CONTOUR

Visual returns monitoring from the operator’s seat.

The illuminated inspection window allows the operator to monitor the returns auger from the cab. In this way, users can quickly identify the combine settings which work best for them.

Rotary or turbine fans.

– Depending on the model, there are six or four turbines or a rotary fan to ensure a consistent, uniformly distributed airflow pressure, even with variations in the sieve loading
– Forced air flow control prevents crop mat formation
– Reliable air flow even at low air speeds
– Continuously adjustable from the cab

Preparation floor.

Pre-sorting of the grains (bottom) and chaff and broken straw (top) takes place on the preparation floor. The resulting reduction in the load on the upper sieve increases the cleaning capacity. All TUCANO models have a plastic preparation floor that can be pulled out towards the front.

Single or double steps.

– Two straw walker steps: TUCANO 500 and 400
– One straw walker step: TUCANO 300
– These significantly reduce the load on the upper sieve
– Result in increased performance, especially in the case of dry and brittle straw

Electric sieve adjustment.

Developed by CLAAS, copied by the competition.

Electric sieve adjustment from the cab:

– Easy and convenient
– No need to exit the cab
– Immediate monitoring of results

3D cleaning system.

– Dynamic side slope levelling – active control of the upper sieve
– Completely consistent performance on side slopes with an incline of up to 20%
– No wear – completely maintenance free
– Fast, simple retrofitting
– Ideal “hillside package” in combination with AUTO CONTOUR

Visual returns monitoring from the operator’s seat.

The illuminated inspection window allows the operator to monitor the returns auger from the cab. In this way, users can quickly identify the combine settings which work best for them.

Rotary or turbine fans.

– Depending on the model, there are six or four turbines or a rotary fan to ensure a consistent, uniformly distributed airflow pressure, even with variations in the sieve loading
– Forced air flow control prevents crop mat formation
– Reliable air flow even at low air speeds
– Continuously adjustable from the cab

Preparation floor.

Pre-sorting of the grains (bottom) and chaff and broken straw (top) takes place on the preparation floor. The resulting reduction in the load on the upper sieve increases the cleaning capacity. All TUCANO models have a plastic preparation floor that can be pulled out towards the front.

Single or double steps.

– Two straw walker steps: TUCANO 500 and 400
– One straw walker step: TUCANO 300
– These significantly reduce the load on the upper sieve
– Result in increased performance, especially in the case of dry and brittle straw

Electric sieve adjustment.

Developed by CLAAS, copied by the competition.

Electric sieve adjustment from the cab:

– Easy and convenient
– No need to exit the cab
– Immediate monitoring of results

3D cleaning system.

– Dynamic side slope levelling – active control of the upper sieve
– Completely consistent performance on side slopes with an incline of up to 20%
– No wear – completely maintenance free
– Fast, simple retrofitting
– Ideal “hillside package” in combination with AUTO CONTOUR
The easy way to make the most of any incline.

Hilly terrain calls for extra concentration on the part of the operator. This is precisely why the AUTO SLOPE function provides support for adjustment of the cleaning system. If the machine is operating uphill, the fan speed must be reduced in order to avoid grain losses from the sieve pan.

Conversely, the fan speed must be increased during downhill operation to maintain the crop flow in the cleaning system and to ensure that the grain is separated.

AUTO SLOPE continuously adjusts the fan speed to the given conditions based on the fan speed preset by the operator.

How does AUTO SLOPE work?

- **When moving uphill:**
  - Fan speed is reduced
- **When moving downhill:**
  - Fan speed is increased

**How you benefit:**

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

Electronic measurement of returns volume.

The fill level and composition of the returns enable conclusions to be drawn about the optimal machine settings to use. The TUCANO detects the total volume of the material in the returns.

- Measurement is performed by a photo cell at the top end of the returns elevator
- Returns volume and loss level are displayed immediately adjacent to each other in CEBIS
Reserve for high throughput.

In keeping with their huge throughput capability, the TUCANO 580 and 570 are equipped with an 11,000-litre grain tank which has sufficient reserve capacity to clear or sub-divide large fields.

Impressive unloading rate.

The TUCANO model series is equipped with a turret auger and has an unloading rate of up to 105 l/s which allows the grain tank to be emptied in less than two minutes. Furthermore, the TUCANO has a large discharge height and reach. As a result, even large transport vehicles can be filled without difficulty. A corresponding range of grain tank unloading tubes for cutterbar widths up to 9.22 m is available.

Well-designed overall concept.

Many more well-thought-out details complete the overall grain tank design concept:

- Easy grain sampling
- High overhead discharge height
- Ideal weight distribution
- Good view into grain tank
- Fast, direct unloading at up to 105 litres per second
- Smooth surfaces in the grain tank facilitate complete emptying

Well-designed overall concept.

The QUANTIMETER measures and checks.

The primary functions of the QUANTIMETER include throughput measurement, moisture content measurement and data display in CEBIS.

The throughput measurement is grain-specific. The moisture content of the crop is monitored continuously and displayed upon request.

Continuous fill level indicator.

During the volume measurement in the grain elevator, a photo cell records the filling of the individual paddles. The value measured is displayed continuously in CEBIS and allows the Fleet View app to be used.

Tidy work.

An automatic cover flap at the end of the grain tank unloading tube prevents grains still in the tube from leaking onto the ground. Every grain lands where it’s meant to: in the transfer vehicle.

PROFI CAM – everything in view.

All TUCANO models can be equipped with a PROFI CAM at the end of the grain tank unloading tube. This camera position has been chosen precisely to allow up to three processes to be monitored simultaneously from the comfort of the cab on an additional colour display or on the S10 terminal:

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

Up to four cameras can be connected to the system and simultaneously feed their images to the colour monitor or the S10 terminal in the cab.

CEBIS rear camera.

The image from the rear camera fitted on the rear hood is fed straight to the CEBIS screen. As soon as the TUCANO moves backwards, the image from the camera is displayed automatically.
Chopped short and spread wide: your field is clear for the next harvest.

1 Adjustable cross-cutter
2 Rotor shaft
3 Knife
4 Built-on nap bar
5 Adjustable static knife array

Short chop, even distribution.

As it leaves the rotor or the straw walkers, the straw is finely chopped and spread evenly across the full working width. The debris from the sieve pan is fed to the heavy duty chaff spreader, which then distributes it evenly over the field. The spreading distance can be adjusted easily.

Electric adjustment of rotor guide plate in TUCANO 500.

An electrically actuated guide plate in the rotor output area can be adjusted to modify the loading of the chopper and the swath profile. The crop moisture and condition of the crop are taken into account in order to ensure that the crop flow is always fed to the chopper as centrally as possible. Only in this way is it possible to achieve an even distribution of the chopped material. During swathing, the width of the swath can be influenced by the position of the rotor guide plate. If the rotor guide plate is fully retracted, the swath gets the full width for better drying of the straw as well as even loading of the following baler across the full pick-up width.

SPECIAL CUT.

The SPECIAL CUT straw chopper is available for all TUCANO models as an alternative to the STANDARD CUT model. The chopper is switched on and off by a sensor-controlled electrohydraulic system as soon as the straw guide plate is operated. The SPECIAL CUT has 30% more knives: 80 for the TUCANO 570 and 580 and those with six straw walkers (450 / 440 / 340), 68 for those with five straw walkers (430 / 320) and the TUCANO 560. The streamlined housing ensures even feeding of the straw to keep power consumption low and spreading reliable. The chopped material is then fed to the ACTIVE SPREADER or the straw spreader hood.

Spread across the full working width: ACTIVE SPREADER (TUCANO 580 / 570 / 560 / 450 / 440 / 340).

The larger the volume of straw and the cutting width, the more precisely and evenly the straw must be spread. The ACTIVE SPREADER by CLAAS offers you the right solution. The mixture of chopped material and chaff is grabbed while in motion by two counter-rotating spreading rotors, accelerated again and distributed over a total width of more than 9.3 metres. The direction of spreading can be conveniently controlled from the cab. Thus, the TUCANO ensures efficient straw spreading with minimal effort. Both the ACTIVE SPREADER and the SPECIAL CUT are unique in this performance class and put the TUCANO at the very top of the upper middle segment.

If you need a chaff spreader, you’ll want the HD.

There are many advantages:

- Suitable for maize and grain – no changeover necessary
- HD components for a longer service life
- Outstanding spreading width
- Consistent crop feed in all conditions
- No influence on the cleaning air flow
- Optimal ease of access to the sieve pan with folding chaff spreader

SPECIAL CUT for maize ex factory.

The TUCANO 500 is available ex factory with the SPECIAL CUT straw chopper for maize harvesting.
Takes rice in its stride: the APS threshing unit.

As rice grains are delicate, the usual rasp bar threshing drum is replaced by a spike-toothed threshing drum to prevent them from being damaged during threshing. Additional toothed bars are bolted to the impeller (TUCANO 400) and to the feed drum (TUCANO 500).

An APS threshing unit is available ex factory for the following machines: TUCANO 580, 570, 560, 450, 440, 430.

The TUCANO 300 can also be upgraded for rice harvesting by means of a conversion kit. For the APS HYBRID 570 and 560 machines, special separator concaves are also available for the rotors of the ROTO PLUS residual grain separation system. The greater spacing of the concave wires results in a significant increase in separation performance in green rice straw.

Built to take it. The grain collection system.

Very large amounts of earth and dirt are also collected when harvesting rice. All components in the grain collection system are made from wear-resistant materials to prevent premature wear.

Wear-resistant components.

- Returns auger
- Returns elevator cover
- Grain auger
- Elevator foot with cover
- Grain tank filler auger
- Grain tank unloading auger
- Auger – grain tank unloading tube

Robust: grain tank HD.

The augers in the grain tank and its unloading tube are also made from wear-resistant material. Furthermore, the unloading auger in the grain tank has been modified to ensure an optimum delivery rate when handling rice grains. The rice grain tank is available for the TUCANO 580, 570, 560, 550, 450, 440 and 430.

Avoiding slippage.

The TUCANO 580, 570, 450 and 440 models can be equipped with special steel track roller units. These ensure good traction, prevent the machine from sinking in deeply and are highly resilient. Without these properties, machine harvesting of rice in fields which can still be very wet would be impossible.

Protecting axles.

As the more difficult harvesting conditions in rice fields make great demands on the machine, the drive axle and all the axle bearings are specially sealed and protected against moisture and the wet (TUCANO 580, 570, 560, 550, 450, 440). The underbody protection protects other important components such as the manual transmission – against damage, dirt and increased wear.
CLAAS POWER SYSTEMS.

Optimal drive for maximum performance: CPS.

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

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

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

It goes without saying that the TUCANO also embodies this development philosophy: the experience gained through 75 years of combine development has resulted in the best ever CLAAS drive system that delivers the best working results.

More technological landmarks and engineering refinements: for maximum reliability even under extreme conditions. The TUCANO is ready.
No compromises on power or endurance.

The high-performance engines in the TUCANO comply with the Stage IIIA (Tier 3) emissions standard. They have sufficient power reserves to deliver optimal performance even under difficult conditions.

Increased engine output with high efficiency.

Fuel tank with capacity of up to 750 l

A 12-volt battery supplies power to the on-board electronics and engine electronics. It is housed in the battery box, where it is easily accessible.

Large cooling system with automatic dust extraction.

The TUCANO works with an extremely efficient common cooling system for the engine, the hydraulic system and the climate control system. The radiator frame has been enlarged to deliver a significant increase in cooling power. The automatic dust extraction facilitates continuous cleaning of the hydraulically rotating radiator frame and thus enables optimal cooling performance. Soiling of the cooling ribs is significantly reduced.

Air intake and air filter.

Fresh air for the engine of the new TUCANO is first drawn in by the rotating radiator screen. Thanks to the active pre-separation process, few particles reach the two air filters, the size of which has been increased considerably for the new engine. These important improvements allow maintenance intervals to be extended significantly and downtime to be reduced drastically.

Side air outlets to improve cooling performance

Dust extraction fan
More power under all conditions.

4-TRAC all-wheel drive.

You can control the hydrostatic ground drive of the TUCANO – without operating a clutch or having to change gear – very easily and conveniently with the multifunction lever. Such operating comfort directly enhances performance with faster turns and precise adjustment of the travel speed to changing field conditions. Your choice for added power: all-wheel drive. A simple touch of a button switches to a hydraulically driven power system which keeps you moving forward even in the most adverse terrain. The all-wheel drive is reliable and maintenance-free.

Immense tractive power.

The all-wheel-drive axle has two central hydrostatic motors which are integrated in the axle and are characterised by significantly greater efficiency. The integrated design means that there are far fewer external hydraulic lines. Less dirt can be deposited in wet conditions and the risk of damage to the drive is reduced to a minimum.

Large tyres for the all-wheel-drive axle.

For even greater traction in difficult conditions and reduced ground pressure, 600/65 R 28 or VF 620/70 R 26 tyres are available (TUCANO 580 / 570 / 450 / 440). These two tyre options can be combined with certain tyres with a width of 800 mm.
At CLAAS, comfort and convenience mean that everything is designed to enable you to work with optimal efficiency. From the unrestricted 360° view to the smallest detail of how you interact with the machine.

Well-being at work.
Deluxe comfort in your working environment.
The new control concept. Climb aboard and get harvesting.

New control concept.
Precise operation is ensured under all conditions, whether it’s a question of a bumpy ride across a field or an operator who is just getting used to the system. Depending on the operator’s preference, settings can be adjusted in three ways in the TUCANO:

- Via the CEBIS touch function
- Via switches for direct adjustment
- Via the rotary push switch on the CEBIS control panel

New-generation CEBIS.
A gentle tap on the sensitive touchscreen and the new CEBIS terminal reacts immediately:
- Representation of the entire machine in the overview
- Direct access to all functions by touching the components in the overview

The new direct adjustment.
- Adjustment of functions directly by means of switches
  - At the same time, a large dialogue box opens in CEBIS to show the adjustment
  1. Threshing drum speed
  2. Threshing concave distance
  3. Fan speed
  4. Upper sieve opening
  5. Lower sieve opening
  6. Rotor speed TUCANO 500
  7. Rotor guide plate TUCANO 500

CEBIS control panel.
- Navigation in CEBIS via rotary/push switch and Esc button
- Reliable operation during bumpy on-field operation

New favourites management.
The most frequently used settings can be programmed as favourites. This feature allows operators to control their machines practically by touch alone while they keep a close eye on the front attachment and the crop flow.
- Seven freely assignable functions
- Direct access and adjustment by buttons on the CMOTION control lever

Intelligent in the cab.
All the machine functions can be accessed easily thanks to the new CEBIS with a touchscreen. The most important ones can be adjusted directly by means of switches on the armrest. Operating the TUCANO is intuitive and is possible without previous knowledge. This means that even new operators are able to operate the machine safely and reliably in a short time and to get the most out of it.
The new CEBIS.

Clear layout and fast operation.

The 12" CEBIS screen uses self-explanatory symbols and colour coding to give a clear picture of the settings and operating statuses. Thanks to the CEBIS menu structure and touch-sensitive screen, all settings can be entered in just a few steps.

Harvest view – overview.
1. Machine silhouette with quick access for threshing unit, sieve adjustment, fan speed incl. status display
2. Display: ground speed
3. Display: returns volume, losses from sieve and straw walker or rotor
4. Engine load
5. Vehicle information
6. Favourites management
7. Display: performance data
8. Freely configurable display area
9. Display: AUTO CONTOUR front attachment guidance
10. Main menu
11. Favourite crops, freely configurable with three crop datasets
12. Quick access job menu

On-road travel – overview.
13. Travel speed
14. Diesel engine speed
15. Fuel level
16. Coolant temperature
17. Urea level
18. Job information
19. Freely configurable display area
20. Maintenance counter

Direct access to favourites.

Operators can program their choice of the seven most important settings as favourites and call them up in three ways when working: via the button on the CEBIS control panel, via the star symbol on the CEBIS monitor or – the professionals’ preferred method – directly by means of the CMOTION multifunction lever. Because with CMOTION, the favourites management system can be controlled with just two fingers:
- Opening of favourites management using the star button
- Selection of the favourites with the arrow buttons
- Direct adjustment of values via toggle switches

The operator’s hand remains on the multifunction lever all the time. As no repositioning is necessary, the operator can concentrate on monitoring the front attachment and the crop flow.
Intelligent assistants that make every harvest easier.

Intuitive dial and slide controllers.

In the new CEBIS, the settings can be adjusted in accordance with the operating conditions in three different ways. The new dial and slide controllers can be operated intuitively. Operators can choose the adjustment method which suits them best.

**Number.**
In the centre of the dial controller, the currently saved setting is displayed as a number. A light touch on the figure shown is all that is required to open the input keypad.

**Dial controller.**
In the outer part of the dial controller, a green shaded bar represents the current setting. The value can be changed by moving the triangle.

**Slider and plus / minus.**
Next to the dial controller is the slide controller. This can be used to set the precise values by sliding the triangle or by touching + / -.

Automatic machine setup.

Factory-programmed settings for over 35 crop types are available in CEBIS. In addition to these, users’ own crop types and settings based on experience can be stored and called up whenever required. Favourite settings, which can be called up via a touch field in CEBIS, are also available.

The following machine parameters are set:
- Threshing drum speed
- Concave gap
- Fan speed
- Upper and lower sieve opening
- Sieve throughput monitoring sensitivity
- Residual grain separation throughput monitoring sensitivity
- Specific crop weight (bulk density)
- Crop-specific calibration factor

Useful hints for settings.

The new CEBIS provides operators with hints about the most common operating problems (e.g. crop flow problems in the cutterbar) which can be used to optimise the machine settings. In this way, inexperienced operators are familiarised with the machine quickly and their skills are enhanced by the learning process.
A perfect view of CEBIS.

Each operator can adjust the height and distance of the CEBIS terminal in accordance with his or her individual height and preferred viewing angle. Furthermore, the terminal can be pivoted far to the rear, independently of the armrest. This ensures a clear view of the entire cutterbar – when starting work in a new field, for example.

Everything at your fingertips.

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

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

LED work lights and long-range work light.

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

- LED long-range work light for long-distance illumination in the dark
- Lighting for folding front attachments
- Side lights, stubble lights, steering axle lights
- Automatic lighting of the unloading tube
- Automatic reversing lights
- Lighting for the cleaning system, grain tank and returns
- Service lights below the side panels
- Mobile work light
A full overview with just a click of the mouse.

The CLAAS TELEMATICS feature gives you comprehensive access to all the important data for your combine anytime, anywhere via the internet. Enjoy the benefits of TELEMATICS.

Fleet View app.

The Fleet View app from CLAAS allows the grain transport team in your harvesting fleet to be coordinated in such a way that the combine harvesters can keep on working without downtime. The app continuously informs all the operators in near real time about the positions of all the machines in the fleet and their current grain tank fill levels.

Improve work processes.

A report comprising an operating time analysis and other important machine evaluations is sent to you by e-mail each day. This enables you to review the specific data from the previous day and determine when and how efficiently the combine operated before you start work again. The machine’s working tracks can additionally be viewed together with the event log in order to optimise transport logistics. TELEMATICS enables planned fleet management and helps avoid unprofitable idle time.

Simplify documentation.

Use TELEMATICS to export the relevant data to your field catalogue and save valuable time. Transfer data on area-specific yields, for example.

Optimise your settings.

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

Automatic documentation.

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

Job management in CEBIS.

Manage your jobs with CEBIS. AGROCOM MAP START software from CLAAS additionally allows you to prepare customer and parcel data to be run and processed via CEBIS.

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

Job management on the S10 terminal.

The S10 terminal can be used not only for GPS guidance, but also as a control terminal for ISOBUS functions. An interface allows the S10 to receive all the data it requires straight from the machine, thereby making task management even easier.

- Import jobs from the farm software
- Export completed jobs via USB stick
- Automatically assign documented data to the active job
- Use TC-Basic to gather key data, such as the area, yield, grain moisture and working time
- Use TC-Geo to create precise yield and performance maps (the working width of the front attachment is recorded automatically)

Documentation in the app.

The "EASY on board" app does more than just allow you to control all ISOBUS-compliant implements from a tablet. Job management and documentation can also be planned and performed in every detail, doing away with all the tiresome paperwork in the cab.

- Create jobs directly in the app or send them to the machine from the farm management software
- Send completed jobs to the farm management software.
- Send job data to the customer by email
- Use TC-Basic to gather key data, such as the area, yield, grain moisture and working time

Job management in CEBIS.

Manage your jobs with CEBIS. AGROCOM MAP START software from CLAAS additionally allows you to prepare customer and parcel data to be run and processed via CEBIS.

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

Yield mapping in CEBIS.

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

All measurements are stored and can be transferred via USB stick. AGROCOM MAP START software is included to enable you to produce informative yield maps to use as a basis for your future production strategy.

A wealth of information can be printed whenever required.
More precise guidance.

Choose from three automatic guidance systems.

All the TUCANO models can be equipped with three automatic guidance systems which can be selected as needed according to application.

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

The way you want it.

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

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

Support at the headlands.

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

Automatic guidance even at the headland.

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

LASER PILOT.

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

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

AUTO PILOT.

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

GPS PILOT FLEX.

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

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

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

The central lubrication system supplies grease to practically all lubrication service points as required. Lubrication points and intervals only need to be programmed once. This system differs from individual manual lubrication in that the grease is distributed to the lubrication service points from a central reservoir.

How you benefit:

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

NEW: Automatic chain lubrication.

- Continuous lubrication of the grain tank unloading chain during the unloading process
- Oil applied by robust brush
- Separate oil reservoir with large capacity
- The service life of the drive chain is extended, the maintenance workload is reduced

NEW: The convenient maintenance package.

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

- Bracket for grease gun in tool compartment
- Tool compartment with new organiser for bolts, nuts, knife sections, double fingers, chopper knives and intake auger fingers integrated in the lid
- Stowage compartment for compressed air hose and bracket for compressed air gun
- Water tank with 15-litre capacity, immediately next to tool compartment, shut-off valve for hand washing, can be removed for filling

Useful extras.

Making things easier.
Easy accessibility keeps maintenance times to a minimum.

Everything to hand.

All the maintenance points in the TUCANO are easily accessible. The access ladder can be secured in different places on the machine and ensures risk-free access. Maintenance spotlights under the side panels, on the access steps and in the area of the engine provide bright illumination.

All components relevant to the crop flow are provided with easily accessible maintenance and inspection ports which make maintenance, care and cleaning significantly easier. Labels provide information about the correct tension for belts and chains.
Your requirements count.

You can always rely on us: we’ll be there whenever you need us. Everywhere. Fast. Reliable. 24 hours a day if necessary. With a complete solution for your machine or business. Keeping you up and running.

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.

Always networked with your distributor and CLAAS.

Using Remote Service, your CLAAS distributor can access your machine and your specific data. This allows you and your distributor to work together, quickly and directly, to respond to maintenance and servicing situations.

TELEMATICS also provides the option of using the internet to access important data about your machine at any time and anywhere. 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.
The TUCANO 500 at a glance.

1. GPS PILOT S7 or S10, GPS PILOT FLEX
2. Comfort cab
3. New control concept with touch-screen CEBIS
4. Turret auger delivering up to 105 l/s and 11,000 l grain tank
5. LASER PILOT
6. VARIO cutterbars with integrated rapeseed plates
7. AUTO CONTOUR
8. MultiCoupler
9. V feeder housing with dust extraction
10. APS threshing system
11. Hydraulic concave adjustment for all models
12. Hydraulic concave overload protection
13. Turbine fan
14. ROTO PLUS residual grain separation
15. HD chaff spreader
16. SPECIAL CUT chopper
17. ACTIVE SPREADER
18. PROFI CAM
19. TUCANO 580 with Perkins engine and 278 kW / 378 hp
20. All-wheel-drive axle
The TUCANO 400 at a glance.

1. GPS PILOT S7 or S10, GPS PILOT FLEX
2. Comfort cab
3. New control concept with touch-screen CEBIS
4. Turret auger delivering up to 105 l/s
5. LASER PILOT
6. VARIO cutterbars with integrated rapeseed plates
7. AUTO CONTOUR
8. MultiCoupler
9. V feeder housing with dust extraction
10. APS threshing system
11. Hydraulic concave adjustment for all models
12. Hydraulic concave overload protection
13. Turbine fan
14. Intensive separation system
15. HD chaff spreader
16. SPECIAL CUT chopper
17. ACTIVE SPREADER
18. PROFI CAM
19. Mercedes-Benz engines with Stage IIA (Tier 3) emissions standard
20. All-wheel-drive axle
The TUCANO 300 at a glance.

1. GPS PILOT S7 or S10, GPS PILOT FLEX
2. Comfort cab
3. New control concept with touch-screen CEBIS
4. Turret auger delivering 90 l/s
5. LASER PILOT
6. VARIO cutterbars with integrated rapeseed plates
7. AUTO CONTOUR
8. MultiCoupler
9. V feeder housing with dust extraction
10. CLAAS threshing system
11. Hydraulic concave adjustment for all models
12. Hydraulic concave overload protection
13. Rotary fan
14. Intensive separation system
15. HD chaff spreader
16. SPECIAL CUT chopper
17. Straw spreader
18. PROFI CAM
19. Mercedes-Benz engines with Stage IIIA (Tier 3) emissions standard
20. All-wheel-drive axle
### Threshing technology

- Up to 20% more throughput with APS
- APS and APS HYBRID
- ACTIVE SPREADER for precise, even straw distribution
- Easy and convenient access to maintenance points
- APS acceleration and pre-separation

A threshing technology unique in its class

### Cutterbars

- VARIO cutterbars with an adjustment range of 700 mm
- Especially versatile thanks to the CERIO and VARIO
- AUTO CONTOUR is an intelligently controlled cutterbar
- CMOTION, the multifunction lever, CEBIS, TELEMATICS,
  Visual returns checked from the operator's seat
- The new control concept with direct adjustment

### Cab

- Easy and convenient access to maintenance points
- APS and APS HYBRID
- ACTIVE SPREADER for precise, even straw distribution
- Easy and convenient access to maintenance points
- APS acceleration and pre-separation

The power of persuasion.
A wealth of impressive features.
More height and reach for easy offloading.