

Combine harvesters

TRION 750 730 720



Different fields need different features.



Anyone who works the land knows that every field has its own characteristics. Whether undulating, flat, large or small, near the coast or in a drier inland location, every field presents challenges which have to be overcome. And in every one of these fields, everything is done to make the most of its potential. The key to achieving this is the recognition that every field is different and unique in its own way. Regardless of where it is. Because different fields need different features.







The new CLAAS TRION. Fits your farm.



Uncompromising adaptability and performance.

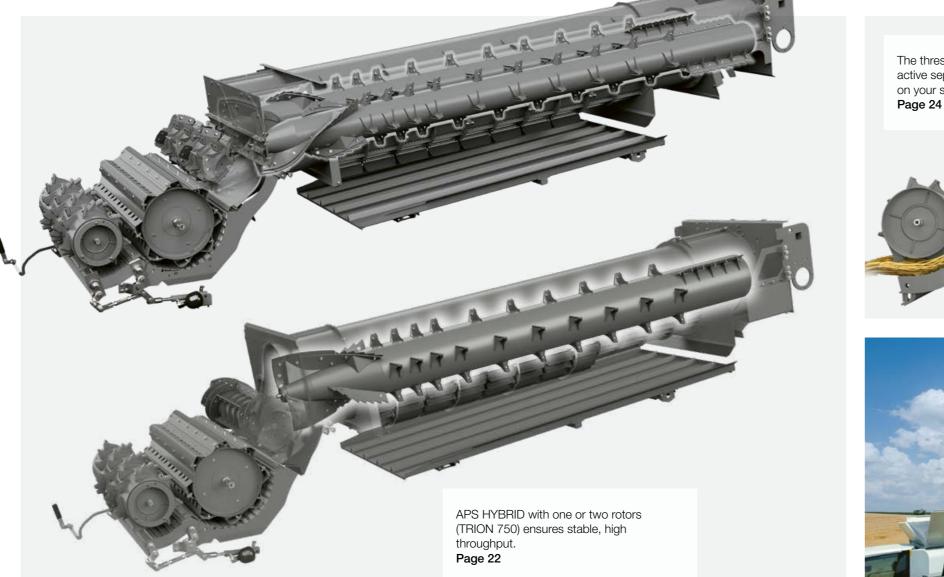
Each field is special in its own way, demanding full commitment from you and your machine. It was with precisely this in mind that we developed the CLAAS TRION, a machine that reconciles performance with efficiency in a new way and takes every field in its stride. Changing from one crop to another is quick and easy. Its threshing unit is designed for high throughput. Self-learning operator assistance systems help make the harvesting process efficient and user-friendly. Experience a new dimension of reliability with the TRION.

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Learn all about the new TRION. trion.claas.com



You don't have to choose between performance and efficiency.











in less than 100 seconds. Page 32



cleans your grain impeccably.





Increase your efficiency.

Benefit from maximum harvesting performance with lower fuel consumption. Discover how high throughput can be reconciled with low grain losses. The APS HYBRID SYSTEM and JET STREAM cleaning make it possible.

Effective and economical.

- The APS HYBRID threshing system impresses with its high separation rate.
- The JET STREAM cleaning system cleans your grain intensively.
- The 3D cleaning system provides dynamic compensation for side slopes.
- The two ROTO PLUS highperformance rotors in the TRION 750 generate a high centrifugal force to separate the remaining grains from the straw.
- Collect up to 12,000 litres of grain at a speed of 130 l/s.
- The ground speed of up to 30 km/h enables fast transfers from field to field.

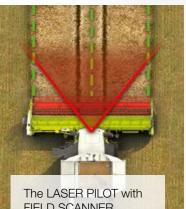
JET STREAM Page 30

See how much the TRION can do for you.



Don't go with the features given to you, pick the ones that fit your farm.





FIELD SCANNER supports you with three steering modes. Page 65





across the entire working width. Page 34

8



The height of convenience.

Choose from a wide range of operator assistance systems for your convenience and success. From CEMOS AUTOMATIC to TELEMATICS, you can count on our extensive line-up of intelligent systems to make your work easier.

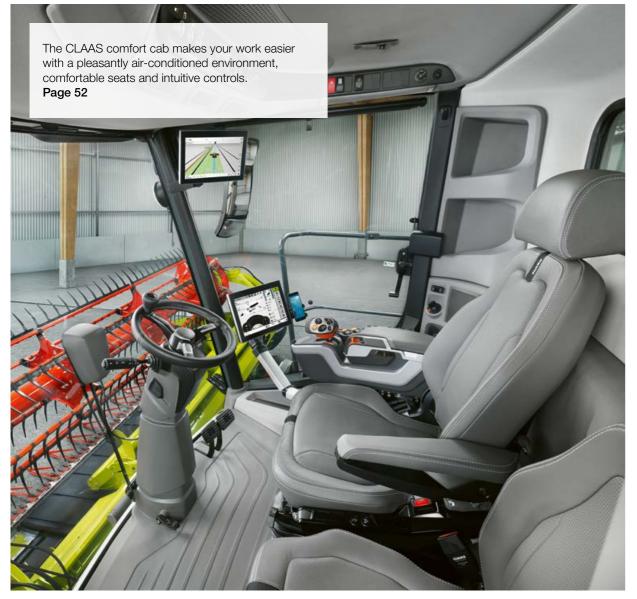
Perfect and precise.

- CEMOS AUTOMATIC adapts to your requirements precisely: from the simple CRUISE PILOT to the AUTO THRESHING high-end system.
- Accurate down to as little as 2.5 cm, LASER PILOT and GPS PILOT CEMIS 1200 keep the number of passes required to a minimum.
- The FIELD SCANNER guides the TRION automatically along the right or left edge of the crop or along the tramline.
- TELEMATICS transfers your data from your machine straight to the cloud.
- DataConnect allows you to process the data from your machines, regardless of manufacturer.

Discover how precision leads to success.



Don't limit your options, move on with more flexibility.















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Declare your independence.

Benefit from the MULTICROP capability of the TRION. Enjoy your new independence and change from one crop to another in next to no time. The settings are quick and easy to configure.

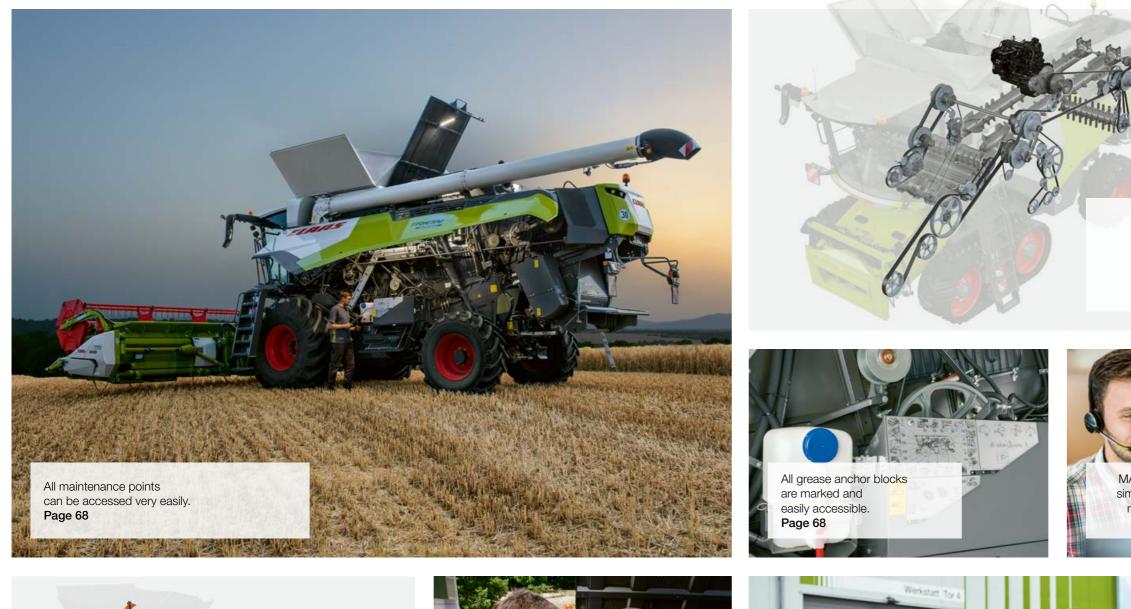
Straightforward and ready for action.

- The preconcave segments are changed easily through the stone trap.
- The threshing concave segment is easily pulled out through the side of the machine.
- The threshing drum speed reduction gearbox allows you to switch between two speed ranges without having to use any tools.
- The differential lock on the front axle ensures you can keep operating safely and reliably in difficult terrain.
- The deflector spreader up to a spreading width of 7.7 m can be adjusted without tools.
- An all-new airflow system for the air conditioning keeps your head cool and your feet warm.

Discover how adaptable the TRION is.



Don't waste time, simply keep harvesting.









Page 73



The drive system is designed for a long service life. Page 42



MAXI CARE Connect simplifies the periodic maintenance tasks. Page 67





Benefit from its quality.

You can count on the outstanding technology and exceptional engineering standards of the TRION to keep you on schedule. Flexible MAXI CARE options and minimum maintenance requirements ensure maximum uptime.

High on resilience, low on maintenance.

- The durable drive components require little maintenance.
- Parts subject to heavy loads are available in wear-resistant PREMIUM LINE quality.
- All lubrication points are combined in grease anchor blocks.
- All maintenance points are marked and easily accessible.
- Engine oil only needs to be changed after 500 operating hours, hydraulic oil after 1,000.
- The flexible MAXI CARE options increase your operational reliability.
- Your service partner has access to all the relevant data via MAXI CARE Connect.

You can rely on its strengths.



The TRION is in its element in every crop.

Cutterbars for every crop.

Whether you are harvesting grain, such as wheat, rye, barley, oats and triticale or rapeseed, maize, sunflowers, rice, soybeans, flax, beans, lentils, millet, grass or clover – you can make full use of the performance potential of your TRION with the right front attachment from CLAAS.

Everything you need for precise cutting performance.

You can instinctively feel when the cutterbar is matched perfectly to the crop and the combine harvester. Harvesting is easier, faster and more convenient. Choose the cutterbar and the options you need to ensure that your TRION is ready to work effectively right from the start.

- CONTOUR and AUTO CONTOUR reduce your workload in every job. The TRION guides the cutterbar precisely over the ground.
- Keep downtime to a minimum. The front attachment brake keeps foreign objects away from the threshing unit.
- Avoid load peaks. The slow intake feeding after reversing can be controlled intuitively.
- You can use the standard feeder universally with all available front attachments.
- Adjust the cutting angle to your harvest conditions. It is adjusted mechanically in the V feeder housing.
- Harvest all crop types without interruption. With the HP feeder housing, you adjust the cutting angle conveniently from the cab.

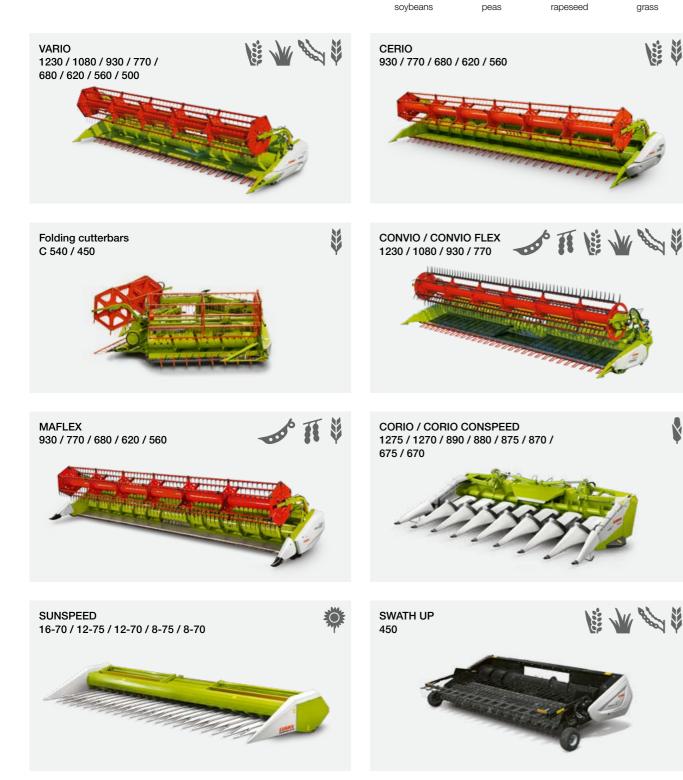


Front attachments

It detects the front attachments, so you have less to do.

Excellent cutting right from the start.

With the right cutterbar, you can harvest effectively and extremely productively right from the word go. Automatic front attachment detection helps you to get your TRION ready for action even faster.



¥

grains

3

rice

sunflowers

maize



Automatic front attachment detection saves time.

The TRION configures the key parameters automatically. It does this based on the following information it receives from the front attachment module: cutterbar type, working width, number of sections, reel position, parking position and the AUTO CONTOUR set values for working height and hectare counter.

You benefit right from the start.

- The combine harvester is ready to harvest in next to no time.
- It is significantly easier to operate.
- The positions of the reel, VARIO cutterbar table and feeder housing are taken into account to rule out the risk of collisions and damage.

AUTO CONTOUR cuts with greater precision.

AUTO CONTOUR adjusts every cutterbar to the terrain precisely. Sensor bands under the cutterbar are deflected by the undulations and trigger the actuation of the corresponding cutterbar rams. The desired cutting height is programmed via CEBIS.

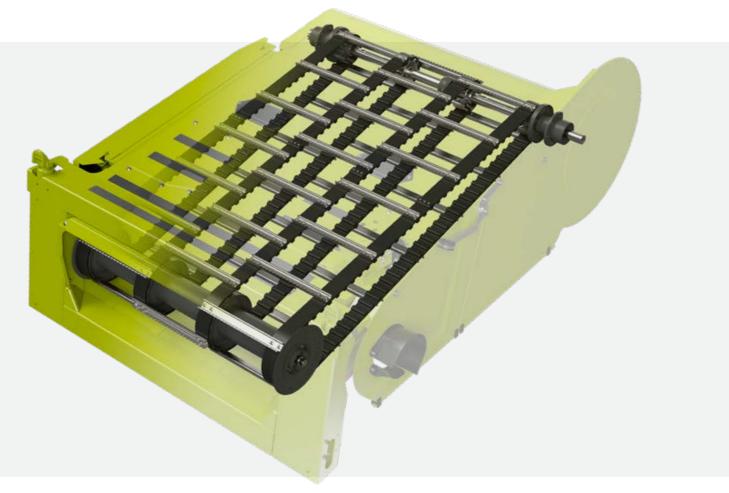
Let us take a weight off your mind.

- AUTO CONTOUR damps and protects the front attachment.
- It makes working with wide cutterbars easier.
- Your operators will appreciate its assistance, especially at night, in laid crops, on side slopes and on stony ground.
- It increases output and makes using the TRION even more cost-effective.

Choose the right front attachment. combine-front-attachments.claas.com



The feeder housing is equal to any challenge.



Belt conveyors with twice the service life.

High on resilience, low on maintenance.

As an option, belts can be specified to link the reinforced feeder slats in the V feeder housing and the HP feeder housing. The belt conveyors run noticeably more smoothly and quietly than conventional chain conveyors. They also require less maintenance and are very durable in resisting stones and other foreign objects.

In order to protect the machine, an automatic "soft start" system keeps load peaks at a low level during start-up of the cutterbar and feeder housing. A slipping clutch provides overload protection for the belt conveyors.

A powerful feeder unit makes you more productive.

- Belt conveyors (optional for V and HP feeder housing) are more robust and reliable than chains.
- The dust extraction system with an enlarged crosssection delivers even greater cleaning performance.
- The additional fan on the feeder housing prevents dust deposits.
- You can adjust the height of the feed roller without using tools.
- A lowered floor plate allows you to achieve even higher throughputs.









Feeder housing.

The universal feeder housing with a mechanical tensioning system is available with chain or belt conveyors and with an open or closed guide roller. It is suitable for all cutterbars up to a working width of 12.30 m or for maize pickers up to 9 m. We have developed the S feeder housing for working widths up to 6.80 m or maize pickers up to 6 m.

V feeder housing.

The V feeder housing allows you to carry out fast, mechanical adjustment of the cutting angle, even with the front attachment fitted. It allows you to harvest lodged crops, soybeans and grass more easily and with reduced losses as the tendency for the crop to pile up is reduced. You can order the V feeder housing ex factory with chain or belt conveyors as well as with an open or closed guide roller.

HP feeder housing.

Using the multifunction lever in the cab, you can perform continuous hydraulic adjustment of the cutting angle of the HP feeder housing from -8° to $+11^{\circ}$ – and you can do so when running at full speed with the front attachment fitted. You can store a separate cutting angle for each of four cutting heights in CEBIS. In this way, you can respond quickly and conveniently to different crop characteristics, types or terrain conditions.

Everything for safe harvesting.

The front attachment brake offers effective protection against foreign objects. In an emergency, you can stop the front attachment immediately via the multifunction lever. Blockages can be cleared by means of protective reversing with high starting torque. The slow intake feeding after reversing avoids load peaks. All functions can be actuated sensitively.

There's no time for compromises out in the field.

It threshes simply everything.

Every field is different and no two farms are alike. You can match the crop flow systems of the TRION precisely to the profile of your farm and crops. From the feeder housing to the threshing system and secondary separation right up to the straw management, you have all the possibilities you need.

Everything you need.

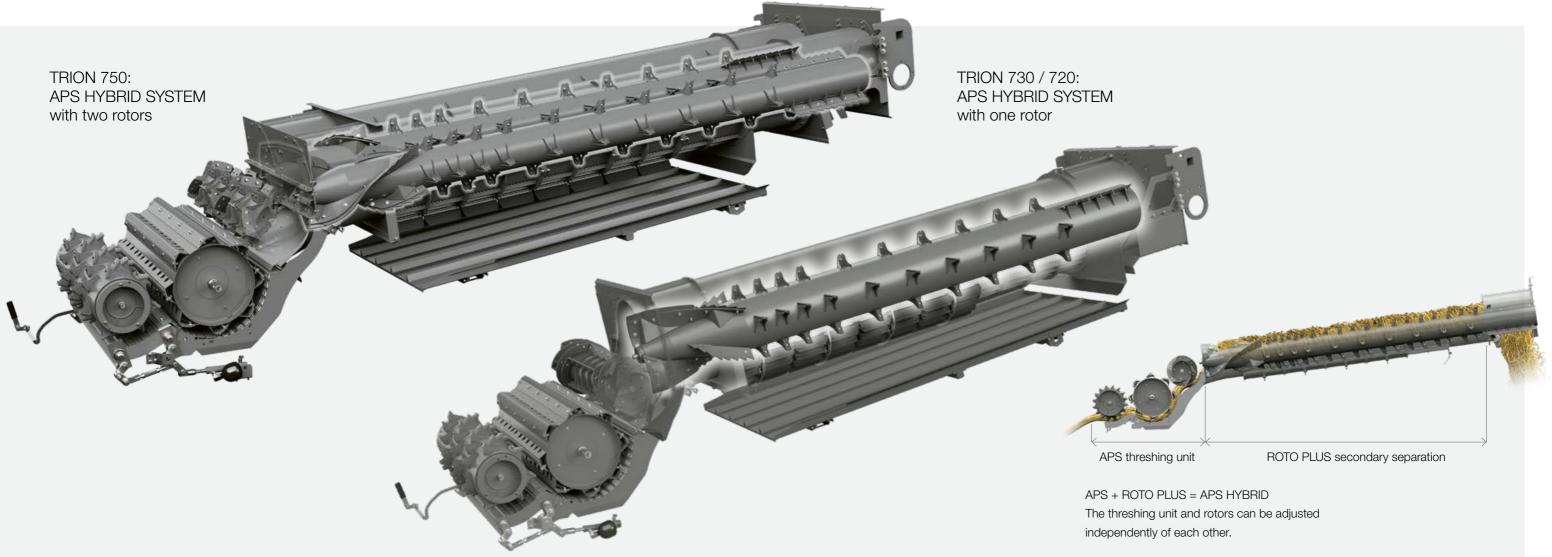
Maximum performance or cost-effectiveness? This is a question you never have to ask yourself where the TRION is concerned. Simply combine the components that fit your requirements and you will never have to put up with compromises further down the line.

- Its threshing unit can cope with all crop types. CEMOS AUTO THRESHING applies the appropriate settings, automatically and precisely.
- The secondary separation is as flexible as your requirements are varied. The hydraulic rotor flap adjustment capability of CEMOS AUTO SEPARATION ensures that you can get the most out of every field.
- AUTO SLOPE and AUTO CLEANING reduce your workload with regard to cleaning. The particular sieve variant fitted is based on your region.
- Collect your grain more efficiently. With a grain tank capacity of up to 12,000 litres and an unloading rate of up to 130 l/s.
- Benefit from the precise straw management. Depending on your preferred working width, you will equip your TRION with a deflector spreader or a power spreader. Spread your straw across the entire working width in any terrain. The discharge direction is adjusted automatically.

 Reduce your wear costs.
 CLAAS PREMIUM LINE components for the entire crop flow path make for a longer service life.



We have a track record of constantly increasing throughput.



APS HYBRID SYSTEM from CLAAS.

The TRION uses the APS HYBRID threshing unit, which has been helping CLAAS combine harvesters break throughput records for years. APS HYBRID represents the combination of two outstanding technologies: the tangential APS threshing system and the axial ROTO PLUS secondary separation system. Only CLAAS brings both systems together in one machine.

In the TRION 750, two rotors take care of the residual grains. The TRION 730 / 720 is equipped with a single rotor.

Compared to straw walker machines, the APS HYBRID SYSTEM makes it possible for the crop flow speed between the rotors and concaves to be increased tenfold. Drum speed adjustment in the threshing system is independent of the rotor speed.

Together, all these measures give you a significant competitive edge. They allow you to thresh at high throughput while protecting the crop and benefiting from low fuel consumption and high straw quality. You can adjust the entire threshing process in line with the specific requirements of the changing harvest conditions in the course of the day.



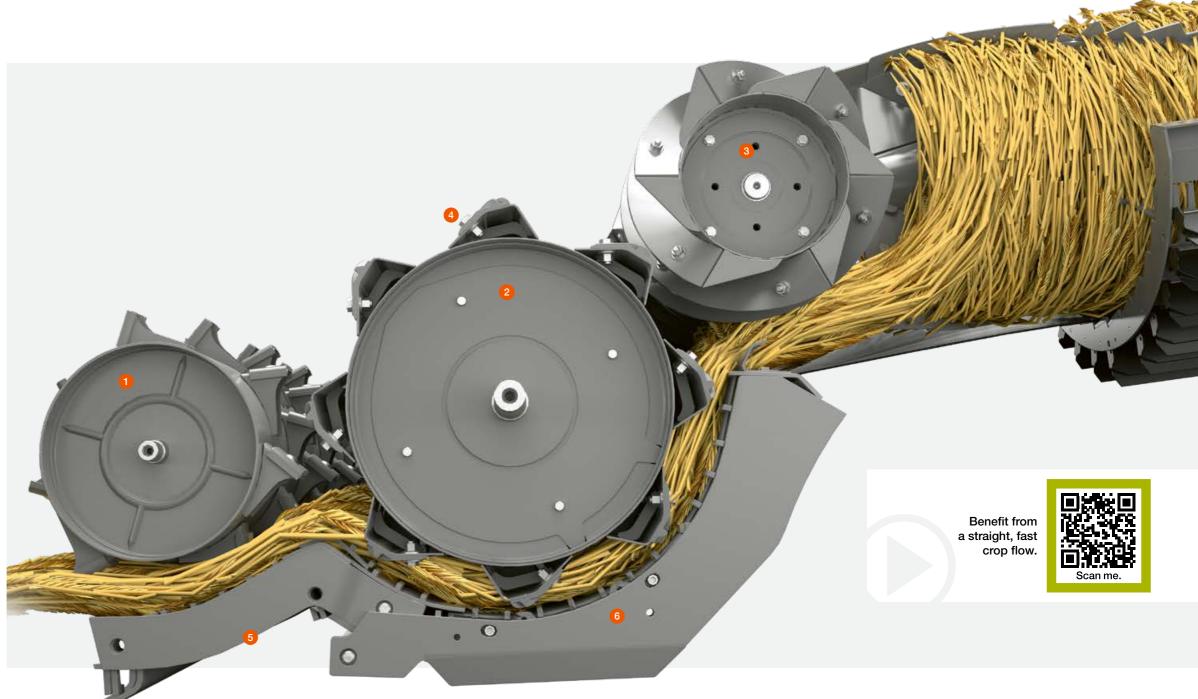
An even crop flow saves fuel.

Up to 20 m/s.

The 450 mm accelerator drum in the APS HYBRID threshing unit starts an efficient threshing process which allows you to achieve extremely high throughputs. It accelerates the crop flow significantly, from 3 m/s to 20 m/s.

Pre-acceleration of the crop is the start of a series of effective processes. The crop is loosened and separated. The crop flow runs more evenly and up to 33% faster. As a result of the high centrifugal force, significantly more grains are separated across all concave areas. On its own, the preconcave situated immediately below the accelerator drum – separates up to 30% of the grains, thereby significantly reducing the load on the main concave.

You are therefore already at an advantage before the crop has even reached the threshing drum. This ultimately means that you benefit from an increase in performance of up to 20% with no rise in fuel consumption.







1 Accelerator drum

This separates the crop and accelerates the crop flow evenly to 20 m/s across all concave areas.

2 600 mm threshing drum

Suitable for use with any crop, the threshing drum handles straw and grain extremely gently, even at high throughput rates.

3 Feed drum

This feeds the harvested material evenly and quickly to the rotors. The wear bars and plates are also available in CLAAS PREMIUM LINE quality.

The speeds of the accelerator drum, threshing drum and feed drum can be adjusted synchronously via CEBIS.

4 Synchronous drum speed adjustment

5 Parallel adjustment

Infinitely variable hydraulic adjustment of the position of the threshing concave is performed via CEBIS. The preconcave and threshing concave are adjusted in parallel and synchronously.

6 Hydraulic overload protection This prevents blockages and provides reliable protection against damage from foreign objects. As a result, you can operate the machine safely and reliably up to its performance limits.

Treats your grain well, right from the start.



Protective threshing.

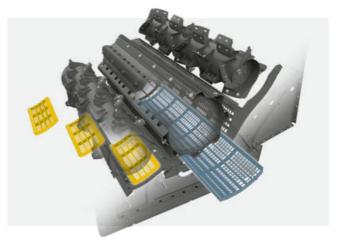
The closed threshing drum is suitable for all crops. The increased gap between the drum cylinder and the threshing concave has a positive effect on the crop flow. A threshing bar angle which is 20° flatter ensures that the grain is subject to a threshing action which is more abrasive than percussive. This results in significantly improved grain quality. Even at very high throughput rates or under extreme conditions – when working in green, long straw, for example – the straw and grain are protected by the way they are handled.

Synchronised speed adjustment.

The threshing drum speed can be adjusted conveniently to all harvest conditions and all crop types. You can adjust it continuously from 400 to 1,050 rpm in CEBIS. The speeds of the accelerator drum and the feed drum are changed synchronously. As a result of this synchronous adjustment, which occurs independently of ROTO PLUS, an ideal speed ratio is always maintained between all drums. In this way, you are able to make full use of the performance potential of the TRION.

Everything for a smooth threshing process.

- The closed threshing drum protects your grain.
- The synchronous speed adjustment gives you more flexibility.
- You can change the preconcave segments and the threshing concave segment quickly and easily.
- The hydraulic threshing concave adjustment allows the crop to flow more evenly.
- The overload protection protects the threshing unit against damage.
- Wear-resistant CLAAS PREMIUM LINE components make for a longer service life.



Change concave segments easily.

Short changeover times and numerous combination options are key benefits of the unique MULTICROP capability of the TRION. You have direct access to the preconcave and threshing concave segments. When a changeover is carried out, the main components of the threshing concave remain in the machine.

The preconcave segments (yellow) are easily changed through the stone trap. The threshing concave segment (blue) represents 63% of the threshing concave and is easily removed via the side of the machine.

Operate preconcave flaps without tools.

The preconcave is a MULTICROP concave and able to cope with any crop. Below the preconcave are plates which deawn and decorticate the grain. These can be engaged quickly without tools by operating a lever.



Preconcave flaps deawn and decorticate your grain.



Adjust threshing concave hydraulically.

CEBIS allows you to carry out infinitely variable hydraulic adjustment of the position of the threshing concave from the comfort of the cab. Any such adjustment is accompanied by parallel adjustment of the clearance to the concave below the accelerator, threshing and feed drums. This means that you can be certain that the entire crop flow will run evenly and in a way which protects the straw.

Integrated overload protection prevents blockages and protects the threshing unit from damage.

Remove stones quickly.

Stones and other foreign objects are separated in the crop flow and collected in a large stone trap. Emptying this is simply a matter of pulling a lever and opening the flap.



The large stone trap can be opened and emptied easily.

Centrifugal force: a different kind of crop rotation.

ROTO PLUS makes the most of your crop.

The ROTO PLUS principle is simple, but effective. The eccentrically mounted ROTO PLUS high-performance rotors generate huge centrifugal force to separate the remaining grains from the straw. The mixture of grain, straw and chaff first reaches the preparation floor through the separate returns pan before passing over the straw walker steps to the sieve pan. This significantly reduces the load on the sieve pan.

TRION 750 with two rotors.

The even feed of the APS creates ideal conditions for the separation of the remaining grain with ROTO PLUS. The feed drum of the APS threshing unit divides the straw into two flows of material and feeds them to the two counter-rotating, high performance rotors in the TRION 750. With a diameter of 445 mm and a length of 4,200 mm each, they provide an outstandingly large separation area.



TRION 730 / 720 with one rotor.

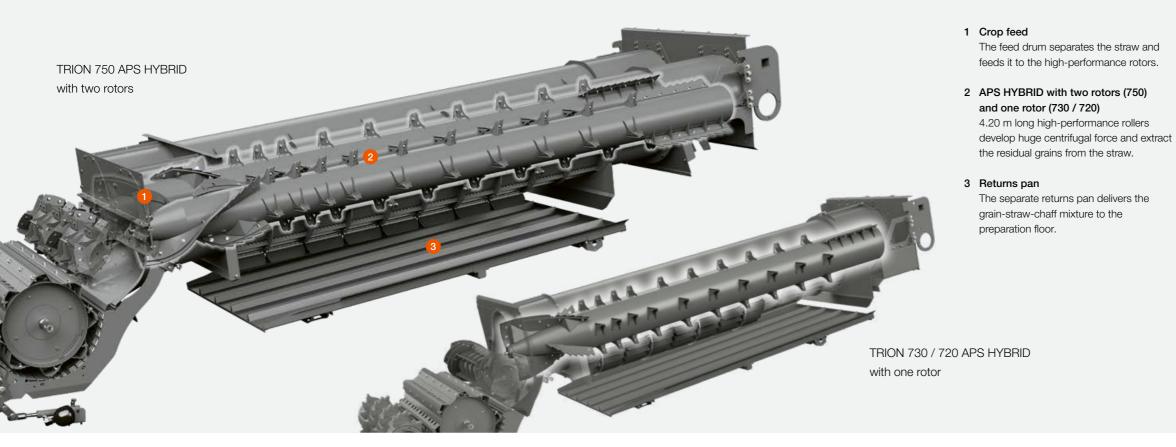
In the TRION 730 / 720 models, a single rotor with a diameter of 570 mm is responsible for secondary separation. As with the twin rotor version, the speed of the single rotor version can be adjusted infinitely via CEBIS.

Infinitely variable rotor drive.

Whether your are harvesting with twin rotors (TRION 750) or a single one (TRION 730 / 720), you can always adjust the speed of the rotors infinitely in CEBIS or by direct adjustment. Rotor speeds from 400 to 1,000 rpm can be set independently of the threshing drum speed. In this way, you can adjust the ROTO PLUS secondary separation precisely for different crops. You can also react quickly to changing harvest and straw conditions and so reach the machine's optimum performance level more easily.

Hydraulic rotor flap adjustment.

You can adjust the secondary separation area as required in CEBIS. The open separation area of the rotor concaves is reduced in steps, quickly and easily, from the cab. Hydraulic rotor flaps close up to four segments while the machine is on the move. This reduces the sieve load under very dry conditions.



Every grain counts in a successful harvest.

- High-performance rotors separate the residual grains effectively.
- The infinitely variable rotor drive gives you more flexibility.
- Hydraulic rotor flap adjustment increases the separation area.
- 4D delivers powerful cleaning performance, even in undulating terrain.

Under wet conditions, you use the large separation area for effective secondary separation. In the TRION 730 / 720, you can also choose to adjust the rotor flaps manually in order to achieve high throughput under all operating conditions.

4D ON



Powerful 4D cleaning system.

The secondary separation material is distributed evenly to ensure that the cleaning performance also remains stable when operating in sloping terrain. The returns pan, preparation floor, upper and lower sieves are loaded uniformly. The 4D cleaning system adjusts the position of the rotor flaps automatically and acts in the background to support the operator.

> 4D is automatically there for you on slopes. See what a difference it makes!



You are judged on the quality of your grain.

Intensive cleaning.

Clean grain is worth real money. The JET STREAM cleaning system with its hydraulic fan speed variator and highperformance returns is specially matched to the ROTO PLUS secondary separation. A dual-ventilated step enables intensive pre-cleaning.

JET STREAM is controlled conveniently from the cab. You no longer have to adjust anything manually. As an option, you can put the JET STREAM cleaning function under the fully automatic control of CEMOS AUTO CLEANING.





Discu inten JET Scan me.

Discover how intensively JET STREAM cleans the grain.



1 Preparation floor

This increases the cleaning capacity of the TRION while also reducing the load on the upper sieve. The plastic preparation floor elements can be removed through the stone trap for easy cleaning.

2 Turbine fan

The powerful turbine fan has sufficient reserves for difficult conditions. The hydraulic variator can be controlled by CEMOS AUTO CLEANING.

3 Airflow equalisation duct

The long airflow equalisation duct with the airflow oriented upwards provides consistent cleaning performance and already achieves a high degree of separation at the first step. The best way to the best grain.

- The JET STREAM cleans the grain intensively.
- The 3D cleaning system keeps the cleaning performance stable when operating on slopes.
- CLAAS PREMIUM LINE parts provide a longer service life.

4 Straw walker steps

The first step is dual ventilated and 56% higher compared with the conventional cleaning system. This enables powerful pre-cleaning with only slight sieve loading.

5 3D cleaning system

The maintenance-free system operates in the background. Using active transverse control, it distributes the material evenly across the upper sieve. This ensures that the cleaning performance remains stable when operating on slopes.

6 GRAINMETER

The GRAINMETER analyses the returns using a light barrier. This makes it possible to calculate the proportion of grains to the total volume. These data are also used by CEMOS AUTOMATIC.

7 Returns

The returns recovers every last grain from unthreshed ear sections. The material is deposited on the accelerator drum, spread out and fed to the threshing drum again.

Collect your grain quickly and reliably.



Up to 12,000 I of grain in the tank.

Once the threshing unit, secondary separation and cleaning systems have done their work, the cleaned grain is collected in the automatically expanding grain tank. Its capacity of up to 12,000 litres is matched to the high throughput of the TRION.

Grain tank unloading at up to 130 l/s.

You can unload the grain tank at rates up to 130 l/s. The concentrated stream makes reliable filling of the transfer vehicles easier. The automatic cover flap at the end of the grain tank unloading tube ensures that there are no run-on losses during the unloading process.

Precise yield measurement.

The QUANTIMETER determines the yield quickly and precisely by means of a baffle plate with an integrated measuring cell at the ejection point of the grain elevator. This system can be calibrated from the cab.

- 1 Grain elevator
- 2 GRAIN QUALITY CAMERA
- 3 QUANTIMETER yield measurement
- 4 Moisture measurement





Grain tank unloading tube with pivoting spout.

The pivot angle of 105° allows you an excellent view of the grain tank unloading tube. You can select the length of the tube in accordance with the width of the front attachment.

The stream of material is concentrated by a pivoting spout at the end of the tube. This can be adjusted via the CMOTION multifunction lever and makes it easier to load the transfer vehicles precisely.

Reliable collection.

The concentrated stream makes reliable filling of trailers easier. The automatic cover flap at the end of the grain tank unloading tube ensures that there are no run-on losses during the unloading process.

Precise GRAIN QUALITY CAMERA.

The GRAIN QUALITY CAMERA provides real-time pictures of the crop. As the software identifies non-grain constituents and broken grains, you can use CEBIS to monitor the grain quality and assess it digitally at any time.

Precise unloading in just 92 seconds.

- The grain tank holds up to 12,000 l.
- You can empty the tank at up to 130 l/s.
- The pivoting spout enables more precise unloading.
- The yield and quality are measured accurately.
- CLAAS PREMIUM LINE parts provide a longer service life.

The TRION: as effective at the back as it is at the front.

Outstanding straw management.

A user-friendly straw chopper drive, a power spreader for large working widths and automatic discharge direction adjustment – these are the three essential elements of an effective straw management system.

Manually engaged straw chopper drives.

The three drives are engaged and disengaged by means of a manual clutch. Switching between swathing and chopping mode is performed manually.

- Basic: you work at a constant chopper speed
- Comfort: you can choose between two speeds which you can select by repositioning the drive belt using a quickrelease clamp (no tools required)
- Comfort Plus: the speed adjustment is performed directly by means of a manual clutch. This option comes into its own when you have to work frequently in changing crop types

NEW: Premium.

Switching the straw chopper on and off, as well as switching from swathing to chopping, is performed conveniently from the cab via CEBIS. The speed is adjusted by repositioning the belt using a quick-release clamp.

Deflector spreader up to 7.70 m working width.

From the rotors, the straw moves directly to the chopper, whose intensity you can adjust in accordance with the operating conditions. STANDARD CUT and SPECIAL CUT, respectively equipped with 52 and 72 knives sharpened on both sides, and a mechanically adjustable static knife provide the appropriate cutting action. You can adjust the deflector spreaders without tools. The spreading width and direction can be adjusted manually or hydraulically via CEBIS.



Precise power spreader.

The power spreader from CLAAS is synonymous with precise straw spreading – even with high volumes of straw, strong crosswinds or sloping terrain. Comprising two spreading rotors turning in opposite directions at a constant speed, it takes both the chopped material and the chaff straight from the cleaning section, accelerates it further and spreads it evenly across the entire working width.





- 1 If the machine is operating on a slope, the discharge direction is adjusted automatically.
- 2 The chopped material is spread evenly across the entire working width.



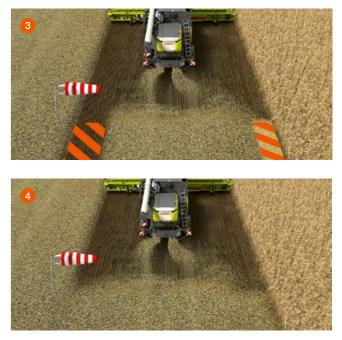
Power spreader for efficient straw spreading with minimal use of power.

Make your straw management more efficient.

- SPECIAL CUT chops with up to 72 knives.
- You can switch to swathing from the cab.
- The power spreader works precisely at large working widths.
- The discharge direction is adjusted automatically.
- The deflector spreader spreads precisely up to a width of 7.70 m.

Automatic discharge direction adjustment.

You can equip your TRION with two sensors which automatically adjust the discharge direction of the chopped material to the terrain conditions. The sensors are fitted on the light brackets at the rear of the machine and ensure that the power spreader and deflector spread the chopped material evenly on slopes or in the event of crosswind. You set the sensitivity of this system in CEBIS.

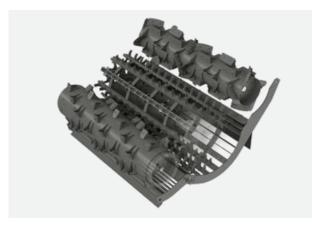


3 Sensors at the rear of the machine detect the intensity of the crosswind.4 The discharge direction of the chopped material is adjusted to compensate.

Change crop types in next to no time.



You can switch between the two speed ranges of the threshing drum speed reduction gearbox manually via a hydraulic valve.



The rice threshing unit or the rework kit consists of an open spike tooth threshing drum and a spike tooth concave.



The speed of the straw chopper can be adjusted in line with your current task easily, quickly and without the need for tools.

Convenient, with no tools required.

The TRION saves you a lot of time when changing to a different crop type. The entire changeover process is convenient and easy without even requiring any tools to adjust the speed of the various assemblies. 63% of the threshing concave area can be replaced in a single movement.

Adjust feeder housing.

You can adjust the height of the feed roller without using tools. A sticker indicates the appropriate position.

Convert threshing unit.

You can change the preconcave segments easily through the stone trap. The threshing concave segment accounts for 63% of the threshing concave and is easily removed via the side of the machine. With the grain harvest completed, the TRION is now ready for the maize.

Change speeds.

You select the speed ranges of the threshing drum speed reduction gearbox manually by means of a hydraulic valve. You have a choice of two ranges which are clearly indicated on the actual switchover valve.

Modify straw management.

The speeds of the power spreader and straw chopper can be adjusted easily and conveniently. In the case of the straw chopper, you do not even need any tools. It can be equipped ex factory with universal knives which are suitable for both grain and maize.

You can adjust the speed of the chaff spreader in line with your specific requirements. The spreader plates can be adjusted easily to provide the required spreading distance. The static knife and chopping floor can also be adjusted without tools. Convenient access to the grain tank means that you can also make short work of adjusting the grain tank cover plates in line with the job in hand.

Harvesting grass seed.

As grass seeds and small seeds are very light, it is important to adjust the fan speed accordingly. The two-stage drive has two speed ranges which you can engage by using quickrelease clamps and repositioning the drive belt. An emptying aid is available to prevent bridging in the grain tank. This ensures trouble-free unloading of these light crops.

Cleaning the machine.

Before harvesting seed, or at the end of the season, you should clean the entire machine. The TRION assists you in this by providing unrestricted access to all components. The threshing unit can be reached through large maintenance openings on both sides of the machine. Sufficient space to perform cleaning tasks is also provided around the sieve pan, rotors and grain tank.





Its MULTICROP capability is unique.

- It is easy to change the configuration of the threshing unit.
- You can change speeds quickly.
- You can adjust the straw management in line with your specific requirements.
- Cleaning the machine when changing crop type or at the end of the season is effortless.

It delivers exactly the power you need.

Interplay of optimal components.

Top performance happens when all the parts of your CLAAS machine are precisely matched to each other and work together optimally. CLAAS POWER SYSTEMS brings together the best components to form an intelligent drive system: drives which are suited to your requirements and the way you use your machines; full engine output only when you require it; fuelsaving technology which quickly pays off.

Every TRION can be made to measure.

It is your TRION and you have many options for optimising it to meet the specific requirements of your farm and your fields. Whichever features you choose, DYNAMIC POWER is always on board. The intelligent engine management system is standard on all machines and reduces your fuel consumption by up to 10%.

- Save yourself the trouble of refuelling during long harvesting days. The large fuel tank holds up to 1,000 litres.
- With spacers on the drive axle, the TRION is ideally prepared for twin tyres to be fitted.
- Protect the ground with TERRA TRAC. The crawler track units offer a high level of driving comfort and are narrow enough for road travel.
- Benefit from greater throughput and high driving comfort on slopes. The TRION is also available as a MONTANA version.
- The differential lock on the front axle allows you to continue to operate reliably in difficult terrain.
- For greater tractive power in difficult terrain you can equip your machine with a POWER TRAC all-wheel drive.
- Operate the 2-speed ground drive manually or opt for the convenience of letting the TRION do the shifting for you.



Variable power to match the way you work.

Intelligence saves fuel.

DYNAMIC POWER is standard in all machines. It automatically adjusts the engine output of your TRION to the operating conditions. This means that you are always running with an ideal power curve when operating under partial load and can achieve fuel savings – during swathing, for example – of up to 10%. Maximum engine output is automatically maintained when operating at full load – when the grain tank is being unloaded and the straw chopper is engaged, for example.

The latest generation of Cummins engines.

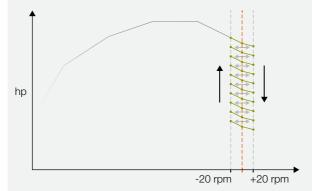
With an annual output of more than 1.4 million engines, Cummins is the world's largest independent engine manufacturer. Cummins engines are in use in more than 1,000,000 agricultural machines around the world. The range extends from 55 to 4,400 hp.

All TRION 700 models are equipped with the CUMMINS L9. This powerful engine meets the Stage V emission standard and is notable for its high torque and efficient power transmission.

- 6-cylinder in-line layout with 8.9 I displacement
- Output of 270 kW / 367 hp to 320 kW / 435 hp
- Reduced rated engine speed: 1,900 rpm
- Common-rail technology with Stage V emission standard

Low revs in the field and on the road.

The Cummins L9 delivers its maximum output at a rated speed of just 1,900 rpm. On the road, it makes do with just 1,600 rpm. This technology allows you to save significantly more fuel while enjoying a higher level of driving comfort as a result of the reduced noise level.



DYNAMIC POWER: the parameter which triggers the automatic power adjustment is the reduction or increase in the engine speed resulting from a change in the power requirement.



Long operating time without refuelling.

The high-capacity fuel and urea tanks are particularly safe and robust. They are both located in the same position on the right-hand side of the machine for convenient filling with diesel fuel and urea.

- Fuel tank with a capacity of 800 or 1,000 l
- Urea tank with 100 I capacity
- Fewer refuelling stops during the harvest



Effective cooling without dust build-up.

The TRION draws in outside air from above for the cooling system. As the air intake area is actively cleaned continuously, less dirt accumulates on the cooling fins. This reduces the overall dust load in the cooling system, thereby increasing the cooling performance.

A clean radiator under extreme conditions.

Even during activities with high potential for dirt build-up – such as maize threshing under wet conditions with a maize picker and horizontal chopper – the radiator screen remains clean thanks to a cleaning brush. In addition, a cleaning chopper prevents the dust extraction system from becoming blocked. As much power as necessary, as little fuel as possible.

- High-torque Cummins engines of the latest generation meet the Stage V emission standard.
- DYNAMIC POWER adjusts the engine output to the current power requirement and can deliver fuel savings of up to 10%.
- The engine speed is reduced to 1,600 rpm during road travel.
- The cleaning chopper and cleaning brush keep the radiator clean at all times.
- Three connection points for the air compressor allow cleaning to be carried out quickly while out in the field.

Tractive power and economy are not mutually exclusive.

Hydrostatic ground drive up to 30 km/h.

All TRION 700 models are equipped with a 2-speed hydrostatic ground drive with convenient gear selection either manually via a shift lever or electrically via the buttons on the armrest. The high efficiency of the hydrostatic motor saves power which is available to the rest of the machine. Both the wheeled machines and the TERRA TRAC models can travel at up to 30 km/h.

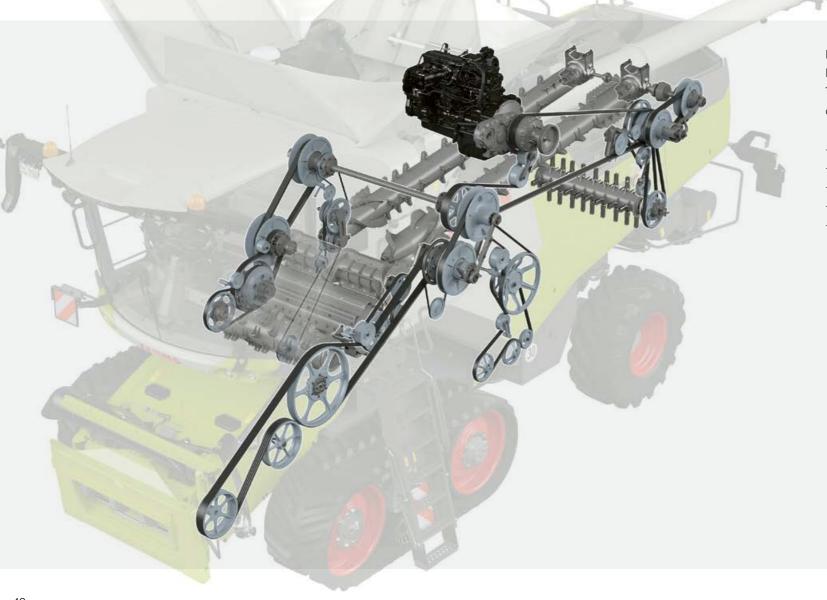
Comfortable and economical.

- Less wear of the drive components leads to lower maintenance costs and a longer service life.
- The driving characteristics are smooth and well-mannered.
 The high degree of driving comfort has a positive effect on your productivity.
- The high efficiency saves you fuel.

The differential lock can be engaged under load.

The electrohydraulic differential lock, which is activated by means of a pushbutton on the control panel, ensures that you can continue to operate safely and reliably in extreme conditions. The high traction and pulling power are maintained on slopes and in the wet. You can also engage the differential lock under load.

- Automatic engagement when ground speed is less than 10 km/h, steering angle less than 15° or slip occurs
- Automatic disengagement when ground speed is over 10 km/h, steering angle over 15° or braking occurs



Durable drive system.

Power transmission is performed efficiently via belt drives. The drives engage smoothly with low wear. All the drive components are designed for a long service life.

- Hydraulically actuated dry clutch
- Standardised, maintenance-free belt tensioners
- Up to six fewer belts
- Improved power transmission
- Lower maintenance costs



Powerful POWER TRAC all-wheel drive.

When ground conditions are difficult, a push of a button is all it takes to engage the all-wheel drive in order to benefit from greater traction. Or you can use the standby mode, in which the all-wheel drive is permanently available in the background and can be activated quickly if required.

- ON: rear wheels are mechanically engaged and are driven
- STANDBY: rear wheels are mechanically engaged but are not driven
- OFF: rear wheels are mechanically disengaged



Take the pressure off your soil.



TERRA TRAC for every requirement.





TERRA TRAC 735 mm



TERRA TRAC 890 mm



TERRA TRAC 890 mm spoke design



TERRA TRAC 890 mm rice



All TERRA TRAC crawler tracks are fully suited to road travel up to 30 km/h and provide a more comfortable driving experience than the wheeled machines.



The 635 mm crawler tracks make the TRION compact on the road and so increase your mobility.

Third-generation crawler unit.

The soil is the most important basis for production available to you. As it is impossible to create more of it, you need to be able to obtain ever greater yields from the existing land. In order to do this, you need productive machines which protect the soil with TERRA TRAC as they operate.

The crawler tracks of the third TERRA TRAC generation impress with the large diameter of the land wheels, hydropneumatic suspension, improved track tensioning and automatic level compensation from 2 km/h. They increase traction drastically and leave hardly any trail behind them when operating in the wet, on soft ground or on side slopes. This makes the work of the transport vehicles considerably easier.

TERRA TRAC on the road.

- 30 km/h top speed possible
- Fully suited to road travel at 20, 25 and 30 km/h
- High driving safety and directional stability
- More driving comfort compared with a wheeled machine

TERRA TRAC in the field.

- Up to 66% less ground pressure than wheeled machines
- Better traction in maize, in the wet and on slopes
- Less slip and greater stability on side slopes
- Lower drive resistance and fuel consumption

TERRA TRAC in rice.

- Special rice track, 890 mm wide
- Greater spacing of tread lugs for self-cleaning
- High traction and load-bearing capacity
- Will not sink in when operating in wet field conditions

The TRION harvests on slopes as effectively as on level ground.

TRION 700 MONTANA.

Threshing on slopes as effectively and powerfully as on level ground – the MONTANA combine harvesters from CLAAS have made a name for themselves around the world with their prowess in this domain. With its fully automatic side slope compensation of up to 18% and longitudinal compensation of up to 6%, the TRION MONTANA is able to cope with even the hilliest of fields.

Built for tough terrain.

The TRION MONTANA is the ideal combine harvester if your farm is located in a hilly region. It is perfectly at home in particularly challenging terrain and is able to operate successfully even under extreme conditions.

- The machine reduces your workload significantly when harvesting on slopes. All the MONTANA functions are fully automatic.
- You can also enjoy loss-free harvesting on slopes. This is made possible by the precise cutterbar guidance, the MONTANA feeder housing and the MULTI CONTOUR control.
- You can always make good progress on steep slopes and in difficult terrain thanks to all-wheel drive and the differential lock.
- You can operate efficiently in the field. There is no need to change gear up to 12.5 km/h.



Automatic compensation for side slopes up to 18%.



Full support on steep slopes.

The interplay of all the MONTANA components ensures that you can also harvest effectively on challenging slopes. Whatever the conditions, you can operate safely and reliably while enjoying a high level of driving comfort because your seating position is always level. All MONTANA functions run automatically – adjusted to the slope of the field.

Compensate a side slope of up to 20%.

The MONTANA feeder housing is equipped with two vertical rams for AUTO CONTOUR control and up to 20% side slope compensation.

In the MULTI CONTOUR variant, the feeder housing has an additional horizontal ram for hydraulic adjustment of the cutting angle. This enables automatic longitudinal compensation of up to 6%. Depending on the axle position, the MULTI CONTOUR system controls the pivoting frame, the cutting angle adjustment and all the usual AUTO CONTOUR functions.



1 MONTANA feeder housing Slope compensation up to 20%

- 2 MONTANA front axle Up to 18% side slope compensation and differential lock for greater traction
- 3 AUTO SLOPE Automatic adjustment of fan speed
- 4 3D cleaning system Active transverse control of the upper sieve
- 5 POWER TRAC 4-wheel drive Maximum traction in challenging terrain
- 6 Cummins engine Plenty of power and high reserves of performance

Precise cutting with AUTO CONTOUR.

AUTO CONTOUR guides the cutterbar precisely over the ground contours and ensures a clean take-up, trouble-free threshing and a uniform stubble height in all crops.

Two ways to work efficiently.

Two different operating modes are available for the MONTANA function. Setting the maximum side-slope compensation uses the entire deflection range of the front axle. This mode is recommended for most areas of operation.

Setting a constant cutting angle restricts the deflection range of the front axle and instead gives priority to the set cutting angle. This mode is recommended when harvesting laid crops and low-growing crops.

Keeping moving with 18% transverse tilt.

The MONTANA chassis compensates for transverse tilt of up to 18%. Angle sensors detect the position of the axle. Hydraulic swing rams turn the axle portals to adjust the wheels to the ground. This allows you to thresh in steep terrain as effectively as on level ground.

Comfortable harvesting with two drive ranges.

A 2-speed gearbox with automatic adjustment to the engine load ensures that you have high traction in steep terrain. In both gears, operators can call on two drive ranges. When the machine requires maximum traction, it switches automatically to the lower drive range. With all-wheel drive and an electrohydraulic differential lock (optional) you have everything you need to keep you safely on the move and are always able to call on sufficient traction.



Everything you need for sloping terrain.

- The MONTANA system controls the chassis automatically on slopes of up to 18%.
- The feeder housing compensates for slopes up to 20%.
- The MULTI CONTOUR feeder housing provides longitudinal levelling up to 6%.
- The differential lock and all-wheel drive provide high traction and reliability.
- The powerful 2-speed ground drive enables a working speed of up to 12.5 km/h in first gear.
- AUTO SLOPE adjusts the fan speed automatically, as required.

A comfortable working environment also helps to increase productivity.

Exactly the right level of support.

Instead of settling for functions imposed by others, select the ones that fit your farm. The line-up includes self-learning operator assistance systems as well as high-end lighting packages which illuminate your working area as bright as day.

Comfort improves performance.

We know that you work better in the field when you have a comfortable working environment. This is why the cab of the TRION is designed for comfort. As well as being distinctly spacious at head, shoulder and leg level, it features an intelligent control concept and a bright CEBIS terminal which provides a razor-sharp display of all the information you need.

- Whether the day is hot or cold, you will be in your comfort zone. The optimised airflow ensures a pleasant temperature in the cab.
- You will also be comfortable throughout the longest of working days, whether you choose the standard seat or the premium leather seat.
- Everything is safely stowed and kept pleasantly cool in the storage compartments in the B-pillar or the cool box under the instructor's seat.
- Stay informed and well organised with the digital radio with hands-free facility and the tablet holder.
- You can keep working when night falls thanks to the LED work lights and the maintenance lighting available in a number of different versions and configurations.
- Camera systems give you a clear view for added safety and convenience when performing tasks such as unloading the grain tank or hitching up the cutterbar trailer.



When we want to improve something, we ask you first.



Everything the way you want it.

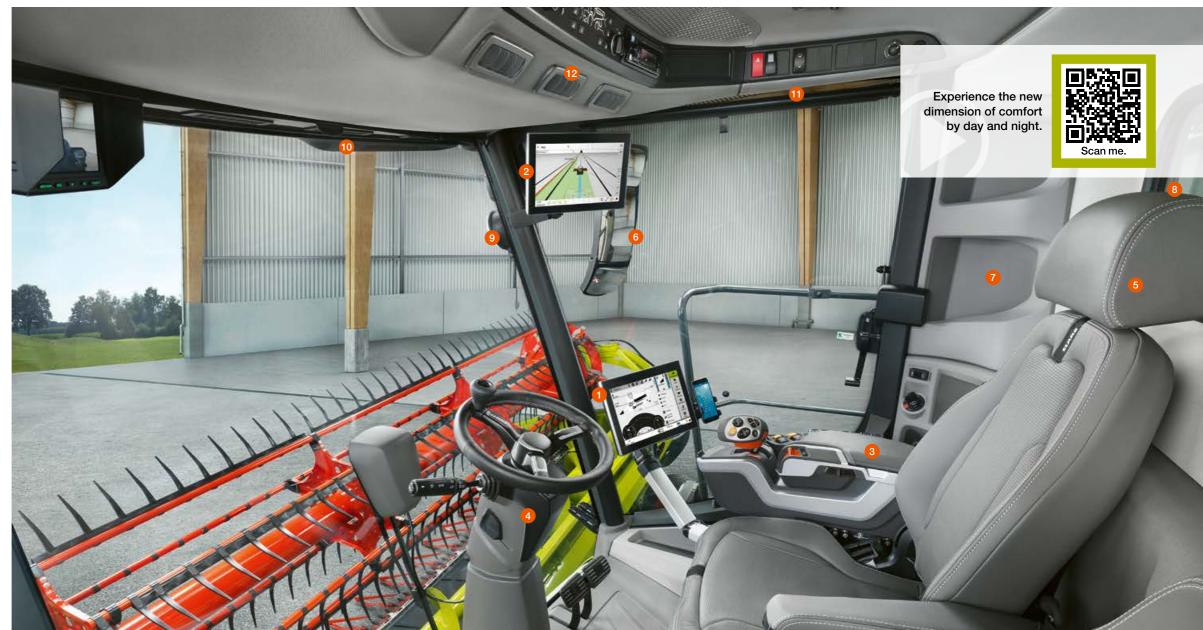
When we develop a new combine harvester, we always include the cab concept in our design considerations. We are supported in this by combine harvester operators all over the world. Together with them, we take the important decisions relating to the comfort and control aspects of our machines. Proven approaches are continued, good solutions are improved, new ideas are put to the test.

We are certain that you will welcome the innovations which we have introduced in the TRION as a result of this process: the air conditioning concept with an all-new airflow system, the large storage compartments, the actively cooled 30 I cool box for your drinks or the bright, high-resolution CEBIS display. Of course, you will also find much that is familiar. The incomparable CLAAS comfort, for example, or the intelligent control concept which gives you easy access to all machine functions.

1 Bright CEBIS terminal

The razor-sharp HD display tells you what you need to know at a glance.

- 2 Intuitive CEMIS 1200 terminal CEMIS 1200 provides support for precision GPS tracking and networked documentation.
- **3** Armrest with direct adjustment Your right hand intuitively controls all the important machine functions.
- 4 More legroom
- The narrow steering column with footrests ensures that even very tall operators do not feel cramped.



5 Comfortable seats

The operator's seat with a 30° swivel angle (optional) and a comfortable instructor's seat look after your back, even on long working days.

- 6 Good all-round view Cantilever mirror arms allow a clear view to all sides.
- 7 Spacious storage compartments Everything you need to take with you is safely accommodated in the TRION.
- 8 Large grain tank inspection window For even easier crop monitoring.

- 9 High-end lighting package Benefit from 360° illumination of your working area (optional).
- 10 Bright LED front area lighting

Up to 26 work lights flood the entire working area in light as bright as day.

11 Subdued cab lighting

The interior of the cab is pleasantly illuminated. LED light strips illuminate the storage compartments.

12 Air conditioning

Work at a comfortable temperature, whether the day is cold or hot.

LED lighting packages turn night into day.

- The long-range work light provides illumination over a particularly long distance.
- The front attachment is illuminated as brightly as the working direction, sides and stubble.
- All the important machine components are equipped with maintenance lighting.

A TRION is easy to drive.

CEBIS operates intuitively.

Operation is intuitive and possible without previous knowledge. This means that even new operators are able to use the TRION in a short time. CEBIS plays a decisive role in this. The system is an information supplier, performance optimiser and problem solver all rolled into one.

CEBIS offers immediate assistance.

Stored in CEBIS is a library of measures - based on the experience of countless CLAAS combine harvester operators - for resolving various problem scenarios. They consider all the parameters which could contribute to solving the problem. They therefore represent a comprehensive resource which supports you in making full use of the installed capacity of the machine.

CEBIS simplifies the menu.

Beginner, normal or expert: you define your user type and CEBIS adjusts the menu system to your level of experience. This ensures that new operators are not overwhelmed by complex menus. The operator assistance system is also integrated in CEBIS. You operate CEMOS DIALOG and CEMOS AUTOMATIC via the user-friendly touchscreen. Using a slider, you program the system's automatic functions with the strategies you wish them to follow.



1 CEBIS touchscreen

CEBIS responds immediately to a tap on the touchscreen. You have direct access to the field work and road travel machine functions as well as to all the operator assistance modules, such as CEMOS AUTOMATIC.

2 CEBIS rotary push switch

Even when operating in bumpy terrain in the field, you can easily navigate the CEBIS control panel using rotary/push switches and the Escape and Favourites buttons - to adjust the threshing drum speed, for example.

3 Direct adjustment via switches

You operate predefined basic functions directly by means of assigned switches. In this way, you can adjust the sieve opening or the fan speed, for example.

4 CMOTION favourites management

Seven settings can be programmed as favourites in CEBIS. When working, you can call these up conveniently via rocker switches on the CMOTION ground speed control lever. Your hand intuitively actuates the relevant switches while you keep a close eye on the front attachment.

User-friendly design that supports the operator and reduces stress.

- Depending on your preference, settings can be adjusted in three ways in the TRION: via the CEBIS touchscreen, the CEBIS rotary push switches or the direct-adjustment switches.
- Operating the direct adjustment system causes a dialogue box to open in CEBIS.
- A numeric keypad helps you enter precise target values.



Discover how easy it is

CEMOS DIALOG integrated in CEBIS.



Intelligent control by CEMOS AUTOMATIC via CEBIS.

- All parameters can be modified easily by means of dial and slide controllers in CEBIS.
- All the functions of the CEMOS AUTOMATIC operator assistance system, as well as CEMOS DIALOG, are integrated in CEBIS.
- You can call up your seven favourites directly on the CMOTION ground speed control lever.

Select the systems which will benefit you the most.

Digitalisation is indispensable.

There are very good reasons for the digitalisation of our machines – three to be precise: we want to help your operators work more confidently, to make your harvest go more smoothly and to reduce your costs. With self-learning operator assistance systems such as CEMOS AUTOMATIC, for example, or steering systems that are accurate down to the last centimetre.

Connected machines are more productive.

To enable you to get more out of your CLAAS machines, we have a range of modules to connect them with the farm. The line-up extends from yield mapping to fleet coordination to continuous documentation of your job and yield data.

- Let CEMOS AUTOMATIC reduce your workload significantly. Select the appropriate modules from entry level to the full version.
- The more precise your movements in the field, the more efficiently you will be able to harvest. Accurate down to as little as 2.5 cm, LASER PILOT and GPS PILOT CEMIS 1200 keep the number of passes required to a minimum.
- Collect and process your data how and where it suits you.
 TELEMATICS, automatic documentation and DataConnect give you a whole host of options.
- Increase throughput, grain quality and comfort. Active forward travel control or a threshing unit which adjusts itself help you achieve these goals.



CEMOS operators are unbeatable.

Configure CEMOS AUTOMATIC for your specific requirements.

CEMOS AUTOMATIC is a self-learning operator assistance system which provides you and your operators with continuous, active support throughout the entire work process. On the basis of agricultural economics parameters, such as grain quality, threshing quality, standard of cleaning, straw quality and throughput, the system checks sensors and settings. It optimises your TRION to its technical performance limits while it is running.

The operator decides.

You tell the system your requirements concerning the grain quality and loss level. During harvesting, CEMOS AUTOMATIC optimises the performance of your machine to meet your criteria precisely.

Assemble your own CEMOS solution.

Whether you choose the entry level or full version, you configure your very own CEMOS AUTOMATIC system on the basis of the functions that will make sense in your fields and optimise your work.





See how CEMOS reduces your workload.

CEMOS AUTOMATIC functions

1 CEMOS DIALOG

- Guides the operator to the optimal machine setup **2 AUTO CROP FLOW** Protects the entire system against overload (sensor B)
- 3 AUTO SLOPE
- Controls the fan setting on the basis of the slope (sensors K and D)
- 4 CRUISE PILOT
- Actively controls the harvesting speed (sensors A, F and 5 AUTO CLEANING
- Improves cleaning by controlling the sieve opening and speed (sensors A, C, D, G, I, J and K)
- 6 AUTO SEPARATION

Controls rotor speed and rotor flap position in order to improve secondary separation (sensors A, D, E, F and K 7 AUTO THRESHING

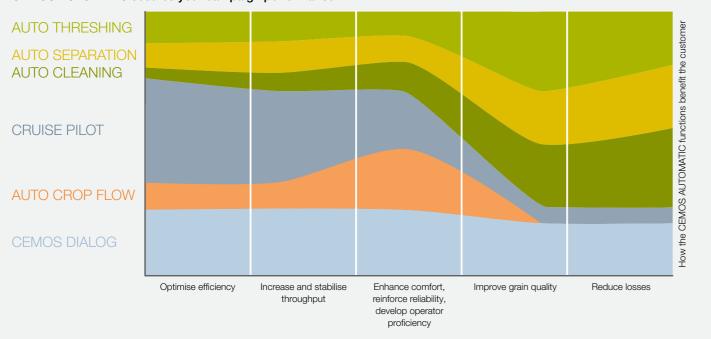
- Provides fully automatic adjustment of the threshing conclearance and the threshing drum speed (sensors A, B, D, E, F, G, H and I)
- 8 4D cleaning system Controls the rotor flap position on the basis of the slope order to make optimal use of the cleaning capacity (sensors K, D and E)



	CEMOS AUTOMATIC sensors
	A Material feed height sensor
	Detects the overall throughput of the machine
	(grain and straw)
	B Drum speed monitoring
	Monitors drive speeds and loads
	C GRAINMETER
	Determines the grain content in the returns
	D Throughput monitor for sieve pan
d D)	Measures loss at end of sieve pan
	E ROTO PLUS throughput monitor
fan	Detects losses at the rotor output
	F Engine load
	Provides information about the load factor of the
	diesel engine
<)	G Grain moisture sensor
	Measures the grain moisture
ncave	H QUANTIMETER
	Determines the machine's grain throughput
	I GRAIN QUALITY CAMERA
	Determines the grain quality
e in	J Returns volume
	Detects the overall volume in the returns
	K Incline sensor
	Measures the machine incline

Optimise CEMOS AUTOMATIC for your fields.

CEMOS AUTOMATIC secures your campaign performance.



The CEMOS AUTOMATIC functions support you throughout the entire harvest. You can configure the functions in such a way that they are a precise fit for your requirements. The user-friendly CRUISE PILOT, for example, helps you optimise efficiency while increasing throughput and stabilising it. If you wish to improve the grain quality and reduce losses, AUTO THRESHING will provide you with optimal support.

The functions of CEMOS AUTOMATIC.

In CEMOS AUTOMATIC you have a self-learning, modular operator assistance system. Choose from the set of available functions the ones that are most cost-effective for your farm.

CRUISE PILOT and AUTO SLOPE, for example, provide economical access to automation. With these functions, as well as benefiting from intelligent forward travel control, your TRION is able to adjust the fan speed automatically. This allows the grain cleaning system to operate without losses in undulating terrain.

Or you can choose the full version of CEMOS AUTOMATIC and let the machine optimise its threshing unit, primary and secondary separation autonomously. You benefit from high throughput, clean grain and reduced fuel consumption.

CEMOS analyses the machine's performance.

The TRION keeps you updated, continuously and precisely, about the potential for optimisation. It continuously indicates all the factors currently imposing the greatest limitations on throughput and actively suggests ways to increase performance.



AUTO CROP FLOW recognises peak loads.

AUTO CROP FLOW continuously monitors the speeds of the threshing unit, secondary separation and engine. If the preset slip limit is overshot, the system takes measures to prevent any more material from entering the machine. In this way, downtime because of blockages, damage or overload is avoided.

AUTO SLOPE manages cleaning on slopes.

Hilly fields are a challenge for the grain cleaning system. Uphill, the fan speed has to be reduced, downhill it has to be increased. AUTO SLOPE reduces your workload by controlling the fan speed on the basis of the longitudinal tilt.

- You increase throughput and reduce grain losses on slopes.
- The cleaning performance always remains stable.
- The crop flow in the cleaning system is maintained.

CRUISE PILOT controls the speed.

The optimal harvesting speed increases your productivity. CRUISE PILOT controls it automatically on the basis of the engine load. It is possible to choose from three strategies:

- 1 Maximum throughput with loss monitoring: you are always harvesting at the machine's performance limit.
- 2 Constant throughput: all the key assemblies are subject to consistent loading even under changing conditions.
- 3 Cruise control: you work at a constant harvesting speed.

CEMOS AUTO CLEANING.

The fan speed and the upper and lower sieve opening are the parameters by which CEMOS AUTO CLEANING automatically regulates the cleaning. In the background, the system continuously tests various settings to optimise performance. If parameters such as yield, grain quality, throughput or moisture change, CEMOS AUTO CLEANING reacts immediately.

CEMOS AUTO SEPARATION.

The TRION uses CEMOS AUTO SEPARATION to optimise the secondary separation continuously. It automatically adjusts the speed of the rotors and the position of the rotor flaps as soon as the harvest conditions change. Unnoticed by the operator, CEMOS AUTO SEPARATION tests various settings in the background and selects the best one.

CEMOS AUTO THRESHING.

The system improves the performance of the threshing unit and primary separation. It controls the threshing concave clearance and the threshing drum speed fully automatically. A comparison of all the possible settings to optimise performance takes place in the background. The data on which this is based are supplied by numerous sensors in the machine.

Harvesting at the limit.

- Your operators' workload is reduced significantly.
- They achieve more throughput and a high standard of grain cleaning.
- The fuel efficiency of your TRION is improved.
- You have no outages because of incorrect settings.
- You reduce costs and effort effectively.

CEMOS DIALOG motivates you like never before.

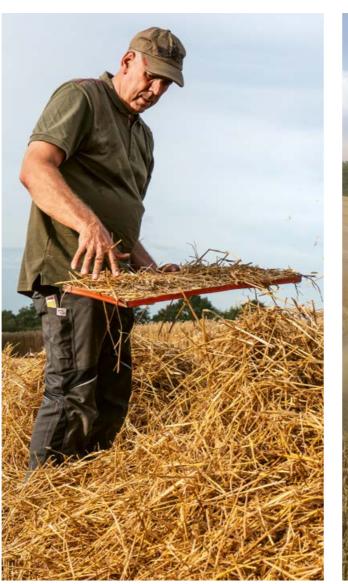
Greater safety and reliability in the field.

Controlled through CEBIS, the CEMOS DIALOG operator assistance system guides you to the optimal machine setup. Settings which are confirmed by you are implemented directly by CEMOS DIALOG. You are motivated to check the settings more frequently and also benefit form the learning effects.

NEW: CEMOS DIALOG analyses the machine's performance. The machine always keeps you informed about the scope for optimisation. It continuously indicates all the factors imposing the greatest limitations on throughput and actively suggests ways to increase performance. It even calibrates the sensitivity of the loss sensors automatically while running. If you change the accepted loss level during harvesting, CEMOS DIALOG automatically adjusts the sensitivity of the sensors. There is no need for another loss measurement to be performed.

CEMOS Advisor app supports you.

The free CEMOS Advisor smartphone app helps you find the optimal machine setting. The grain loss calculation is already integrated in this valuable adjustment aid.





Determine losses.

Increase campaign performance.

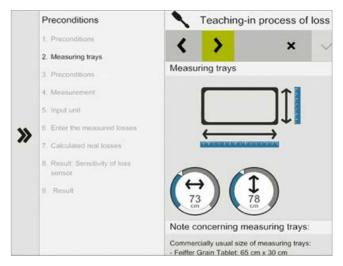
Setting the correct loss rate plays a decisive role in increasing your campaign performance. An accurately set grain loss ratio ensures that you do not waste any power. Once the losses have been determined and the sensitivity of the loss sensors has been adjusted accordingly, CEMOS AUTOMATIC applies the optimal settings. In this way, the system always brings the machine precisely up to the limit of acceptable losses. Another benefit of this system is that it prevents the entry of incorrect values which could slow the machine down.

Loss sensor programming.

CEMOS DIALOG supports you when it comes to calibrating the loss sensors for the separation and cleaning stages. You can use the same loss control pan which you are already using. The system guides you steadily, step-by-step, through the loss measurements. It asks you to input the dimensions of your loss control pan and tells you when to deploy it.

Harvest right up to the grain loss limit.

- You only have to calibrate the loss sensors at the start of the day.
- CEMOS DIALOG actively supports you with loss measurements.
- After the loss level has been changed, the sensitivity of the sensors is corrected automatically.
- The machine always works precisely up to the limit set for acceptable losses.



The dimensions of the loss control pan being used are entered in CEBIS.

Adjusting the sensitivity.

This is a situation you will recognise: you start harvesting in the morning with a loss level of 0.5%. In the afternoon, there is a risk of rain. You want to adjust the loss limit to 1%. As soon as you enter the new loss value, CEMOS DIALOG automatically determines the corresponding value for the sensitivity of the loss sensors. CEMOS AUTOMATIC runs the machine at the maximum loss limit again and optimises the throughput. This saves you a lot of time, as there is no need for another measurement of losses to be performed with a loss control pan.

Once you have entered the measurements obtained with the loss control pan (volume, weight or number of grains), CEMOS DIALOG suggests a value for the sensitivity of the loss sensors. The better the sensor sensitivity setting, the more precise the loss indication. These data allow CEMOS AUTOMATIC to set up the machine to operate more efficiently.

The TRION harvests accurately down to the last centimetre.

Keep the number of passes to a minimum.

Steering systems are an essential tool in your everyday work. The TRION can be equipped with three automatic steering systems, which you can choose between on the basis of the task in question: the digital AUTO PILOT, the satellite-based GPS PILOT CEMIS 1200 and the electro-optical LASER PILOT, which we can also equip with the FIELD SCANNER for you as an option.

Precision for every task.

- The GPS PILOT steers precisely and can be controlled intuitively via CEMIS 1200.
- The FIELD SCANNER system with LASER PILOT technology offers you three different steering modes.
- The AUTO PILOT helps you work precisely in maize.
- With dynamic steering you can turn quickly and easily at the end of the field.

GPS PILOT CEMIS 1200 is precise.

The satellite-based automatic steering system from CLAAS is permanently integrated in the machine. It supports you in all tasks which depend on high pass-to-pass accuracy. You start the GPS PILOT via the multifunction lever. It actively controls the steering hydraulics and takes you across the field, always on the right track, using the full working width with no overlapping and regardless of the light conditions. It works at night or in low visibility just as precisely as it does in full daylight. You receive correction signals for whichever degree of accuracy you require.



GPS PILOT CEMIS 1200 is user-friendly.

With the GPS PILOT automatic steering system, the TRION will seem like it is running on rails. It takes next to no time to become proficient in using the straightforward CEMIS 1200 touchscreen interface. The high level of digitalisation enables optimal integration of your TRION in your farm's digital ecosystem.

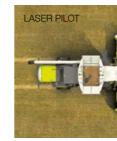
Thanks to ISOBUS and standard data exchange formats, CEMIS 1200 is the way forward for Precision Farming. The GPS antenna and the terminal can be used throughout the year on all CLAAS machines set up for this equipment. Transferring the system from one machine to another takes next to no time – keeping you flexible and saving money.

LASER PILOT for the left-hand edge of the crop. (TRION MONTANA)

The electro-optical sensor of the LASER PILOT uses pulses of light to scan the left-hand edge between the harvested and unharvested areas of the field. In this way, it steers the TRION automatically along the left-hand edge of the crop.

LASER PILOT or FIELD SCANNER.

As an option, you can replace the sensor on the outer edge of the cutterbar with a FIELD SCANNER which is fitted centrally on the cab roof. There is no need to fold the scanner out or in. Calibration is also no longer required. A button on the armrest





Watch the new CEMIS 1200 terminal at work.



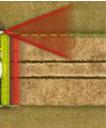
NEW: Dynamic steering for fast turning.

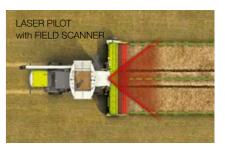
You steer the TRION with about four steering wheel turns from lock to lock. If you prefer a less demanding steering input when you have to turn at the end of the field, you can activate the dynamic steering system. This reduces by 40% the extent to which the steering wheel has to be turned to go from straight-ahead running to full lock. This functionality is conditional on a speed of less than 10 km/h.

is used to activate three steering modes: along the edge of the crop to the right or left or along the tramline.

AUTO PILOT.

Two digital sensors incorporated in one of the snapping units of the maize picker guide the TRION automatically through the rows of maize, thereby ensuring it is in the optimal position in the crop.





A connected TRION is more productive.

Digitalisation pays.

Intelligent digitalisation matched to the requirements of your farm reduces your workload and increases your productivity. Data generated in completely different places can be collected and evaluated centrally. This conserves your resources and improves your farm operations.

To enable you to get more out of the TRION and your other machines, CLAAS offers a range of modules which allow systems, technology and working processes to be connected with each other, regardless of the manufacturer.

Forward planning in the office.

- Use 365FarmNet to determine the harvest sequence per crop on the basis of maturation
- Prepare jobs including reference tracks and transfer them to CEMIS 1200

Optimisation on the machine.

- Create and manage all jobs directly on the machine with CEMIS 1200
- All job data are documented online as an automatic background operation
- Transmit data from different manufacturers' products into the cloud smoothly
- Use CLAAS connect and the CEMOS Advisor app to monitor the performance of the combine harvester and make full use of it
- Save valuable maintenance and service time with remote diagnostics

Detailed assessment in the office.

- Transfer and document job and harvest data quickly
- Analyse fields easily and map yields precisely
- Assess work processes intensively and identify scope for improvement



CLAAS connect links you up with CLAAS.

CLAAS connect links people, machines and systems. This app helps you keep track of your machine fleet, check the most important telemetry data and make use of CEMOS Advisor to optimise your combine harvester. You can find the right operator's manual quickly and view service and licence contracts. Lubricants and parts can be obtained conveniently by ordering them from the shop around the clock. What's more, you have access to many other CLAAS applications.

Machine connect links your TRION into the network.

Machine connect allows you to use the full scope of CLAAS connect. It gives you a real-time overview of the tank fill levels, the location, the operating hours and maintenance dates. You also benefit from other digital CLAAS services, such as CLAAS TELEMATICS and MAXI CARE connect. With CEMIS 1200 and Machine connect you can take care of job management tasks on the machine itself and transfer the data online to TELEMATICS, 365FarmNet or other connected systems.

TELEMATICS records your success.

Work data, tracks and yield data for your combine harvester can be retrieved and recorded continuously by means of TELEMATICS. All data are transmitted via the mobile phone network from the machine to the server, where they are processed and stored. You can access and evaluate your data online in real time or retrospectively via the TELEMATICS portal or the app.

DataConnect, developed by CLAAS, 365FarmNet, John Deere, Case, Steyr and New Holland, is the first direct multimanufacturer and industry-wide open cloud-to-cloud solution. It allows you to control and monitor your entire machinery fleet in the CLAAS TELEMATICS portal.



Connected documentation collects your harvest data.

With the "CLAAS Connected Documentation" licence, the harvest data associated with your combine harvester are automatically collected and assigned to the fields which have been worked. This functionality requires that your field boundaries are specified in the system, either before or after the harvest. Subsequent documentation of any extra areas which happen to be harvested means that no data are lost. Data can be exported to all the current farm management programs at any time.

MAXI CARE connect simplifies servicing.

MAXI CARE connect plays an important role in ensuring the operational reliability of your machines. It simplifies maintenance and service support for you significantly. The machine informs the service partner of an upcoming requirement for maintenance or sends immediate notification if a fault arises. The service partner therefore has access to the relevant data and can prepare optimally for the intervention in both scenarios.

Save time on maintenance.

A TRION is not a lot of work.

The TRION is built for you and your individual harvesting requirement. Benefit from its assistance systems every day you use it, and from its reliability for its entire lifetime. To help you take good care of it, all the maintenance points are positioned logically, clearly indicated and easily accessible. These measures save time when performing daily maintenance tasks.

Easy visual inspections.

When something is easy to find, it will be checked. All the maintenance and lubrication points are clearly visible and provided with stickers indicating their purpose. An integrated display on the tensioners tells you about the belt tension. All oil levels can be read clearly via level gauges.

Excellent accessibility.

The radiator and engine compartment are accessed conveniently via a platform. Slip-resistant steps and a rail make for easy access to the grain tank and inspection window. Attachment points for the portable ladder are located around the whole machine. The exterior of the cab is equipped with steps and handles to allow you to clean the windows safely.

Easy lubrication.

All lubrication points are grouped in central grease anchor blocks. The grease anchor blocks are clearly marked and easy to reach from a standing position.



PREMIUM LINE components with enhanced durability.

Wear-resistant PREMIUM LINE quality.

PREMIUM LINE components are extra wear-resistant and durable. Even with intensive annual use or when subjected to aggressive crops, these parts will not usually have to be changed until after several campaigns. This increased durability is achieved through special manufacturing processes, highquality materials and special coatings.

All components subject to particularly heavy wear and tear in the crop flow are optionally available in PREMIUM LINE quality: threshing unit, grain collection system, grain tank, grain tank unloading system, secondary separation, straw chopper knife and power spreader.



Long oil-change intervals.

A TRION belongs in the field, not in the workshop. Important oil products for the working hydraulics, TERRA TRAC and transfer gearbox only have to be changed after two years or 1,000 operating hours. An engine oil change is only due after two years or 500 operating hours. As a result, downtime is reduced and you make significant savings on the cost of consumables.

Maintenance at its most convenient.

Connection points for the air compressor are situated in front of the cab door, by the tool compartment and in the engine compartment. The tool compartment is large enough to accommodate the toolbox and the grease gun. Spare parts for the front attachment can be stored in a separate compartment. A 15-litre reservoir holds plenty of water for hand washing when work is over.



Easy visual check of all oil levels.



Many attachment points for the mobile ladder.

Easily accessible grease anchor blocks.

Daily maintenance made easier.

- The new maintenance and access concept saves you time which you can use effectively in the field.
- Long oil-change intervals mean you save on effort, working time and operating costs.
- You can perform the daily maintenance tasks easily, quickly and conveniently.
- Remote Service simplifies maintenance activities and ensures that scheduled servicing takes place exactly when it is due.

Developed and built for each and every one of your fields.





Whatever it takes – CLAAS Service & Parts.





Specially matched to your machine.

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



For your farm: CLAAS FARM PARTS.

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



Global supply.

The CLAAS Parts Logistics Center in Hamm, Germany, stocks almost 200,000 different parts and has a warehouse area of over 183,000 m². This central spare parts warehouse delivers all ORIGINAL parts quickly and reliably all over the world. Wherever you are, you can count on us to always provide you with the service and the contact persons you need. Your CLAAS partners are on hand in your local area, ready to support you and your machine around the clock. With know-how, experience, commitment and the best technical equipment. Whatever it takes.



CLAAS service contracts.

Few factors are as decisive for the success of your business as the reliability of your machines. This is why we offer services for your machine which ensure a high degree of reliability at rates which allow you to budget precisely.

MAXI CARE Connect.

With MAXI CARE Connect, all the relevant data from your telematics-equipped machines are made available to your service partner. This greatly simplifies the remote diagnostic process and the provision of remote support. Servicing can be carried out more efficiently and the level of machine readiness for use is enhanced. All you have to do is give your consent.



The availability of products from CLAAS Service & Parts may vary according to country.

Your local CLAAS distributor.

Being a CLAAS machine is the most compelling feature of all.





- APS HYBRID with one or two rotors (TRION 750) ensures stable, high throughput.
- The JET STREAM cleaning system cleans the grain intensively.
- The 3D cleaning system compensates for side slopes.
- Collect 12,000 litres of grain in less than 100 seconds.
- The pivoting spout on the grain tank unloading tube directs the stream precisely.
- The Cummins engine has high power reserves.



Precision.

- Operator assistance systems, such as CEMOS AUTOMATIC, optimise the machine right up to its technical performance limits.
- The GPS PILOT CEMIS 1200 keeps the machine precisely on track.
- The LASER PILOT with FIELD SCANNER supports you with three steering modes.
- TELEMATICS transmits your data straight to the cloud.
- DataConnect allows you to process the data from your machines, regardless of manufacturer.

...III ➡ Adaptability

- Preconcave and threshing concave segments can be changed quickly.
- With the threshing drum speed reduction gearbox, you can switch between two speed ranges without having to use any tools.
- The crop type can be changed quickly and effortlessly.
- The MONTANA harvests on slopes as effectively as on level ground.
- The POWER TRAC all-wheel drive and differential lock keep you operating safely and reliably in difficult terrain.

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Reliability.

- The maintenance and access concept saves you time and money.
- Wear-resistant PREMIUM LINE components ensure high operational reliability.
- All maintenance points can be accessed very easily.
- Long maintenance intervals reduce downtime and
- expenditure on consumables.
- Remote Service simplifies the periodic maintenance tasks.
- MAXI CARE keeps repair and breakdown risks to a minimum.

RION		750/ 750 TERRA TRAC / 750 MONTANA	730 / 730 TERRA TRAC / 730 MONTANA	720 / 720 TERRA TRAC / 720 MONTANA
nreshing unit and primary separation				
PS HYBRID		•	•	•
nreshing drum width	mm	1420	1420	1420
nreshing drum diameter	mm	600	600	600
nreshing drum speed	rpm	400-1050	400-1050	400-1050
ith reduction gear		0	0	0
reshing concave wrap angle	degrees	142	142	142
ain concave area	m ²	1.06	1.06	1.06
ce threshing unit		0	0	0
econdary separation				
DTO PLUS		•	•	•
otors	No.	2	1	1
ed drum diameter	mm	382	382	382
otor length	mm	4200	4200	4200
otor diameter	mm	445	570	570
otor concaves	No.	5	6	6
tor flap segments	No.	0/2/4	0/2/4	0/2/4
peration		Hydraulic	Mechanical / hydraulic	Mechanical / hydraulic
tor speed	rpm	400-1000	400-1000	400-1000
eaning				
T STREAM		•	•	•
n adjustment, hydraulic		•	•	•
) cleaning system		0	0	0
tal sieve area	m ²	5.1	5.1	5.1
eturns display in CEBIS		0	0	0
AINMETER		0	0	0
ain tank				
apacity (as per ANSI/ASAE S312.2)	1	12000 / 110001	12000 / 11000 ¹	12000 / 105001
loading auger swivel angle	degrees	105	105	105
loading rate	l/s	130/110	130/110	130/110
JANTIMETER yield meter		0	0	0
ain moisture sensor		0	0	0
nopper				
eflector spreader with STANDARD CUT chopper, 52 knives		0	0	0
eflector spreader with SPECIAL CUT chopper, 72 knives		0	0	0
wer spreader with SPECIAL CUT chopper, 72 knives		0	0	0
naff spreader		0	0	0
itomatic discharge direction adjustment		0	0	0
Applies to TBION MONTANA				

Applies to TRION MONTANA

CLAAS continually develops its products to meet customer requirements. This means that 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 refer to your nearest CLAAS dealer and their price list for local specification details. Some protective panels may have been removed to present the function more clearly in photographs. To avoid any risks, you should never remove these protective panels yourself. In this context, please refer to the relevant instructions in the operator's manual. 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.

		750/	720 /	700 /
TRION		750/ 750 TERRA TRAC / 750 MONTANA	730 / 730 TERRA TRAC / 730 MONTANA	720 / 720 TERRA TRAC / 720 MONTANA
Chassis				
TERRA TRAC crawler tracks with hydropneumatic		0	0	0
suspension and electric gear shift		0	•	0
MONTANA running gear with electric gear shift		0	0	0
POWER TRAC 4-wheel drive		0	0	•
Mechanical gear shift (2-speed)		•	•	•
Electric gear shift (2-speed)		0	0	0
20 km/h		0	0	0
25 km/h		0	0	0
30 km/h		0	0	0
Differential lock for wheeled machine		0	0	0
Engine Stage V				
Manufacturer / Type		Cummins / L9	Cummins / L9	Cummins / L9
Cylinders / displacement	No./I	6/8.9	6/8.9	6/8.9
Maximum output (ECE R 120)	kW/hp	320 / 435	300/408	270/367
Fuel consumption measurement		•	•	•
Fuel tank capacity	1	800 / 1000	800 / 1000	800 / 1000
Urea tank capacity	I	100	100	100
DYNAMIC POWER		•	•	•
Data management				
TELEMATICS		0	0	0
Job management		0	0	0
Yield mapping		0	0	0
Remote Service		0	0	0
Operator assistance systems				
CRUISE PILOT		0	0	0
AUTO SLOPE		0	0	0
AUTO CROP FLOW		0	0	0
CEMOS AUTO CLEANING		0	0	0
CEMOS AUTO SEPARATION		0	0	0
CEMOS AUTO THRESHING		0	0	0
CEMOS DIALOG		0	0	0
GRAIN QUALITY CAMERA		0	0	0
Steering systems				
GPS PILOT CEMIS 1200		0	0	0
AUTO PILOT		0	0	0
LASER PILOT		0	0	0
FIELD SCANNER		0	0	0
Weights Without front attachment, straw chopper and chaff spreader,	kg	17000 / 20200 (TERRA	16700 / 19900 (TERRA	16700 / 19900 (TERRA
full fuel tank, full urea tank (weights can vary depending on	NY	TRAC) / 17900 (MONTANA)	TRAC) / 17700 (MONTANA)	TRAC) / 17700 (MONTANA)
equipment)				
Sound pressure level and vibrations				
Equivalent continuous A-weighted sound pressure level in various operating states	dB (A)	76-79	76-79	76-79
Vibration total value (vibration level), to which the upper limbs are exposed, standard EN 1032:2003	m/s ²	≤ 2.5	≤ 2.5	≤ 2.5
Effective value (vibration level) of the weighted acceleration,	m/s ²	≤ 0.5	≤ 0.5	≤ 0.5
to which the whole body is exposed, standard EN 1032:2003				

TRION			750/ 750 TERRA TRAC / 750 MONTANA	730 / 730 TERRA TRAC / 730 MONTANA	720 / 720 TERRA TRAC / 720 MONTANA
Tyres on drive axle		ø cat.	External width		
900/60 R38 CHO1	m	2.05	3.61	3.61	3.61
900/60 R32	m	1.95	3.61	3.61	3.61
800/70 R38 CHO1	m	2.05	3.47	3.47	3.47
IF 800/70 R38 CF01	m	2.05	3.48	3.48	3.48
IF 800/70 R32 CF01	m	1.95	3.48	3.48	3.48
800/70 R32 CH0	m	1.95	3.48	3.48	3.48
800/70 R32	m	1.95	3.48	3.48	3.48
710/75 R34	m	1.95	3.30	3.30	3.30
680/80 R38 CH01	m	2.05	3.20	3.20	3.20
IF 680/85 R32 CF01	m	1.95	3.22	3.22	3.22
680/85 R32	m	1.95	3.22	3.22	3.22

TRION			750/ 750 TERRA TRAC / 750 MONTANA	730 / 730 TERRA TRAC / 730 MONTANA	720 / 720 TERRA TRAC / 720 MONTANA
Tyres on steering axle		ø cat.			
750/85 R26 IMP ²	m	1.65	4.12	4.12	4.12
710/60 R30 IMP ²	m	1.65	4.08	4.08	4.08
VF620/70 R26 MI	m	1.50	3.50	3.50	3.50
620/55 R26 IMP MT	m	1.35	3.48	3.48	3.48
600/65 R28 IMP MT	m	1.50	3.50	3.50	3.50
500/85 R24 IMP MT	m	1.50	3.27	3.27	3.27
500/70R24 IMP	m	1.35	3.27	3.27	3.27

Front attachments

VARIO cutterbars		Vario 1230, Vario 1080, Vario 930, Vario 770, Vario 680, Vario 620, Vario 560, Vario 500
CERIO cutterbars		CERIO 930, CERIO 770, CERIO 680, CERIO 620, CERIO 560
Rapeseed equipment		For all standard and VARIO cutterbars, not available for CERIO cutterbars
Folding cutterbars		C 540, C 450
CORIO maize picker	rows	12, 8, 6
SUNSPEED	rows	16, 12, 8
MAFLEX		MAXFLEX 930, MAXFLEX 770, MAXFLEX 680, MAXFLEX 620, MAXFLEX 560
CONVIO FLEX		CONVIO FLEX 1230, CONVIO FLEX 1080, CONVIO FLEX 930, CONVIO FLEX 770
CONVIO		CONVIO 1230, CONVIO 1080, CONVIO 930, CONVIO 770
VARIO rice cutterbars		Available as HD version with rice harvesting accessory pack
CERIO rice cutterbars		Available as HD version with rice harvesting accessory pack
SWATH UP		SWATH UP 450
Front attachment variable speed drive (electrohydraulic)	rpm	300-430
Front attachment step drive	rpm	340. 430
Instant cutterbar brake		0



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¹ Applies to TRION MONTANA

² Not available for TRION MONTANA