

Complete new TRION combine range designed to 'Fit your Farm'

With the introduction of the new TRION range of combines, CLAAS has completed the final stage in the total replacement of its combine range, which started with the introduction of the new generation LEXION 8000/7000 combines in 2019.

The TRION is a completely new range of combines, with a total of 19 models available including not only conventional 5- and 6-straw walker machines, but also single and twin rotor hybrids, plus the availability TERRA TRAC and MONTANA hillside versions.

The wide range of farms, crops and climates in which CLAAS combines work around the world, mean that combines of this size have to be versatile. This is reflected in the extensive range of variants, features and options to ensure that the new TRION provides customers, whether they be a small mixed arable farm looking for a simple, straightforward machine or a large arable unit looking for a more technically advanced combine to maximise output, with a TRION model that can be specified to truly 'Fit your Farm'.

While at its heart the new TRION relies on well proven CLAAS straw-walker and HYBRID threshing technology, it also incorporates many features that set completely new performance standards on combines of this size.

Several key new features within the TRION set it apart:

- The extensive range of 19 models available
- The range of threshing systems available: straw walker, single rotor HYBRID and twin-rotor HYBRID
- The massive separation area for high-capacity threshing
- JET STREAM standard across all models
- New British-built Cummins engines that provide optimum power for the size of combine
- Wide availability of wheeled, tracked TERRA TRAC and MONTANA hillside models
- A new design of CLAAS cab that brings higher cab comfort standards
- Tank capacities that set a new standard for this size of combine
- Extensive range of chopping options

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Extensive model range

Within the 19 models available, the base TRION range comprises of two 500-range 5-straw walker models, three 600 range 6-straw walker models, including the TRION 640 which provides a new entry point into the 6-straw walker market, and three 700-range HYBRID models, of which two have a single rotor and one has twin rotors.

Common to all TRION models is the well-proven APS primary threshing system designed to thresh out up to 90% of grains, leaving just the harder to thresh grains for the secondary separation system. For greater throughput capacity, TRION 500 and 700 range machines are fitted with a 1,420mm wide threshing system, increasing to 1,700mm for TRION 600 models. These are wider than on previous TUCANO models, which were either 1,320mm or 1,580mm wide.

For the TRION, the APS system comprises of a 450mm diameter accelerator and a 600mm diameter closed threshing drum, which again is some 33% larger than the threshing drum on the TUCANO. As a result, the concave area is also greater, with the concave on TRION 600 models being 31% larger than on the TUCANO 450, and the concave on TRION 700 models 9% bigger than on the TUCANO 580. The front concaves are interchangeable and the speed of all three drums is synchronised and adjusted using CEBIS, which is also used for adjusting the concaves, which are also synchronised.

To keep maintenance downtime to a minimum, the completely redesigned and less complex drive system for the TRION means that there are now six less belts on HYBRID models and three less on straw walker machines compared to the previous TUCANO range. As on the new LEXION, the drive system is based on that used in the JAGUAR which ensures a more positive, smooth engagement of the threshing and auger systems.

Secondary separation

All 5- and 6-straw walker TRION 500 and 600 models come as standard with the well proven CLAAS Multifinger Separation System (MSS) which evenly fluffs the straw for greater separation efficiency, especially in difficult conditions. The straw walkers use an open walker design and are 4.4m long with four steps. The total separation area for TRION 500 models is 6.25m² rising to 7.48m² for the TRION 600, which is a considerable increase on the TUCANO and the largest of any combines of this size on the market.

TRION 730/720 HYBRID models come with a single 4.2m long and 570mm diameter rotor with 6 grates, while the larger TRION 750 has twin 4.2m long and 445mm diameter rotors with 5 grates. A new feature for combines this size is the hydraulic adjustment of four rotor flap 'bomb doors' and rotor speed is infinitely adjusted independently of the APS system using CEBIS.

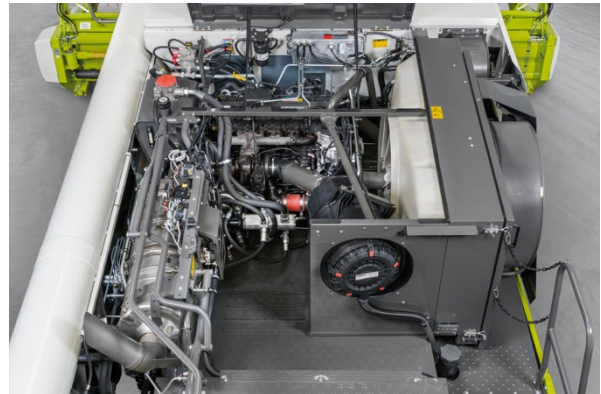
Another new feature on CLAAS combines of this size is the extremely efficient JET STREAM cleaning system using six or eight turbine fans, meaning this is now used across the complete CLAAS range.

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TRION 600/500 models have the option of 3D sieves with 4D sieves also available on TRION 700 models. Other options also include AUTO SLOPE fan speed adjustment, CRUISE PILOT, AUTO CROP FLOW and either CEMOS DIALOG or full CEMOS AUTOMATIC.

Cummins engine power

Power for the TRION range comes from British built 8.9 or 6.7 litre Cummins 6-cylinder Stage V standard engines. These have been chosen not only on account of the optimum range of power outputs for across the whole TRION range, but also due to their ideal weight, the level of engine technology they provided, the fact that they are an ideal size for the combine and their layout means that they are easy to access and maintain.



As standard, all TRION models come with DYNAMIC POWER, which by reducing engine power output when not under load, for instance when not running the chopper or unloading, can cut fuel costs by around 10%. The rated engine speed is just 1,900rpm dropping to 1,650 for road travel, so further helping to save fuel.

Extended TERRA TRAC and MONTANA models

No two farms are the same and topography can vary considerably. To accommodate this an unprecedented six TRION models are available with either TERRA TRAC crawler tracks or MONTANA hillside compensation.

As farmers pay more attention to the care of their soils, to meet customer demand for tracks on smaller combines, TERRA TRAC is now available on the 5-straw walker TRION 530, making this the first CLAAS combine this size to have this option. The TERRA TRAC system used for the TRION is similar to the 3rd generation TERRA TRAC system on the LEXION, with full suspension and a road speed of 30kph.

The TRION 530 is also the start point for versions with MONTANA hillside slope compensation, which again has been extended to more models than previously. Buyers can opt for having just lateral slope compensation of up to 18%, or for both lateral and longitudinal compensation of up to 6% when the optional MULTI CONTOUR is ordered. POWER TRAC all-wheel drive is also an option on all MONTANA models.

Latest in cab design

Greater operator comfort is ensured in the new design of cab that is fitted to the TRION range. Its spacious design has both more leg and head room. The larger windscreen and narrower A-pillars give the operator excellent visibility over the cutterbar. Features include new seats that can swivel 30 degrees each way and footrests to ensure a comfortable seating position.

The 12-inch CEBIS touchscreen colour monitor is easily adjusted independently of the armrest. As previously, in addition to using the CEBIS touchscreen, all the main combine functions can also be activated using buttons on the armrest. The CEBIS terminal also now accommodates the controls for CEMOS DIALOG and CEMOS AUTOMATIC when fitted.

Four automatic steering systems are available for the TRION: LASER PILOT on the cutterbar, the cab mounted FIELD SCANNER, AUTO PILOT on maize headers or the satellite-based GPS PILOT, which is controlled using the new CEMIS 1200 terminal.

High-capacity tanks

High capacity combines need high capacity tanks, and here again the TRION sets a new standard for this size of combine. Tank sizes range for 8,000 litres on the TRION 520 up to a class-leading 12,000 litres on the TRION 750. The unloading auger swings through 105 degrees for easy visibility and unloading rates range from 90 to 130 litres/second.

A new option is the availability of a pivoting spout, controlled using the CMOTION control lever. Being able to adjust the throw of grain from the spout will be particularly useful when working on side-hills or with deeper trailers.

Widespread chopping options



Turning to the back of the combine, again there is a wide selection of straw-chopper options to meet every need, from a standard mechanically controlled chopper through to the advanced electronically controlled radial power spreader chopping system with deflectors for wind compensation.

In addition to the STANDARD CUT chopping unit, which on narrow-body TRION 700 and 400 models has 52 knives and 64 knives on the TRION 600, there is the option of the SPECIAL CUT chopper with 72 or 88 knives respectively.

Cutterbar options

The new TRION can be used with the full range of CERIO or the new VARIO range of auger type cutterbars, plus the CONVIO and CONVIO FLEX draper type cutterbars, in widths up to 12 metres. As standard, the TRION comes with automatic cutterbar detection, so will always know what cutterbar is fitted and the setting previously used.

The wide range of TRION models:

TRION	Primary separation	Secondary separation	Max. engine output (ECE R120)	Grain tank
520	APS <ul style="list-style-type: none"> 1,420 mm channel width 450 mm pre-accelerator 600 mm threshing drum 	5 straw walkers	258 hp	8,000 l
530			306 hp	9,000 l (10,500 l)*
530 MONTANA				
530 TERRA TRAC				
640	APS <ul style="list-style-type: none"> 1,700 mm channel width 450 mm pre-accelerator 600 mm threshing drum 	6 straw walkers	306 hp	9,000 l
650			354 hp	10,500 l
650 MONTANA				
650 TERRA TRAC			408 hp	11,000 l
660				
660 MONTANA				
660 TERRA TRAC				10,500 l
720 MONTANA	APS <ul style="list-style-type: none"> 1,420 mm channel width 450 mm pre-accelerator 600 mm threshing drum 	ROTO PLUS single rotor	367 hp	10,500 l
720 TERRA TRAC				10,500 l (12,000 l)*
730				11,000 l (12,000 l)*
730 MONTANA				11,000 l
730 TERRA TRAC			408 hp	11,000 l (12,000 l)*
750				12,000 l
750 MONTANA				11,000 l
750 TERRA TRAC		ROTO PLUS twin rotor	435 hp	12,000 l

*optional

