



Tractors

ARION

660 650 630 610

550 530 510

CLAAS



ARION 600 / 500. Freedom to do more.

We've listened to you and equipped the new ARION with plenty of new features to lighten your daily workload and provide greater comfort and convenience: a new top model with a maximum output of 205 hp, a new CEBIS display with touch operation and a new armrest in the CIS+ version. Together with its superior driving comfort and intuitive user interface, combined with intelligent and efficient powershift and continuously variable transmissions, you'll be impressed by the new ARION 600 / 500 – freedom to do more.





Innovations	6
CLAAS POWER SYSTEMS	8
Engine	10
CMATIC	14
HEXASHIFT	22
Construction	28
PTO	32
Hydraulics	34
Rear linkage	36
Front linkage	38
Front loaders	40
Cab	42
Versions	44
CEBIS version	46
CIS+ version	52
CIS version	54
CIS displays	56
CSM headland management	58
Comfort	60
ISOBUS	64
Steering systems	66
Job management, TELEMATICS	68
Maintenance	70
CLAAS Service & Parts	72
Features	74
Specifications	75

Learn more about how we develop and manufacture CLAAS tractors:

tractors-making-of.claas.com

The right choice in any situation.

Three equipment options.

CIS. Everything you need.

With HEXASHIFT powershift transmission, mechanical spool valves and CIS display

NEW: CIS+. Simply more.

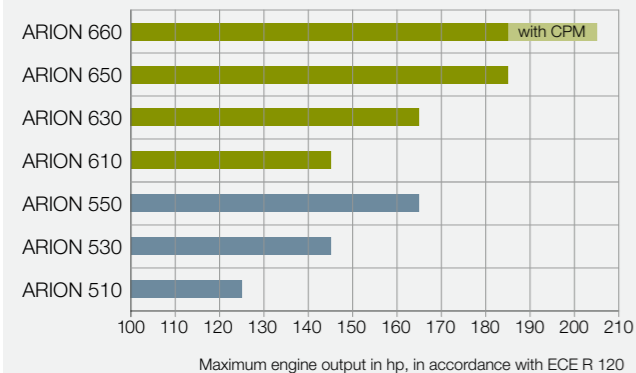
With HEXASHIFT powershift transmission or CMATIC continuously variable transmission, electronic spool valves and CIS colour display.

NEW: CEBIS. Simply everything.

With HEXASHIFT powershift transmission or CMATIC continuously variable transmission, electronic spool valves, CEBIS terminal with 12" touch display and additional functions.



Model overview ARION 660-510.



NEW: Extended product range

- All equipment options available from 125 hp
- Powerful 6-cylinder models from 145 hp in the ARION 600
- Lively and manoeuvrable: ARION 500 with 4-cylinder engines and 125 to 165 hp
- ARION 660: up to 20 hp extra power for transport and PTO work with CPM
- Versatility on the move with 1.95 m diameter tyres (42" rim) from 165 hp

NEW: PROACTIV front axle suspension.

- New CLAAS suspension kinematics:
 - Very long connection arm with pivot point on the transmission
 - Wide suspension cylinders with active roll stabilisation on bends for outstanding vehicle stability
- Double-acting suspension actively reduces unwanted compression and rebound on braking and acceleration
- Dynamic steering with adjustable steering ratio



NEW: HEXASHIFT powershift transmission functions.

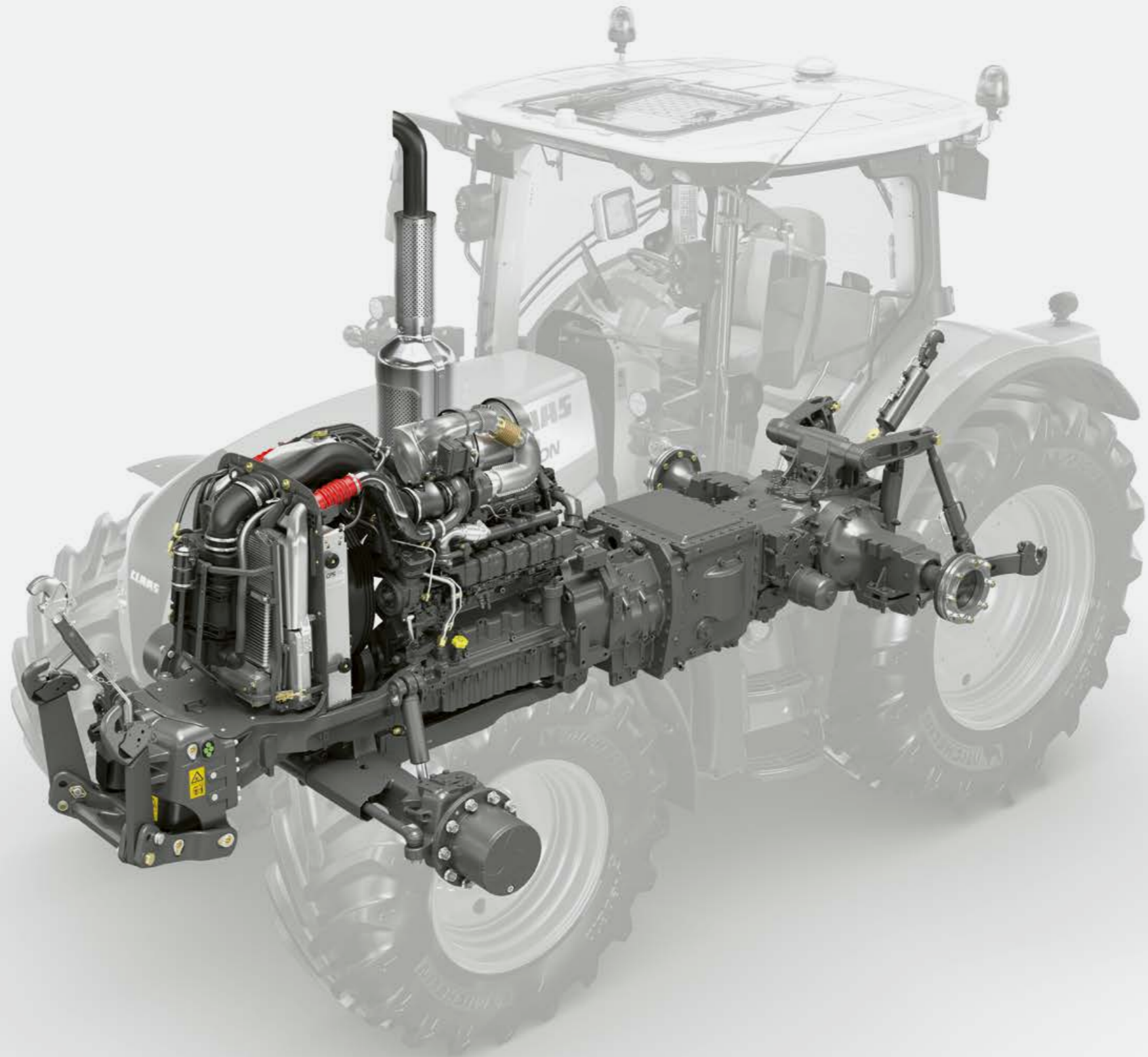
- Comfortable and highly efficient:
 - SMART STOP: stop with the brake pedal without using the clutch
 - Automatic gear changing and six powershift speeds
 - HEXACTIV auto-shift function with cruise control
 - Disable cruise control and engine speed memory using the throttle pedal
- REVERSHIFT shuttle lever with electronic parking brake

NEW: CMATIC continuously variable transmission functions.

- CMATIC continuously variable transmission available in CEBIS or CIS+ version
- REVERSHIFT shuttle lever with electronic parking brake
- Quickly customised for the current job by changing the engine droop between the "Eco" and "Power" settings simply by pressing a button.
- Aggressiveness of clutchless reverser is adjustable
- Cruise control is easily deactivated using the accelerator pedal or cruise control button

Optimised drive for outstanding results.

The CLAAS machinery development programme constantly strives to maximise efficiency, improve reliability and optimise cost-effectiveness. CLAAS POWER SYSTEMS (CPS) bring together top-quality components to create a drive system that sets new standards – and always delivers maximum power when it is needed. CPS is ideally matched to the working system, featuring fuel-saving technology that quickly pays for itself.



Constant output is just as important as pure power.

Strong at heart.

- DPS Powertech engines with 4.5 or 6.8 l cubic capacity
- ARION 500: 4-cylinder engines with twin turbo a smaller turbocharger with an extremely fast response time and a wastegate turbocharger)
- ARION 600: 6-cylinder engines with VGT turbocharger
- Common rail injection (1,800 bar)
- 4-valve technology and intercooler
- ARION 600: two engine idling speeds (650 and 800 rpm) with automatic adjustment to reduce stationary fuel consumption
- Visctronic fan control

The CLAAS-specific engine performance curve provides full torque in a wide engine speed range, guaranteeing constant output and power delivery when they are needed. This makes it easy to save fuel while working at a low engine speed and maximum torque with the ECO PTO, or to work at rated speed with a full reserve.

NEW: High-performance turbocharger.

The VGT turbo in the ARION 600 provides the optimum charge pressure at all engine speeds by automatically adjusting the paddle angle. In the ARION 500 the rapid response time of a small turbocharger at low speeds has been combined with the performance of a larger wastegate turbocharger to give torque and performance throughout the entire rev band.

Thanks to load- and speed-dependent control, the 6-cylinder and 4-cylinder engines all deliver high torque even at a low engine speed.



CPS | CLAAS POWER SYSTEMS

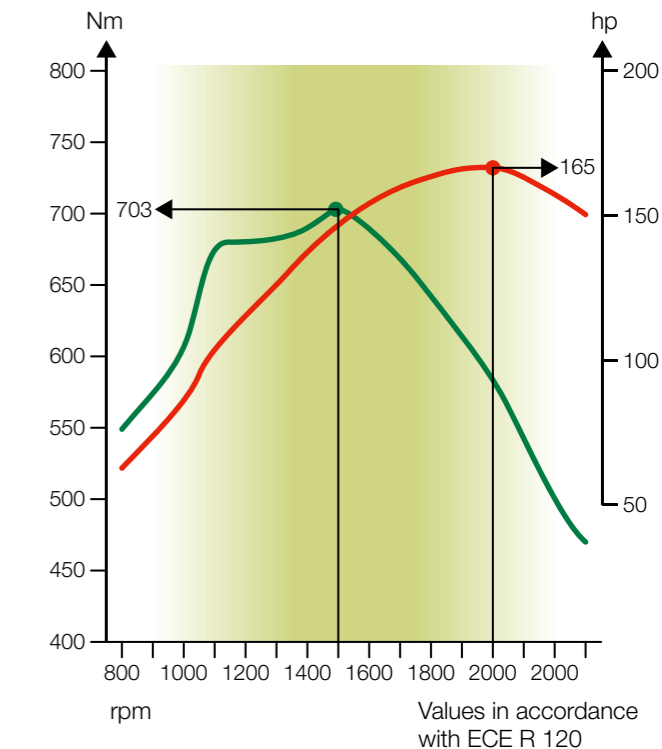
NEW: ARION 660 CMATIC.

The ARION 660 CMATIC delivers up to 205 hp thanks to the intelligent CLAAS POWER MANAGEMENT (CPM) electronic control system. 20 hp of additional boost power is available for PTO and transport work, and also for the fan drive, significantly increasing the performance and versatility of the ARION 660 CMATIC.

Visctronic – economical fan control.

With Visctronic electronic fan control the fan speed can be accurately adjusted based on values for engine, intake air and transmission temperature, engine speed and operating status of the air conditioning compressor. The reduced fan speed lowers the noise level and saves valuable fuel.

ARION 630



ARION	Maximum output (hp) ECE R 120
660	185 + 20 with CPM ¹
650	185
630	165
610	145
550	165
530	145
510	125

¹ CPM (CLAAS POWER MANAGEMENT)

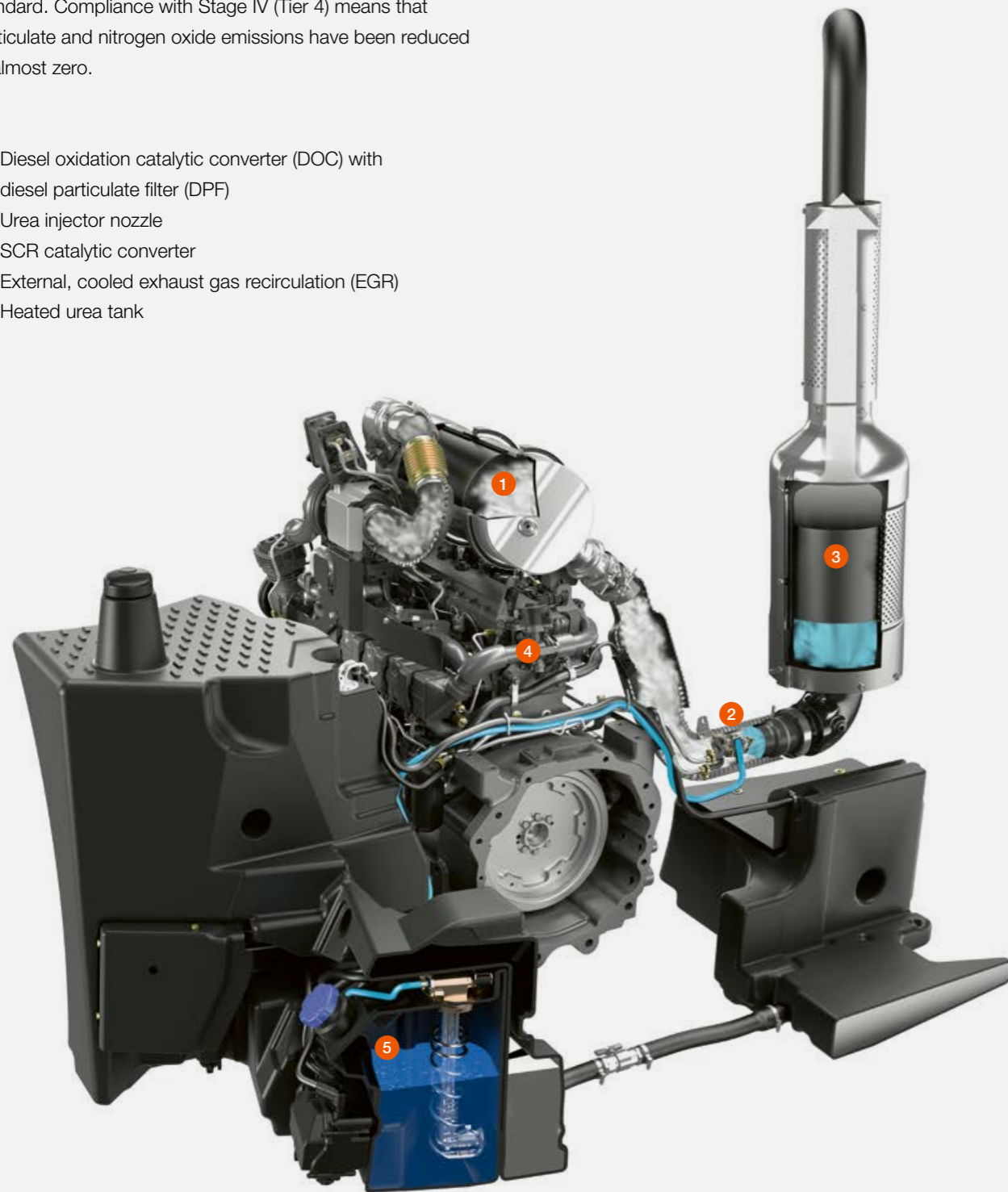


Cleaning up.

Stage IV (Tier 4).

ARION 600 / 500 tractors meet the Stage IV (Tier 4) emissions standard. Compliance with Stage IV (Tier 4) means that particulate and nitrogen oxide emissions have been reduced to almost zero.

- 1 Diesel oxidation catalytic converter (DOC) with diesel particulate filter (DPF)
- 2 Urea injector nozzle
- 3 SCR catalytic converter
- 4 External, cooled exhaust gas recirculation (EGR)
- 5 Heated urea tank



CPS | CLAAS
POWER
SYSTEMS



NEW: SCR and DPF – the system.

In ARION 600 / 500 tractors, several exhaust treatment systems have been combined into one:

Cooled exhaust gas recirculation (EGR).

With EGR some of the engine exhaust gas is mixed with the intake air, reducing the speed of combustion in the engine and the temperatures generated. Targeted control of combustion reduces diesel and urea consumption.

NEW: Exhaust gas filters and urea to minimise emissions.

The tried and tested combination of diesel oxidation catalytic converter (DOC) and diesel particulate filter (DPF) reduces hydrocarbon and soot levels in the exhaust gases. The DPF is also maintenance-free and regenerates passively during normal operation as you work. You hardly notice it.

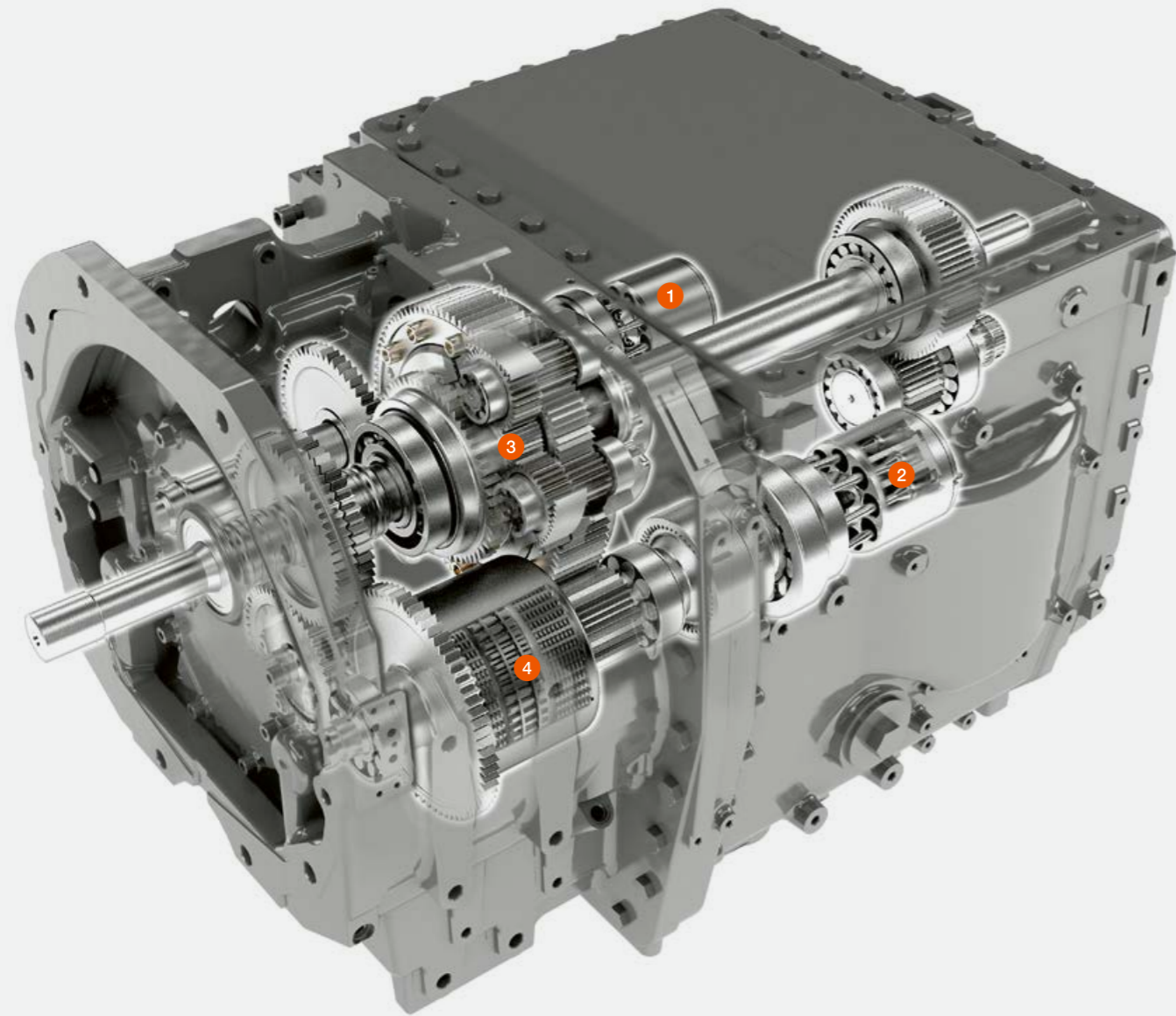
SCR stands for selective catalytic reduction, a process in which nitrogen oxides remaining in the exhaust gas are converted into water and pure nitrogen. This is achieved by using a synthetic aqueous solution of urea (AdBlue®¹), which is carried in an additional, heated tank. Thanks to the upstream EGR, urea consumption in ARION 600 / 500 tractors is impressively low.

Well integrated exhaust gas aftertreatment

The DPF is positioned under the bonnet, immediately behind the turbocharger, because it needs high exhaust temperatures to produce an optimum reaction. The SCR catalytic converter is an integral part of the exhaust system and is located on the right-hand side of the tractor immediately behind the A-pillar of the cab. There is no impact on the driver's field of vision or machine accessibility.

¹ AdBlue® is a registered trademark of the VDA.

CMATIC.
Simple, convenient and continuously variable.

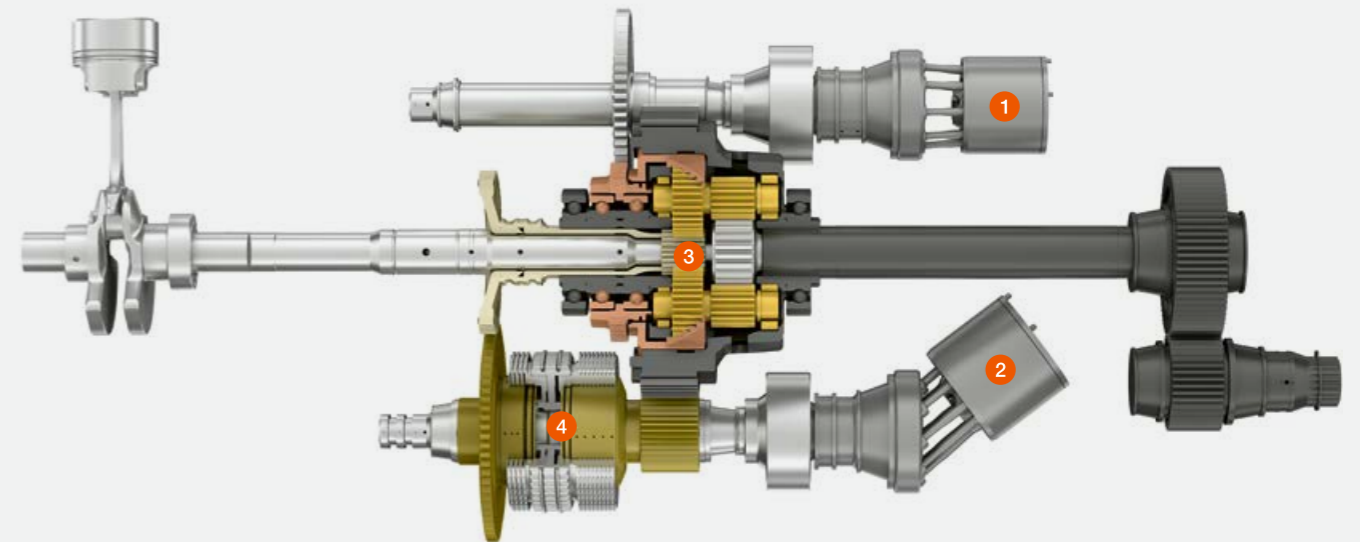


- 1 Hydrostat 1
- 2 Hydrostat 2
- 3 Stepped planetary transmission
- 4 Clutches for changing ratio

CPS | CLAAS
POWER
SYSTEMS

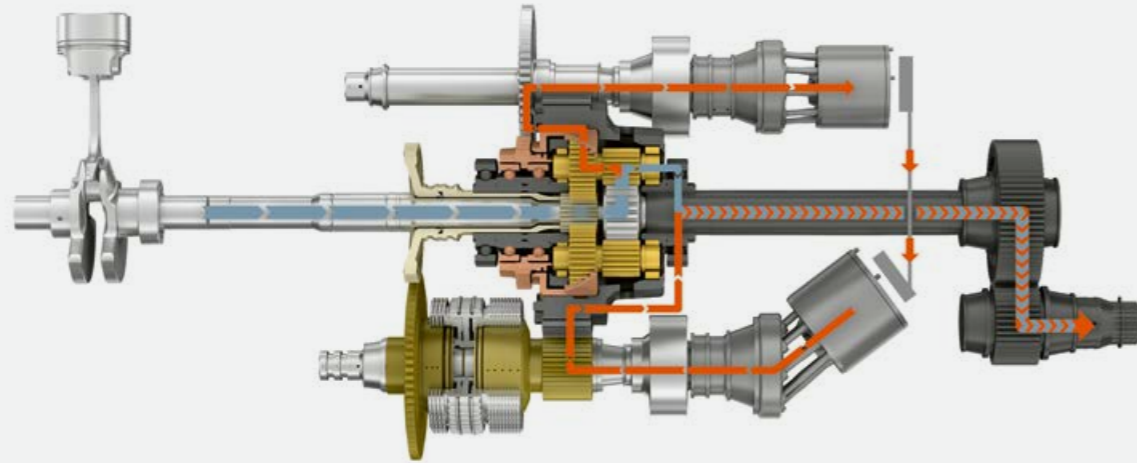
The continuously variable EQ transmission from CLAAS.

The ARION 600 / 500 CMATIC comes with the continuously variable EQ 200 / 220, developed and built by CLAAS. This intelligent combination of stepped planetary gearbox, clutch unit and two hydrostatic units guarantees optimum power flow. The transmission is very simple in structure, with two automatically shifted drive ratios.



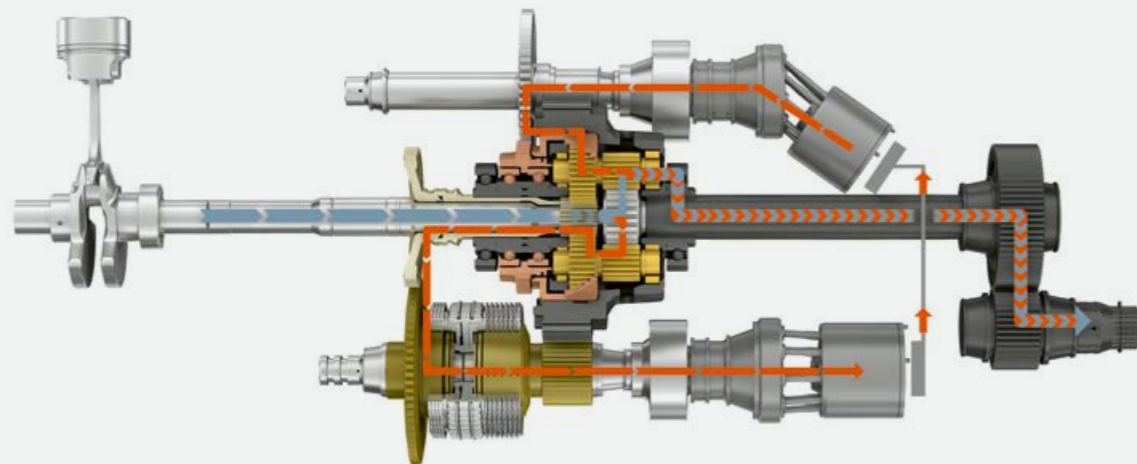
CMATIC. The technology.

Drive ratio 1



Hydrostat 1: pump, hydrostat 2: engine

Drive ratio 2



Hydrostat 1: engine, hydrostat 2: pump

- — — Mechanical power flow from the engine
- — — Hydraulic power flow
- · · · · Combined power flow (mechanical + hydraulic to transmission output)

Drive ratio 1:

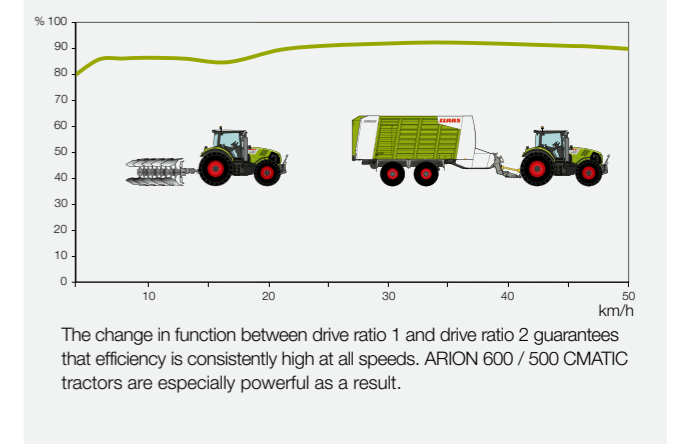
In the first drive ratio the tractor can start up, reverse or remain stationary in powered zero mode. (There are no mechanical shifting operations in the transmission.) The stepped planetary transmission splits the power coming from the engine (from the left) into a mechanical component and a variable, hydrostatic component. When the tractor accelerates, the rotational speeds of the two clutch shafts become closer and closer until they are the same. The drive ratio changes automatically at this point without the driver noticing.

Drive ratio 2:

In the second drive ratio the power flow and functions in the transmission change. The hydrostats switch function. The stepped planetary transmission is intelligently connected with the hydrostats by means of the clutches. As a result, the stepped planetary transmission splits the power coming from the engine (from the left), then combines it again downstream of the hydrostats.

Superior transmission control.

Powerful acceleration, smooth deceleration and a fast response to changes in load: CMATIC powertrain management shows its maturity in all conditions and for every task. Stay relaxed and focused throughout the working day so you can concentrate on more important things – CMATIC does the rest for you.



Efficient and user-friendly.

With engine speeds of 1,500 rpm at a top speed of 50 km/h and 1,400 rpm at 40 km/h, ARION 600 / 500 tractors also demonstrate their full capabilities in transport operations. If the accelerator is not depressed, the transmission is in powered zero mode and maintains its position reliably without creeping or rolling. This means that the tractor can start up safely and easily at steep field entrances or road junctions, even with a full load.

The benefits for you:

- Completely smooth acceleration from 0 to 50 km/h (or 40 km/h), even under maximum load
- Low fuel consumption on the road as maximum forward speed is reached at just 1,500 rpm
- Powered zero mode makes it easy to stop on slopes and start off again without using the service brake
- Drive ratio changes smoothly and automatically
- You are always in the right drive ratio
- Two drive ratios, which change the power flow and processes within the transmission – consistently high efficiency levels for low fuel consumption and maximum versatility in all applications

CMATIC.

Optimised settings.

Simple, straightforward operation.

The CMATIC transmission has three operating modes: accelerator pedal, drive lever and manual mode.

In the first two modes, forward speed can be controlled by the accelerator pedal or drive lever. The engine speed and transmission ratio are adjusted automatically – for optimum efficiency and optimised fuel consumption. In manual mode, the driver chooses the engine speed and transmission ratio. Automatic engine and transmission control is not active.

Accelerator pedal or drive lever.

You can switch between accelerator pedal and drive lever mode while the tractor is moving by pressing a button on the armrest. The active mode is displayed in the CEBIS or CIS.



NEW: Engine droop at the push of a button.

The engine droop value can be used for quick and easy regulation of the engine speed under full load. The CEBIS or CIS terminal clearly displays the engine speed at which the transmission reduces the speed.

When the engine speed memory is active, e.g. for PTO work, you can specify the difference from the saved engine speed at which the transmission ratio is reduced.

Two engine droop values can be saved for engine droop in accelerator pedal and drive lever mode. They are retrieved by the quick-access facility using the F buttons. With these values, known as "Eco" and "Power", the droop can be rapidly adjusted to the task in hand, e.g. when moving from the road to the field. The engine droop for the engine speed memory is defined separately.

AUTO

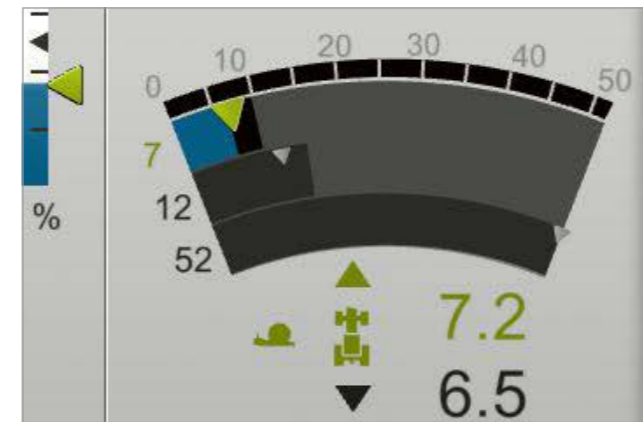


The current driving mode is shown on the CEBIS or CIS display



Engine droop setting for "Eco" and "Power", and the engine speed memory

CMATIC. No need to stop.



Tailor-made speed ranges.

With the CMATIC transmission, three speed ranges can be pre-selected in both directions of travel. The active range is displayed in the CEBIS or CIS and can be changed while the tractor is in motion using two buttons. The lower the maximum preset value for the range, the more accurately the forward speed can be controlled.

A cruise control speed can be saved for all the ranges while the tractor is moving by pressing the button on the drive lever. The cruise control speeds can also be pre-set on the CEBIS or CIS terminal.

CMATIC allows drivers to create their own profiles according to the job in hand. Intelligent CMATIC transmission technology enables you to use the full power of your ARION economically and productively – with maximum operator comfort.

Stopping power.

In accelerator pedal mode, the CMATIC transmission offers different ways of adapting braking to the job in hand.

Increase the engine braking effect:

When the accelerator pedal is released and the multifunction control lever is pulled back, the transmission ratio is reduced, causing the engine speed to increase. This reduces brake wear.

Anti-jackknife brake:

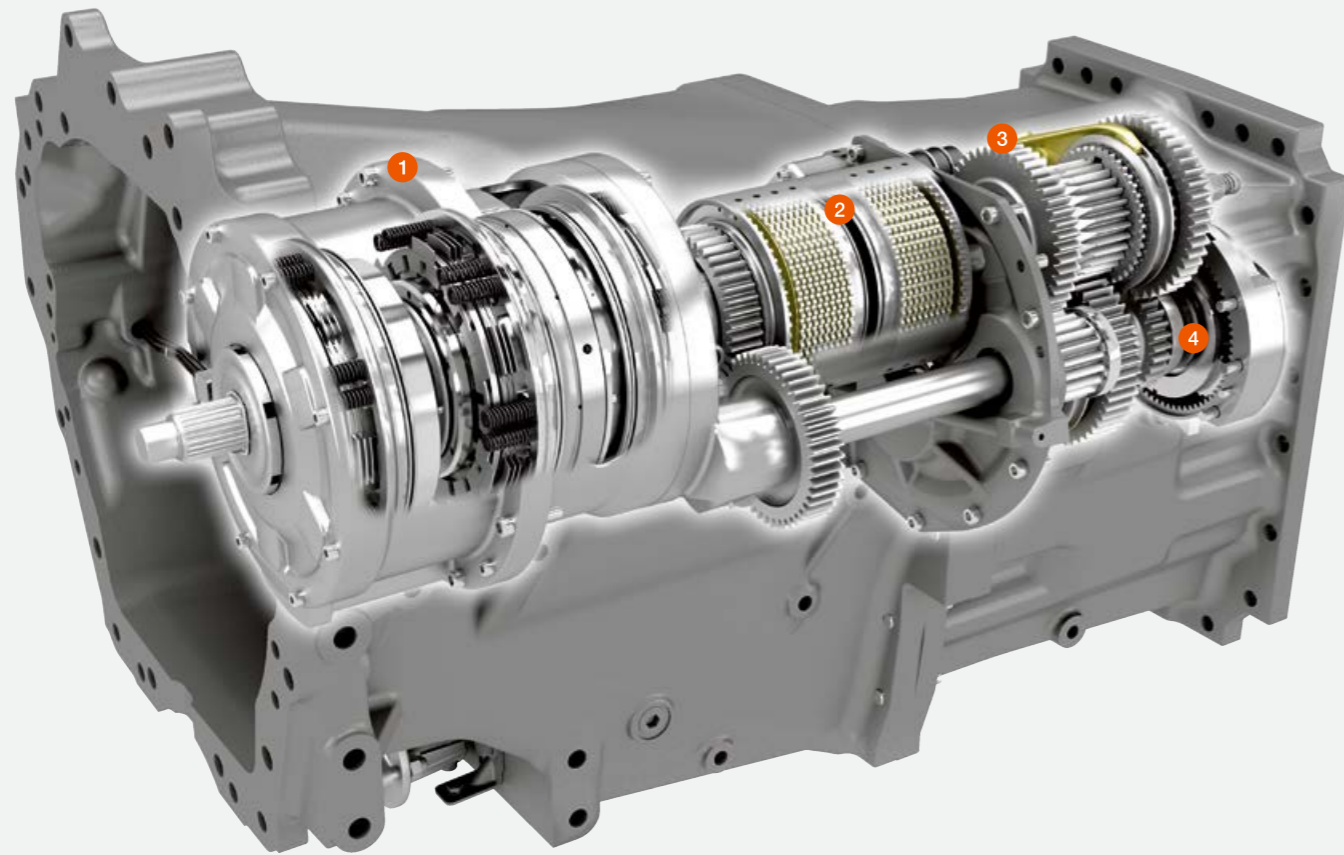
When the trailer is braked with the service brake, you can accelerate at the same time using the accelerator pedal or by pressing the multifunction control lever. This maintains the distance between the tractor and trailer on steep hills and increases safety. These functions can be used whether the tractor is stationary or moving.



CIS+ operation
1 Change range
2 Activate cruise control

HEXASHIFT.

Efficient powershift transmission.



- 1 HEXASHIFT 6-speed powershift module
- 2 REVERSHIFT hydraulic reverser
- 3 Electrohydraulically actuated 4-speed range shift
- 4 Optional creep gears

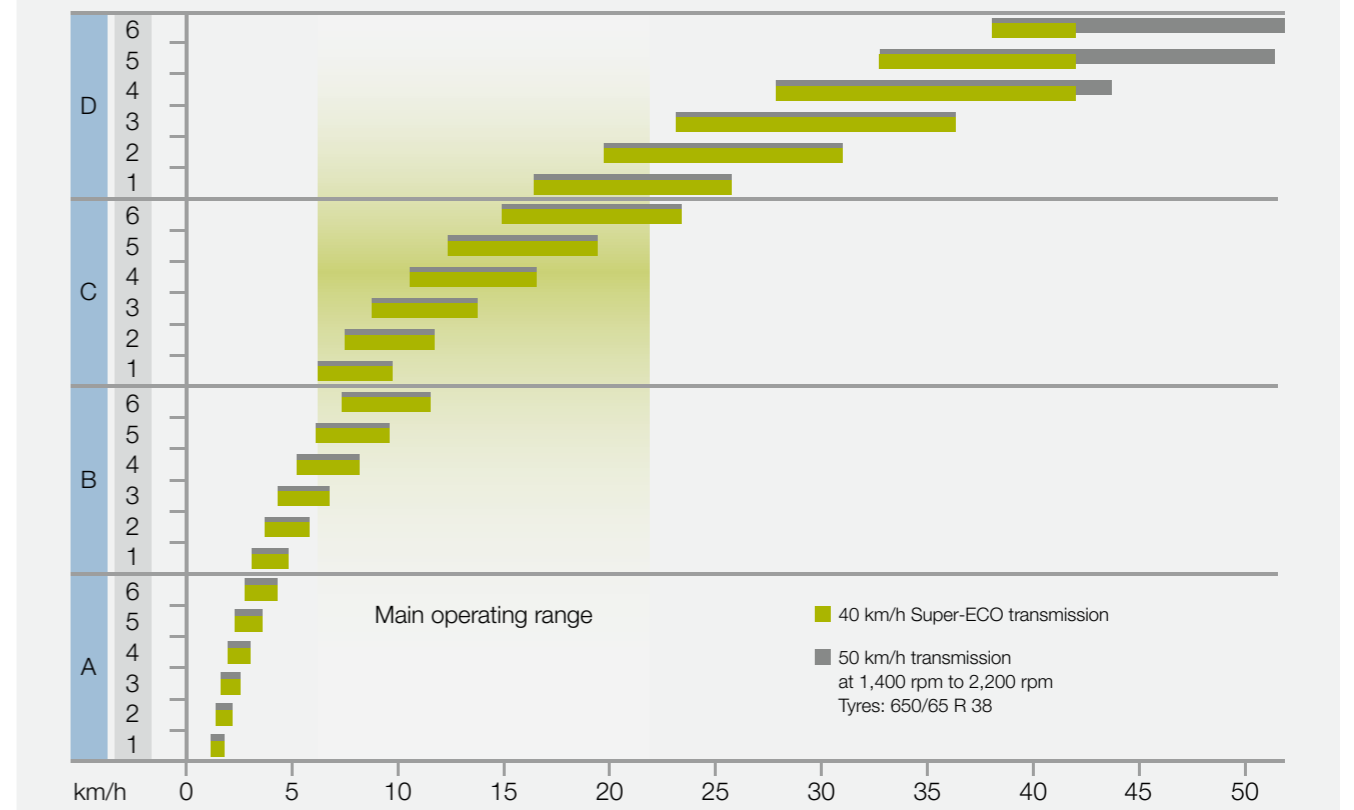
CPS | CLAAS
POWER
SYSTEMS

The HEXASHIFT powershift transmission from CLAAS.

With HEXASHIFT you can shift effortlessly through all six powershift speeds and the four automatic ranges using your fingertips, or you can shift automatically using the HEXACTIV auto-shift function.

Overlapping powershift speeds allow the full output potential of the engine to be utilised and provide smooth range shifting on the road.

HEXASHIFT: 24 gears for optimum gear spacing



Clear benefits.

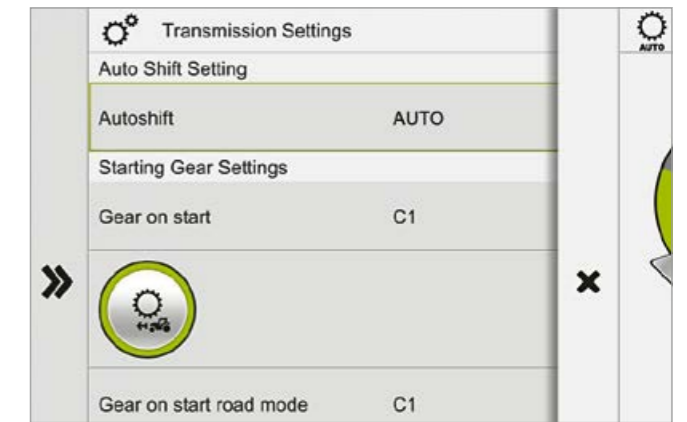
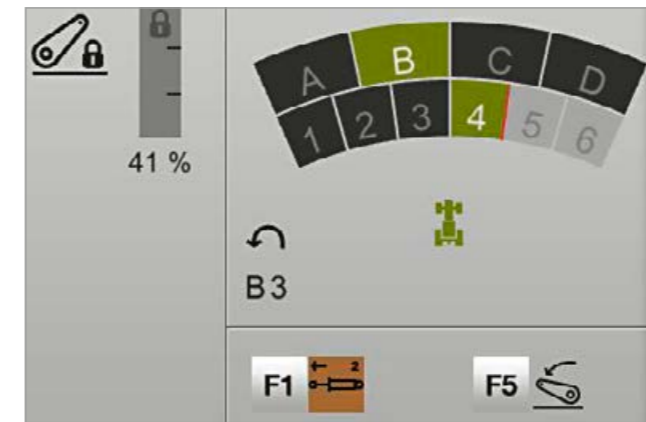
- No need to use the clutch when changing range
- Good gear spacing in all ranges
- Excellent efficiency in the field and on the road for low fuel consumption
- Creep gear options down to 110 m/h
- Convenient adjustment options with CIS or CEBIS
- High operating comfort with the DRIVESTICK or CMOTION
- CLAAS powertrain management for smooth changes in range and powershift operations
- NEW: Powershift transmission functions:
 - SMART STOP: stop with the brake pedal without using the clutch
 - HEXACTIV auto-shift function with cruise control
 - Disable cruise control and engine speed memory using the throttle pedal

- NEW: REVERSHIFT shuttle lever with electronic parking brake
- NEW: REVERSHIFT reversing function on the ELECTROPILOT four-way control lever

HEXASHIFT is available in three different versions:

- Super ECO 40 km/h at 1,650 rpm
- ECO 40 km/h at 1,950 rpm
- ECO 50 km/h at 2,000 rpm

HEXASHIFT. Always in the right gear.



Intelligent transmission settings.

When using the clutchless reverser, you can even change gear automatically when you want the forward speed to be different from the reverse speed. At the headland, you can also engage a pre-selected gear simply by pressing a button. This means that you are always moving at the same speed on the headland. The aggressiveness of the REVERSHIFT clutchless reverser is also adjustable in nine steps (-4 to +4), providing optimum ride comfort in all situations.

HEXACTIV start-up and approach gears.

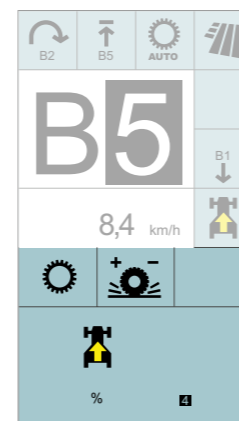
The start-up gear engaged when starting the engine is freely selectable between A1 and D1. The specified start-up gear is engaged every time you start the engine. A separate approach gear can also be selected when operating with the HEXACTIV auto-shift function activated. This gear is automatically engaged as soon as the tractor comes to a standstill.

Automatic transmission control.

There's no need to move through every gear (as in a conventional powershift transmission) when shifting between ranges – the HEXASHIFT transmission automatically selects the most appropriate gear depending on forward speed and load, regardless of whether you are driving manually or automatically. If you press the clutch in range D, the transmission automatically adjusts the powershift speed when the clutch is re-engaged. This can be very useful, e.g. when approaching a junction.



Intelligent gear selection on the A-pillar display in the CIS version



REVERSHIFT progressivity in the CIS

NEW: SMART STOP and cruise control.

With the SMART STOP function, ARION 600 / 500 tractors can be brought to a standstill by pressing the brake, without needing to use the clutch pedal. This lightens the driver's workload considerably, especially during tasks which involve a lot of stopping and starting such as making round bales and front loader work. SMART STOP is easily activated once only in the CEBIS or CIS. The HEXACTIV auto-shift function can be equipped with a cruise control function. Instead of a fixed engine speed, a target forward speed is specified by pressing a button and the tractor maintains this speed by adjusting the engine speed and gear ratio.



HEXASHIFT. HEXACTIV changes gear for you.



HEXACTIV auto-shift function.

Because you've got more important things to do, you can leave the HEXACTIV to change gear automatically. You can configure the HEXACTIV auto-shift function with a wide range of well-designed functions according to your preferences and the job in hand.

- Fully automatic: HEXACTIV shifts for variations in engine speed depending on engine load, vehicle speed and the driver's preference / accelerator position
- PTO mode: HEXACTIV shifts in such a way as to ensure the engine speed / PTO speed remain as constant as possible
- Manual mode: HEXACTIV shifts according to a fixed engine speed which is programmable by the driver

You can choose between three modes for the auto-shift function in CEBIS or CIS.





Setting the three modes in CEBIS:









Fully automatic mode

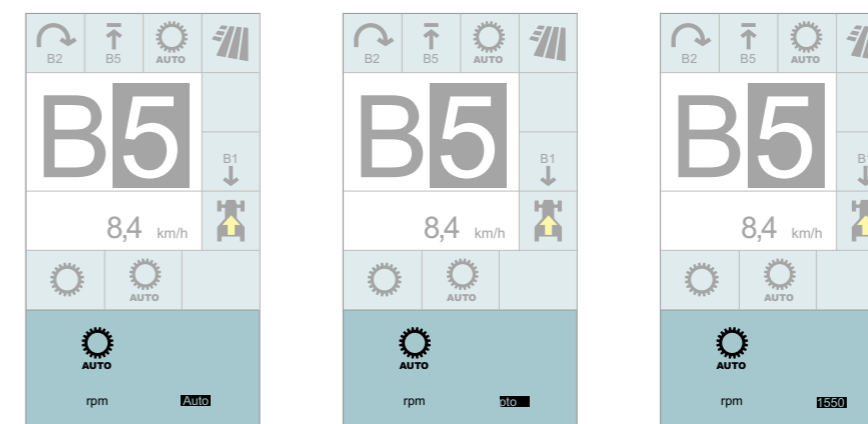
PTO mode

Manual mode

Manual shifting	Driving strategies	Mode	Shifting
	 <p>Manual shifting in field mode</p>		<ul style="list-style-type: none"> - Range shifting (A-D) by pressing the DRIVESTICK or CMOTION through the stop - Powershift shifting (1-6) by tapping the DRIVESTICK or CMOTION
	 <p>Manual shifting in transport mode</p>		<ul style="list-style-type: none"> - Shift through all 24 gears (A1-D6) by tapping the DRIVESTICK or CMOTION

HEXACTIV auto-shift function	Driving strategies	Mode	Shifting
	 <p>Automatic shifting in field mode</p>	 	<ul style="list-style-type: none"> - Range shifting (A-D) by pressing the DRIVESTICK or CMOTION through the stop - Automatic powershift shifting (1-6)
	 <p>Automatic shifting in transport mode</p>	 	<ul style="list-style-type: none"> - Shift all 24 gears (A1-D6) automatically

Setting the three modes in the colour CIS:



Fully automatic mode

PTO mode

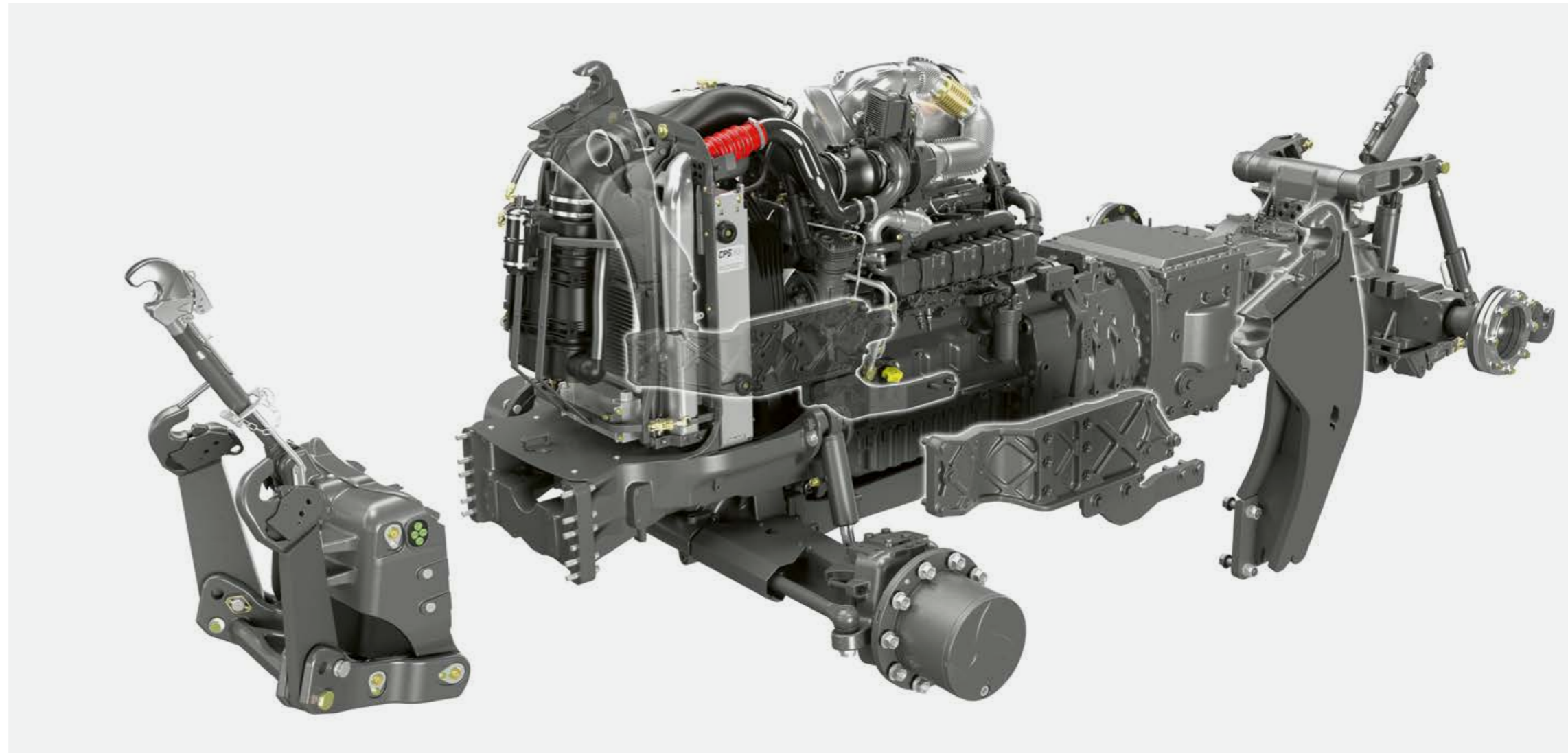
Manual mode

CLAAS tractor concept for greater flexibility.

Smart ideas throughout.

CLAAS offers a range of factory-installed pre-fittings and equipment specially designed for ARION 600 / 500 tractors to make the tractor as versatile as possible.

With suitable pre-fittings, a front loader or front linkage can be retrofitted at any time. As an option, a robust half frame can be fitted along the engine between the front axle carrier and transmission. This frame absorbs forces as they arise and, at the same time, can be used as a coupling point for the front loader brackets. These are simply bolted to the half frame and can therefore be retrofitted at any time. If the ARION is equipped with a front linkage or a front loader ex factory, the half frame is included in the scope of delivery. Naturally, access to all maintenance points is guaranteed whatever equipment is fitted.



CLAAS tractor concept:

A long wheelbase combined with optimum weight distribution (50% front / 50% rear) and a compact overall length guarantee superb flexibility and performance.

Long wheelbase and excellent weight distribution:

- High driving comfort
- Good and safe road handling
- High tractive power and performance due to low ballast requirement

- Higher lifting capacity thanks to improved stability
- Optimises fuel consumption
- Lower ballast requirement protects the soil and guarantees dynamic road transport

Short overall length:

- Good manoeuvrability
- Short trailer combination on the road
- Good visibility
- Good guidance of front-mounted implements

For all applications.



NEW: REVERSHIFT shuttle lever with electronic parking brake available



NEW: Air brakes with air drier



Wheel spacers to adjust the track and quick-release axle available as an option



Fully balanced.

With so many front and rear axle ballast options, the ARION is easily adapted to every application. Its full performance potential can then be exploited without unnecessary losses. If you need to carry out heavy work at low speeds, the ballasting on the ARION can easily be increased. Weight that is no longer required can be removed just as easily.

Wheel weight per wheel, rear axle			
38" rim		42" rim	
259 kg	337 kg	220 kg	409 kg

Front ballasting for every situation.

The fixed 110 kg weight carrier (ex factory) can be fitted with 28 kg, 35 kg or 50 kg weight plates. A 600 kg block weight can also be mounted on the 110 kg weight carrier.

For flexible ballasting using the front hydraulics the combinations available ex factory are as follows:

- 600 kg
- 900 kg
- 1,200 kg (600 + 600)
- 1,500 kg (900 + 600)

Safe braking.

Due to their design, all ARION models in the 40 and 50 km/h version have the same permissible gross weight. This is up to 12.5 t in the ARION 600.

In the 50 km/h version the front axles have suspension and disc brakes as standard. Both these features are available as options in the 40 km/h version. The braking system on the front and rear axle provides maximum safety and stability on braking. During braking, the front axle suspension automatically adjusts to the change in load. The tractor therefore retains its normal stability and safety even during sharp braking manoeuvres.

NEW: Any size up to 710 mm.

A wide variety of tyres are available ex factory. All models can be fitted with MICHELIN XeoBib tyres. Nokian industrial tyres are available for municipal work. The ARION 660-630 models can also be fitted with tyres up to 42" / 1.95 m in diameter to increase the contact area and traction.

Powerful and economical at the push of a button.

Four speed ranges:

- 540 rpm and 1,000 rpm as standard
- 540/540 ECO and 1,000/1,000 ECO optional
- NEW: Ground speed PTO available for both PTO options

The PTO speed is easily pre-selected at the touch of a button. Another button on the armrest activates the PTO.

Automatic PTO engagement/disengagement can be adjusted infinitely according to rear linkage height. Simply move the rear linkage to the position required and press and hold the automatic PTO button. The required engagement/disengagement position is now saved.

Implement attachment is very straightforward as the PTO stub rotates freely.



Standing start.

The ARION transfers its full power to the PTO from a standing start and at low forward speeds.

Rotational speeds:

- 1,000 ECO at 1,570 rpm
- 540 ECO at 1,530 rpm

In ECO mode the engine runs at a low speed, reducing noise levels and saving valuable fuel.



External controls for rear PTO



The PTO stub can be changed easily

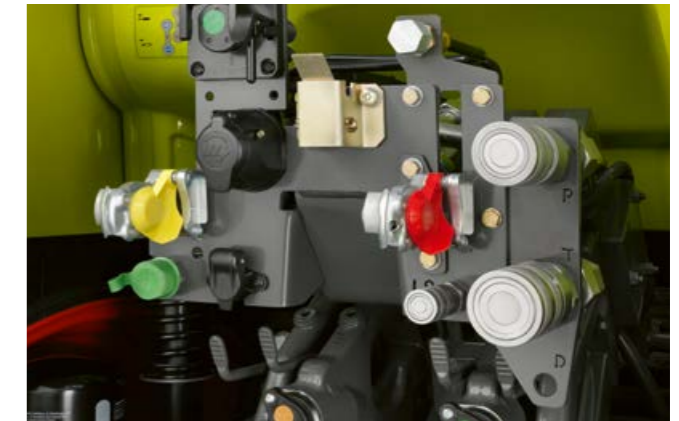
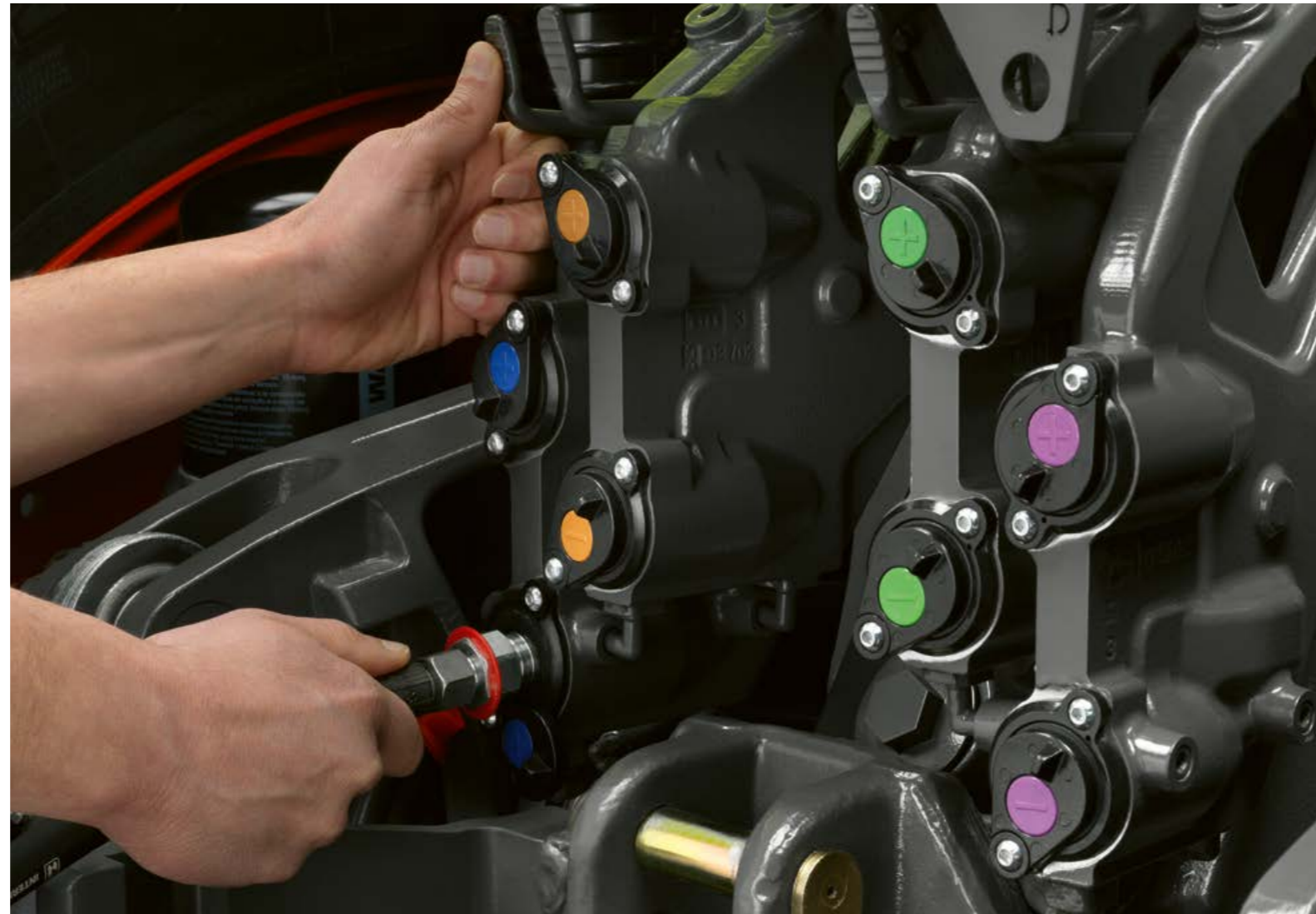
Powerful hydraulics. Simple connections.



The front linkage has connections for one spool valve and one free-flow return line.

Pressure-free connections and no mess.

All eight hydraulic couplings at the rear of the ARION have release levers, so they can be connected and disconnected even under pressure. The coloured markings on the inlet and outlet sides make it easier to attach implements correctly. Oil leakage lines collect the oil from the couplings when attaching and removing connectors.



Hydraulic power throughout.

Power Beyond connections are provided at the rear for implements which have their own control units.

The benefits of this are:

- Hydraulic oil is supplied to the attached implement as required
- Large-diameter pipes, flat-seal hydraulic couplings and non-pressurised return flow reduce power losses

NEW: Hydraulics that get the job done.

- Load-sensing hydraulic system for all ARION 600 / 500 models with 110 or 150 l/min output
- In the CIS version: four mechanical spool valves on the right side console and ELECTROPILOT built into the armrest to operate two electronic spool valves
- In the CEBIS or CIS+ version: up to six electronic spool valves can be operated from the armrest – up to four of these with the ELECTROPILOT. Spool valve operation can be assigned to the F buttons on the CMOTION, multifunction armrest or ELECTROPILOT to make combined operating processes easier.

- Additionally in the CEBIS version: thanks to free assignment and prioritisation of the spool valves, every driver can adapt CEBIS operation according to the task in hand and personal preference. The frequently-used hydraulic functions are positioned side by side for smooth operation.

Equipment	CIS	CIS+	CEBIS
Max. number of mechanical spool valves, rear	4	-	-
Max. number of electronic spool valves, rear	-	4	4
Max. number of electronic spool valves, centre, e.g. for front loader or front linkage; operated from ELECTROPILOT	2	2	2
Spool valve prioritisation	-	-	☐
Free spool valve assignment	-	-	☐

☐ Available - Not available

The rear linkage handles even the heaviest of implements.



The rear linkage.

With a maximum lifting capacity of 7.5 and 8.0 t, ARION 600 / 500 tractors can carry the heaviest of implements. The rear linkage configuration can be tailored to individual requirements:

- Manual or automatic lower link stabilisers
- Wheel slip control
- Hydraulic top link
- Robust and simple top link holder
- Practical ball holder at the rear
- External controls on both mudguards for the rear linkage, PTO and electronic spool valve (depends on installed equipment)
- Wide range of hitching options such as drawbar with hitch ball, automatic clevis, pickup hitch, CUNA

Direct adjustment.

The main rear linkage functions are directly accessed via push buttons and dials on the right-hand B-pillar:

- Raise and lower
- Vibration damping on / off
- Lock rear linkage
- Activate slip control
- Lifting height limiter
- Lowering speed
- Draught and position control
- Adjustment of wheel slip control

The convex rear window and swivelling seat provide an excellent view of the implement and unimpeded operation of the rear linkage controls. The conveniently located controls enable the driver to optimise the rear linkage settings while work is in progress.



External controls for the rear linkage, PTO and one freely selectable spool valve (CEBIS only).



Ball holder at rear



pick-up hitch

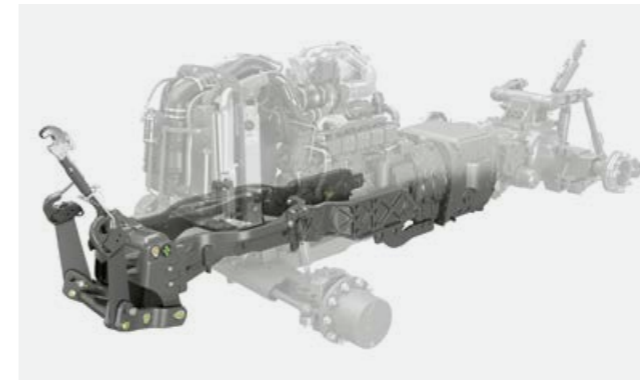


Automatic lower link stabilisers

Greater versatility.
More applications.



External controls for the front linkage and one spool valve (depends on installed equipment)



Front linkage.

All ARION models can be specified with two different front linkages ex factory:

- 3.0 t max. lifting capacity
- 4.0 t max. lifting capacity

The modular construction makes retrofitting straightforward. The half frame along the engine is included in the scope of delivery. The rear axle support is a standard component of every ARION, even if it has no front linkage or front loader.

Front linkage and front PTO.

All ARION models feature a front linkage and front PTO:

- Three positions for the front lower links: folded up, fixed working position and float position in slotted hole
- Double-acting lift rams as standard
- Short distance between front axle and mounting points for improved guidance of front attachments
- 1,000 rpm PTO
- External control of the front linkage and double-acting spool valve in the CEBIS version if fitted.



Precise work.

The optional front linkage position control system for the CEBIS versions enables front-mounted implements to work extremely accurately. The working position is adjusted via a rotary knob on the armrest, while the lifting height can be limited and the lifting and lowering speed can be set using CEBIS. The front linkage can be used in single- or double-acting mode.



Always connected.

Optional hydraulic and electronic interfaces for many applications are incorporated into the front linkage:

- Double-acting spool valve
- Free-flow return line
- 7-pin socket
- 12 V / 25 A socket

A perfect fit. CLAAS front loaders.



Strong plus points.

- Front loader brackets are available ex factory
- Large FOPS (Falling Object Protective Structure) transparent sunroof
- Choice of three convenient control options: ELECTROPILOT ex factory, PROPILOT and FLEXPILLOT as retrofit options
- REVERSHIFT reversing function on the ELECTROPILOT four-way control lever
- Option of PCH hydraulic self-levelling linkage on FL front loaders or PCM mechanical self-levelling linkage on FL C models
- FITLOCK system for quick and convenient fitting / removal
- MACH quick-attachment coupler for electric and hydraulic circuits
- FASTLOCK hydraulic locking for implements
- SPEEDLINK for automatic locking and connection of all hydraulic and electric connectors on the implement
- SHOCK ELIMINATOR vibration damping system
- And not forgetting the full CLAAS service

No compromises. Even in front loader work.

For front loaders, in particular, the connection to the tractor is extremely important in order to guarantee safe, fast loading operations. When developing the ARION 600 / 500 series, it was therefore very important for the attachment brackets to be fully integrated into the complete tractor concept. The brackets are positioned a long way back, providing stability during heavy work. The design of the attachment bracket allows a CLAAS front loader to be retrofitted easily at a later date.



ARION	FL 150	FL 140 / FL 140 C	FL 120 / FL 120 C	FL 100 / FL 100 C
660	☐	☐	☐	-
650	☐	☐	☐	-
630	☐	☐	☐	-
610	☐	☐	☐	-
550	-	☐	☐	-
530	-	☐	☐	-
510	-	☐	☐	☐
Lifting height m	4.60	4.50	4.15	4.00

☐ Available - Not available

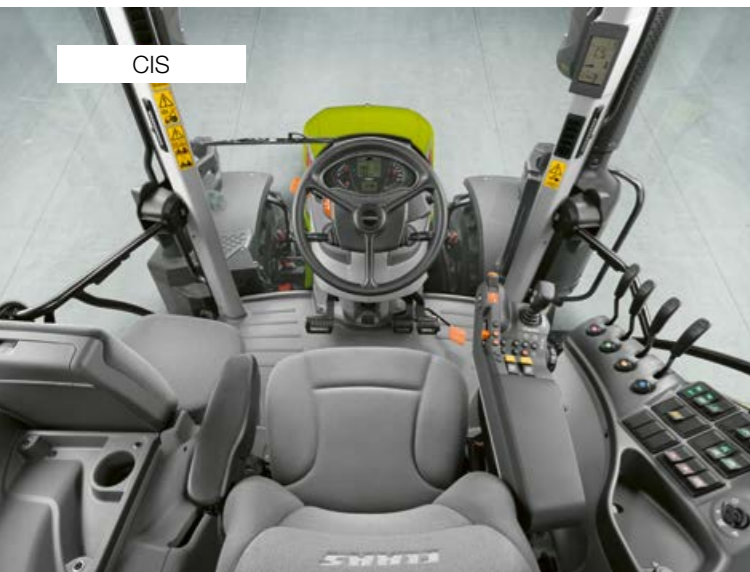
Greater comfort means
higher productivity.

Spacious and quiet, with large windows and full suspension. The cabs on ARION 600 / 500 tractors guarantee maximum comfort throughout long working days and are available in two versions with a 5- or 4-pillar design.

- CEBIS version with touch display operation and the innovative CMOTION multifunction control lever
- CIS+ version with colour display, multifunction armrest and DRIVESTICK
- CIS version with mechanical spool valves, multifunction armrest and DRIVESTICK



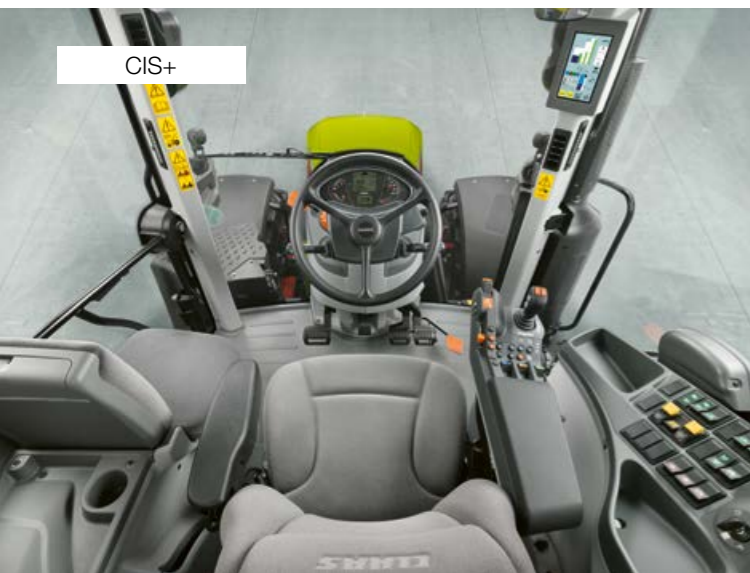
A clear view. The cab.



CIS

CIS. Everything you need.

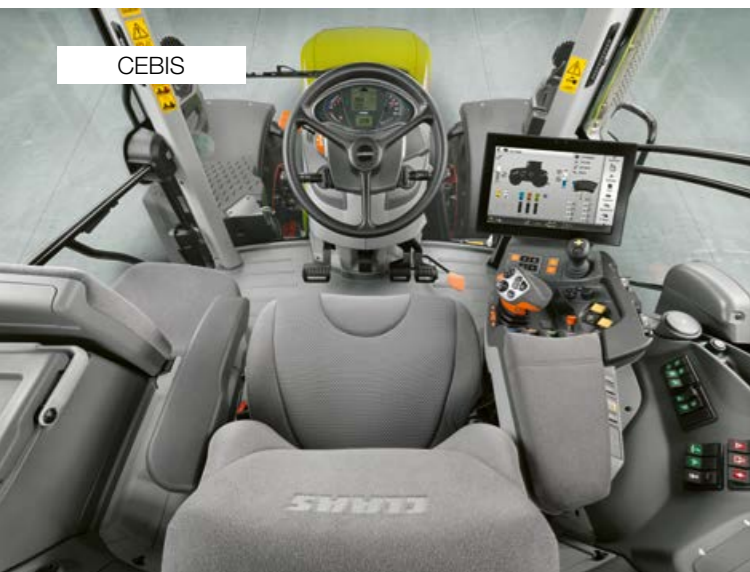
In the basic version, the ARION has mechanical spool valves and the CLAAS INFORMATION SYSTEM (CIS). The CIS display features a compact design and outstanding control ergonomics: all settings are easily activated using a rotary/push switch and the ESC button. Two electronic spool valves for the front loader are also available as an option in the CIS version and are operated via the ELECTROPILOT on the armrest.



CIS+

NEW: CIS+. Simply more.

CIS+ affords impressive ease of use and an intuitive design. Despite its pleasing simplicity, it has all the necessary functionality and the automatic functions needed for effective, effortless operation. CIS+ is also available with a continuously variable CMATIC or HEXASHIFT powershift transmission. The 7" CIS colour display built into the A-pillar combines display and setting options for the transmission, electronic spool valves, F buttons and CSM headland management.



CEBIS

NEW: CEBIS. Simply everything.

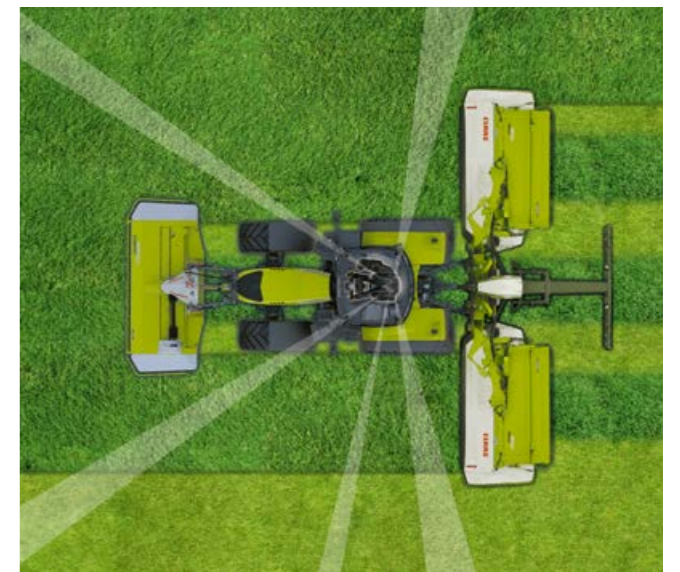
With the HEXASHIFT or CMATIC transmission, the CEBIS version features electronic spool valves and the superb CEBIS terminal with a 12" touch display. As well as enhanced automatic functions such as CSM headland management and spool valve prioritisation, it also offers many other functions – CEBIS leaves no stone unturned. All settings can be entered in seconds thanks to touchscreen operation and logical menu navigation.

Outstanding visibility and accessibility.

Tractors in this performance class are used for all sorts of work. Entering and leaving the cab frequently while working in the yard and implements with a large working width are part of everyday life, so the cab must be designed accordingly. CLAAS has developed a cab which is available in a 5- or 4-pillar version to meet these needs.

Benefits:

- Large-volume cab creates an extremely spacious working environment
- Clear view of the full working width
- Continuous windscreen
- 5-pillar cab: wide access, the open door protrudes a short distance only
- 4-pillar cab: continuous visibility on the left-hand side of the cab



The cleverly positioned rear cab pillars and convex rear window give the driver an excellent view of the implement and hitch area.

ARION equipment	CIS	CIS+	CEBIS
Multifunction armrest	●	●	●
CIS display on the A-pillar	●	–	–
CIS colour display on the A-pillar	□	●	–
CEBIS terminal with touch display	–	–	●
DRIVESTICK	●	●	–
CMOTION multifunction control lever	–	–	●
CMATIC transmission	–	□	□
HEXASHIFT transmission	●	□	□
PTO shaft management	●	●	●
Max. number of mechanical spool valves	4	–	–
Max. number of electronic spool valves	2	6	6
Max. number of electronic spool valves operated by ELECTROPILOT	2	4	4
CSM headland management	–	□	–
CSM headland management with edit function	–	–	●
On-board computer functions	□	●	●
Implement management	–	–	●
Job management	–	–	●
TELEMATICS	□	□	□
ICT (Implement Controls Tractor)	–	□	□

● Standard □ Optional □ Available – Not available

CEBIS. Simply everything.

An armrest that sets new standards.

All the main controls are integrated into the right-hand armrest:

- 1 CMOTION multifunction control lever
- 2 Control panel for drive mode, range changing and two engine speed memories with fine adjustment
- 3 CEBIS terminal with 12" touch display
- 4 ELECTROPILOT with two double-acting spool valves and two F buttons
- 5 CEBIS control panel
- 6 Working depth adjustment for front and rear linkage
- 7 Front and rear PTO activation
- 8 Hand throttle
- 9 Transmission in neutral, activate front linkage
- 10 Electronic spool valves
- 11 Four-wheel drive, differential lock, automatic PTO engagement/disengagement, front axle suspension
- 12 Main switch: battery, electronic spool valves, CSM, steering system

The height and position of the armrest can easily be adjusted to the driver's requirements.

Functions that are used less frequently, such as PTO speed preselection and the main switches, are located to the right of the driver's seat. When the driver's seat is rotated, the electronic linkage control system can be operated comfortably with an excellent view of the attached implement. Fine adjustment of the settings can then take place while work is in progress. Two additional buttons enable you to raise and lower the rear linkage manually for easier implement attachment.

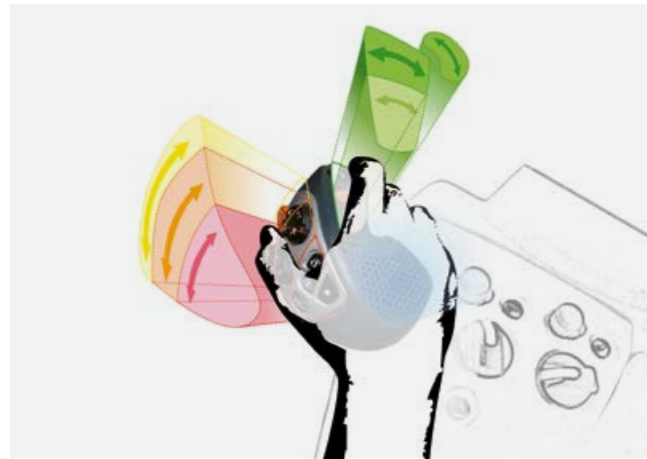


Clear, logical layout.

In all versions, many functions can be controlled directly using the rotary switches and buttons on the B-pillar:

- A PTO speed selection
- B Rear linkage settings
- C Rear linkage status display
- D Controls for electronic rear linkage control system

CMOTION multifunction control lever. Everything in hand.



CMOTION multifunction control lever.

The CMOTION is a CLAAS concept which makes using the main functions of the ARION easier and more efficient. Functions are controlled using your thumb and forefingers, allowing your hand to stay in one place for the majority of time and preventing fatigue.



Operating the HEXASHIFT or CMATIC.

All HEXASHIFT shifting operations are carried out using the CMOTION. A slight push activates the powershift speeds.

By pushing the CMOTION further forwards or backwards, it is possible to select ranges directly and skip powershift speeds. With the CMATIC, the forward speed can be adjusted precisely and continuously using the CMOTION.



Progressive operation with CMATIC continuously variable transmission technology

Shifting operation Powershift speeds + / -

Shifting operation Range + / -

At the push of a button.

The free assignment option for the ten function buttons on the CMOTION means that there is no longer any need to reposition your hands while you work. All implement-specific ISOBUS functions are easily controlled using the CMOTION:

- ISOBUS functions
- Event counter on / off
- Spool valves

Rear linkage functions on the CMOTION:

- Lower to preset working position
- Raise to the preset lift height position
- Manual activation: lift and lower at two speeds (slow / fast)
- Quick implement entry

- 1 Start up / change direction
- 2 Rear linkage
- 3 GPS PILOT activation
- 4 CSM headland management
- 5 Function buttons F7 / F8 / F9 / F10
- 6 Activate cruise control
- 7 Function buttons F1 / F2
- 8 Function buttons F5 / F6

CEBIS terminal. Everything under control.



Clear layout and fast operation.

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

A particularly attractive feature is the DIRECT ACCESS function with the machine silhouette. One touch is all it takes to go straight to the right dialogue window.

As well as screen-based operation with the CEBIS, there is a set of buttons in the armrest. Full CEBIS operation is available using the rotary/push switch and ESC button if uneven ground reduces the accuracy of fingertip operation. The DIRECT ACCESS button takes you straight to the settings for the last used tractor function.

An eye-catching 12" screen.

- 1 Machine silhouette for DIRECT ACCESS and status display
- 2 Spool valve status
- 3 Vehicle information
- 4 On-board computer
- 5 Transmission information area
- 6 Function button assignment
- 7 Menu
- 8 DIRECT ACCESS via CEBIS touch button or button on the armrest
- 9 Dialogue-based system for optimum settings

CEBIS – simply better:

- Fast and intuitive navigation using the CEBIS touch display
- Rapid access to the sub-menus with the DIRECT ACCESS function:
 - Last used function from DIRECT ACCESS touch button on the CEBIS or button on the armrest
 - Touch the machine silhouette or spool valves
- Navigation using the rotary/push switch and ESC button on the armrest – ideal when driving on rough terrain
- Two different screen layouts available (road travel and field work)



- 1 Navigation in the menu
- 2 Select
- 3 ESC button
- 4 DIRECT ACCESS button



CEBIS screen layout for road travel

CIS+.

Simply more.



Everything to hand.

The height and position of the armrest can easily be adjusted to the driver's requirements.



- 1 DRIVESTICK to operate the CMATIC or HEXASHIFT transmission
- 2 Controls for rear linkage and two F buttons, e.g. to activate CSM headland management
- 3 Hand throttle, two engine speed memories, GPS PILOT, four-wheel drive and differential lock
- 4 ELECTROPILOT four-way control lever with two F buttons and buttons to change direction
- 5 Control panel for transmission and hydraulic function activation
- 6 Electronic spool valves
- 7 Set working depth of rear linkage
- 8 Activate front and rear PTO plus automatic engagement/disengagement of rear PTO
- 9 Activate front axle suspension



The perfectly ergonomic armrest.

The multifunction armrest has been designed for optimum ergonomics and is the linchpin to relaxed and effective working. It's the result of extensive analyses of the operating processes in the cab: frequently required functions are located on the multifunction armrest, while those required less frequently are located on the right-hand side console.

An instinct for excellence – CMATIC operation.

The unique DRIVESTICK with handrest on the side handles intuitively and gives full control of the HEXASHIFT or CMATIC transmission.

Unlike conventional drive levers, the DRIVESTICK comes with proportional control of a CMATIC transmission. This means that the further it is pushed or pulled when in drive lever mode, the faster the transmission accelerates or brakes the tractor.

This functionality is not needed so often in accelerator pedal mode as the driver controls the speed with the foot pedal. However, it is still very useful, for example to manually increase or reduce the engine braking effect.

When the DRIVESTICK is used in conjunction with the CMATIC transmission, it also has a cruise control button. Just press the button briefly to activate cruise control, or press and hold to save the current speed. If cruise control is active, the speed can be changed simply by moving the DRIVESTICK forwards or backwards.

CIS+. Simply more.

CEBIS does it, so does CIS+.

- Set or activate individual flow and time control for individual spool valves
- Continuously variable PTO engagement/disengagement settings based on rear linkage height
- Record and run four CSM headland management sequences
- ISOBUS implements can be operated using the F buttons on the tractor
- Implement controls tractor (ICT): with QUADRANT square balers or CARGOS loader wagons



The PTO speed and electronic rear linkage control system can be adjusted on the B-pillar



Everything to hand.

The height and position of the armrest can easily be adjusted to the driver's requirements. All frequently used functions are located on the armrest.

- 1 DRIVESTICK to operate the HEXASHIFT transmission
- 2 Controls for rear linkage and two F buttons
- 3 GPS PILOT and two engine speed memories
- 4 Hand throttle
- 5 Fine tuning of engine speed memory
- 6 Control panel for transmission, HEXACTIV auto-shift function
- 7 ELECTROPILOT
- 8 Set working depth of rear linkage
- 9 Front and rear PTO activation
- 10 Mechanical spool valves



An instinct for excellence – HEXASHIFT operation.

The unique DRIVESTICK handles intuitively and gives full control of the HEXASHIFT transmission. Complex and cumbersome shifting operations therefore become a thing of the past. All you need is nimble fingers to shift as you please.

The perfectly ergonomic armrest.

The multifunction armrest has been designed for optimum ergonomics and is the linchpin to relaxed and effective working. It's the result of extensive analyses of the operating processes in the cab: frequently required functions are located on the multifunction armrest, while those required less frequently are located on the right-hand side console.



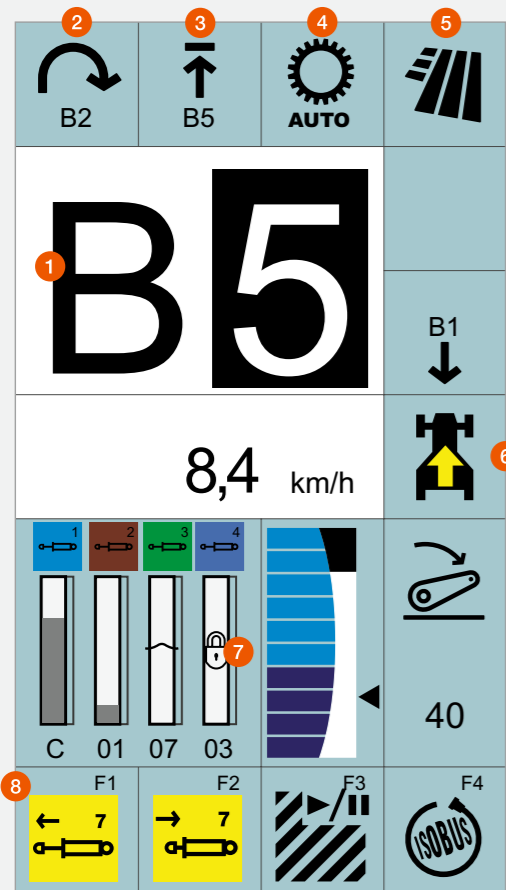
A question of settings.

Each spool valve has its own rotary switch. The function options for each spool valve are selected using the rotary switch allocated to it:

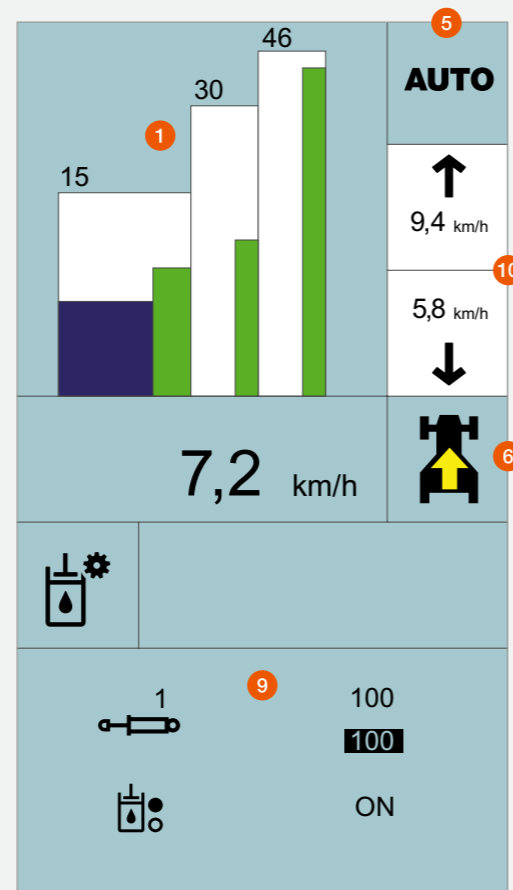
- Rotary switch in position III: Pressure – / Neutral / Pressure + / Float position
- Rotary switch in position III: Pressure – / Neutral / Pressure +
- Rotary switch in lock position: Spool valve locked in pressure position for permanent operation or in neutral position



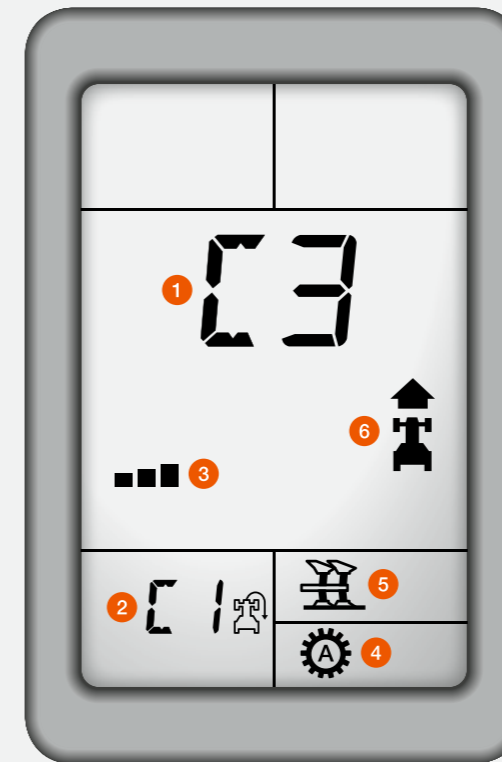
The PTO speed and electronic rear linkage control system can be adjusted on the B-pillar



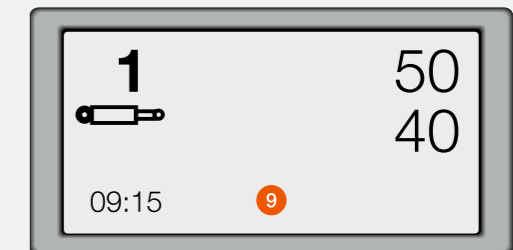
CIS colour display on the A-pillar with HEXASHIFT transmission



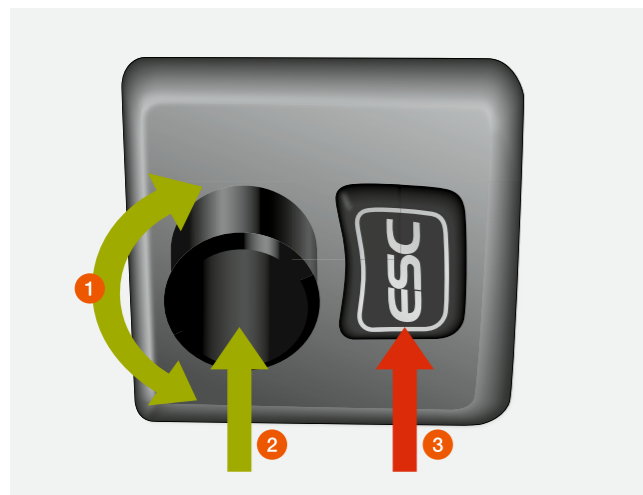
CIS colour display with CMATIC transmission and settings menu



CIS display on the instrument panel and HEXASHIFT transmission display on the A-pillar.



- 1 Current gear / CMATIC range
- 2 Selected headland gear
- 3 HEXACTIV auto-shift limiter
- 4 HEXACTIV mode
- 5 Current driving mode
- 6 Direction of travel or transmission in neutral
- 7 Status of rear linkage and spool valves
- 8 Function button assignment
- 9 Settings menu
- 10 Cruise control values forwards / reverse



- 1 Navigation in the menu
- 2 Select
- 3 ESC button

The CLAAS INFORMATION SYSTEM (CIS).

In the CIS version, the display is built into the instrument panel. The additional HEXASHIFT display on the A-pillar shows all the information relating to the transmission at a glance.

CIS+:

The modern design of the 7" colour CIS display on the A-pillar provides the driver with full information about the transmission, electronic spool valves and F buttons. This colour CIS display shows the settings in the lower part of the screen. The logical, menu-guided interface and clear symbols make navigation very simple.

In both versions, all settings are easily activated using a rotary/push switch and the ESC button on the steering wheel.

The following functions can be configured using the CIS:

- CMATIC or HEXASHIFT transmission settings
- Additional functions e.g. SMART STOP or dynamic steering
- Progressivity of the REVERSHIFT clutchless reverser
- Time and volume settings for the electronic spool valves
- On-board computer functions such as area worked, fuel consumption, area output
- Maintenance interval display

Precision at the headland with CSM.



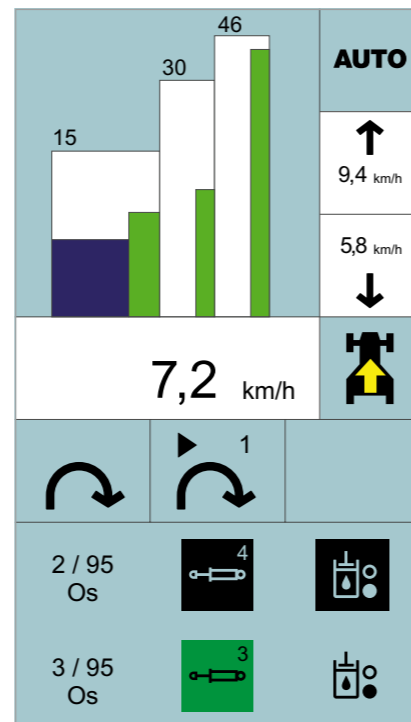
CLAAS SEQUENCE MANAGEMENT.

CSM headland management takes the load off you whenever you need to manoeuvre at the headland. By pressing a button, you can run any of the previously recorded functions.

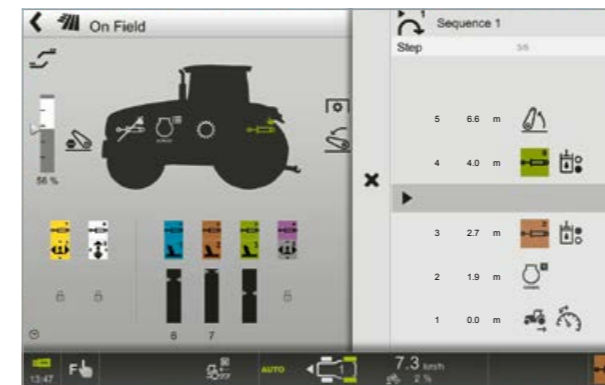
	With CIS+	With CEBIS
Number of storable sequences	Four	Four per implement, up to 20 implements
Sequence activation	F buttons	CMOTION and F buttons
Sequence display	On CIS display	On CEBIS display
Recording mode	Time-related	Time- or distance-related
Edit function	–	Subsequent sequence optimisation in the CEBIS

The following functions can be combined in any order:

- Spool valves with time and flow control
- Four-wheel drive, differential lock and front axle suspension
- Front and rear linkage
- Cruise control
- Front and rear PTO
- Engine speed memory



The sequence flow is shown in the lower area of the CIS colour display



Easy to record and run.

Sequences can be recorded on a distance- or time-related basis. During recording, clear symbols allow the driver to follow the creation of the sequence step by step on the CEBIS or CIS colour display. A sequence that is running can be paused and restarted by simply pressing a button.



Non-stop optimisation with CEBIS.

Recorded sequences can be changed and optimised in the CEBIS at a later date. Steps can be added and deleted or changed and adapted in minute detail, allowing times, distances and flow volumes to be tailored to current conditions. Once a sequence has been recorded, it can be refined down to the last detail in just a few steps.

Ergonomics and comfort for optimum working conditions.



First-class comfort.

Many features of the working environment make the ARION the ideal choice for long working days. A large number of storage options mean that the driver can always find space for a mobile phone or documents. Under the passenger seat there is a cooler compartment which has room for two 1.5 litre bottles and snacks. Perfect for your lunch break.



As well as the large standard mirror, a wide-angle mirror for improved road safety is supplied as standard

LED headlights for perfect illumination.

If you're still working when it goes dark, the work lights will light up the whole of the area around the machine, so you can see exactly what you're doing. For even more demanding situations, up to 14 LED work lights and four LED road lights can illuminate the entire surroundings of the ARION almost as brightly as daylight.



Connections to the power supply and ISOBUS for additional terminals are located below the right-hand console.



The driver and passenger seat are available with modern, non-slip fabric or elegant, easy-care leather upholstery



A pleasant working environment.

All ARION models are fitted as standard with air conditioning and, optionally, with a category 3 filter. The components of the air conditioning system are built into the double insulated cab floor, giving optimum air flow distribution in the cab and significantly reducing the noise level from the ventilation system. As no components are built into the roof, the driver has additional headroom and an enhanced feeling of space. A fully automatic climate control system is available in addition to manual control.



Clear and logical layout.

When you press the small pedal underneath the steering column the entire steering column folds out of the way, allowing plenty of room to enter and leave the cab. The column can be returned to the optimum position when you start work. A lever on the steering column also enables you to adjust the height of the steering wheel.

The instrument panel is always perfectly visible because it is mounted on the steering column and moves with it.



Illuminated interior.

By day and night, all the controls are illuminated when the headlights are switched on. And the symbols on all the switches are backlit so that they can be operated safely at all times. The brightness of the CEBIS monitor automatically adjusts to the lighting conditions, preventing glare within the cab. A dark colour scheme can also be selected in the CEBIS. This gives a softer contrast, especially when working in the dark, and reduces eye fatigue.

Suspension that protects both operator and machine.



Full four-way suspension.

Four suspension points mean that the cab is fully isolated from the chassis, preventing impacts and vibration from reaching the driver. Longitudinal and lateral struts join the suspension points and keep the cab stable when turning corners or braking. An adjustable torsion strut makes it possible to choose between three different suspension hardnesses. The entire suspension system is completely maintenance-free.



Ventilated and warm: the premium seat.

Five Sears and Grammer seats are available, including a ventilated premium seat.

- Active seat ventilation makes the seat feel good whatever the weather
- Suspension automatically adjusts to the driver's weight



NEW: PROACTIV front axle suspension.

The CLAAS suspension kinematics in ARION 600 / 500 tractors produce outstanding drive characteristics. Widely spaced suspension cylinders and active roll stabilisation on bends guarantee vehicle stability and safety, while the double-acting suspension with load change compensation and 100 mm suspension travel deliver outstanding ride comfort.



Vibration damping.

Heavy implements mounted on the front and rear create a load on the tractor as well as the driver. The front and rear linkage are both equipped with vibration damping to compensate for peak loads during transport operations and when the attached implement is raised at the headland.



Switch to activate front axle suspension

Even better control with ISOBUS and ICT.



The way you want it.

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

S10 terminal:

- High-resolution 10.4" touchscreen terminal
- Steering and ISOBUS functions
- Up to four cameras can be displayed

S7 terminal:

- High-resolution 7" touchscreen terminal
- Steering functions

EASY on board app.

With the new EASY on board app, all ISOBUS-compatible implements can be controlled from a tablet¹. For even greater convenience, various functions can be assigned to the F buttons as with any other ISOBUS terminal.

ISOBUS implement control.

Sockets are provided at the rear in order to connect ISOBUS-compatible implements to the tractor. The ISOBUS-enabled terminal can be connected up in the cab using another socket. The attached implement is operated by means of a machine-specific display. ISOBUS compatibility means that implements from other manufacturers can also be operated using S10 terminal.

Function buttons

ARION tractors have up to ten F buttons to which different functions can be assigned in the CEBIS or CIS colour display. The current assignment can be viewed at any time in the CEBIS or CIS display window. The buttons are assigned to the corresponding function using the S10 or other ISOBUS terminals, enabling each driver to customise tractor operation to suit individual requirements.



F button assignment in CEBIS.

ARION 600 / 500 – AEF-compliant.

The Agricultural Industry Electronics Foundation (AEF) is a partnership between approximately 150 companies, associations and organisations. Its aim is to harmonise development standards in electronic systems for agriculture, such as ISOBUS components. These systems comply with the ISO 11783 standard, but more detailed AEF guidelines are also developed. The ARION 600 / 500 was developed according to these requirements and supports the ISOBUS functionality specifications ISO UT 1.0, TECU 1.0, AUX-O and AUX-N for ISOBUS implements.

ICT (Implement Controls Tractor).

Thanks to ISOBUS, when the ARION is used in combination with the QUADRANT square baler or CARGOS loader wagon, two ARION CMATIC functions can be automatically controlled by the implement:

ICT CRUISE CONTROL:

Optimises the performance and work quality of the implement by controlling the tractor's forward speed. The speed is continuously adjusted to suit the current conditions, enabling you to get the best out of your machine combination.

ICT AUTO STOP:

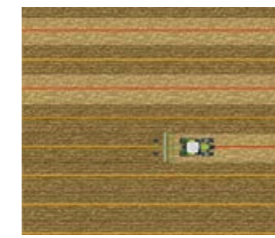
If an overload is detected in the implement, the ICT AUTO STOP function automatically switches off the PTO. This protects the entire drive train throughout long working days and reduces the driver's workload.



ICT CRUISE CONTROL and AUTO STOP were awarded a silver medal at Agritechnica 2013

¹ Apple iPad devices from iOS 9. A specific list of devices is provided in the description of the EASY on board app in the Apple App Store. A CWI (CLAAS Wireless Interface) is needed to connect to the in-cab ISOBUS connection.

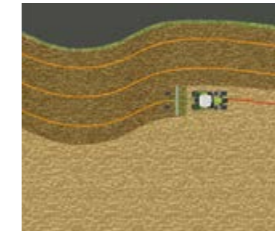
Always on the right track. CLAAS steering systems.



The correction signals.

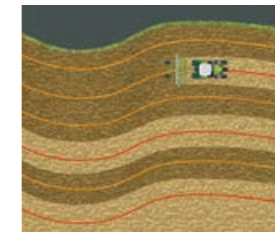
RTK ($\pm 2-3$ cm)

- Base station
- Range approx. 15 km
- Own reference station or licence from CLAAS dealer
- Highest possible repeatable accuracy
- RTCM 3.1
- GPS and GLONASS reception



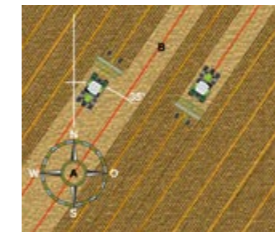
RTK NET ($\pm 2-3$ cm)

- Correction signal via mobile phone network
- Dual-frequency signal
- Unrestricted working radius
- Highest possible repeatable accuracy
- Subject to licence
- RTCM 3.1
- GPS and GLONASS reception



RTK FIELD BASE ($\pm 2-3$ cm)

- Mobile reference station
- Range 3-5 km
- Free of licence fees
- Internal correction signal
- Integrated rechargeable battery
- Dual-frequency signal
- RTCM 3.1
- GPS and GLONASS reception



Improve the quality of your work.

CLAAS steering systems take the pressure off the driver. They show in advance which direction to take, or automatically steer the tractor along the best possible path. Mistakes and overlapping are eliminated. Studies have shown that a modern parallel guidance system can save up to 7% on diesel fuel, machine costs, fertiliser and crop protection products.

The GPS PILOT automatic steering system is controlled by the S10 and S7 touchscreen terminals (see pages 64 / 65) which feature a very simple and user-friendly menu-guided interface.

Automatic steering at the headland.

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



With AUTO TURN the tractor turns automatically at the headland.

Correction signal to meet individual needs.

The design of the CLAAS range enables you to extend your system easily at any time. This applies just as much to the terminal technology as to the use of today's essential correction signals.

CLAAS steering systems can be used with GPS and GLONASS satellite systems to enhance their flexibility and operational capabilities.

OMNISTAR XP / HP / G2 ($\pm 5-12$ cm)

- Satellite-based correction signal
- Dual-frequency signal
- Subject to licence

EGNOS / E-DIF ($\pm 15-30$ cm)

- Free of licence fees
- Base accuracy

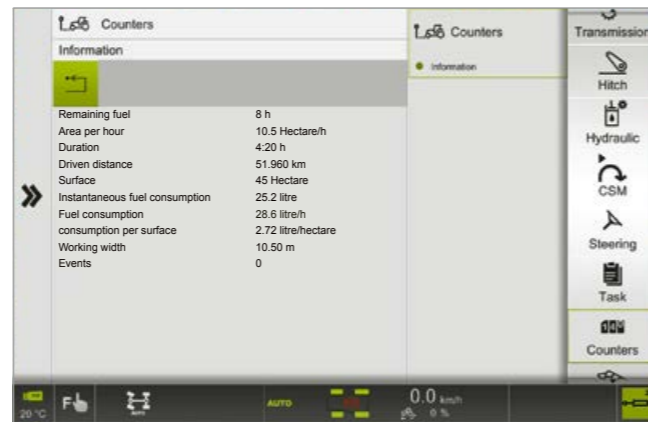
For more information about steering systems, see the CLAAS Steering Systems brochure or ask your CLAAS dealer.

Keep track of all machines and jobs. All the time.



Field management with CEBIS.

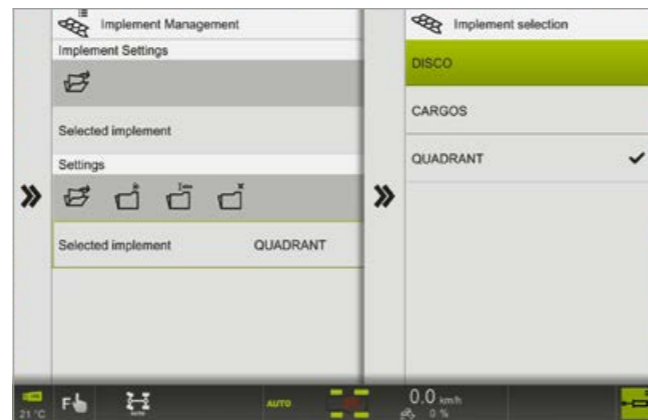
Up to 20 jobs can be set up and stored in CEBIS in order to produce documentation for the work done. First you enter the working width, then you can start area calculation and the fuel consumption display per hectare. To get the most accurate results, the speed can be measured by radar.



Implement management with CEBIS.

With CEBIS, details of up to 20 implements can be recorded. All the preset values are permanently assigned to the specific implement.

- Settings for transmission and hydraulic spool valves
- Four CSM sequences
- Area calculation – mode and activation
- Working width of attached implement



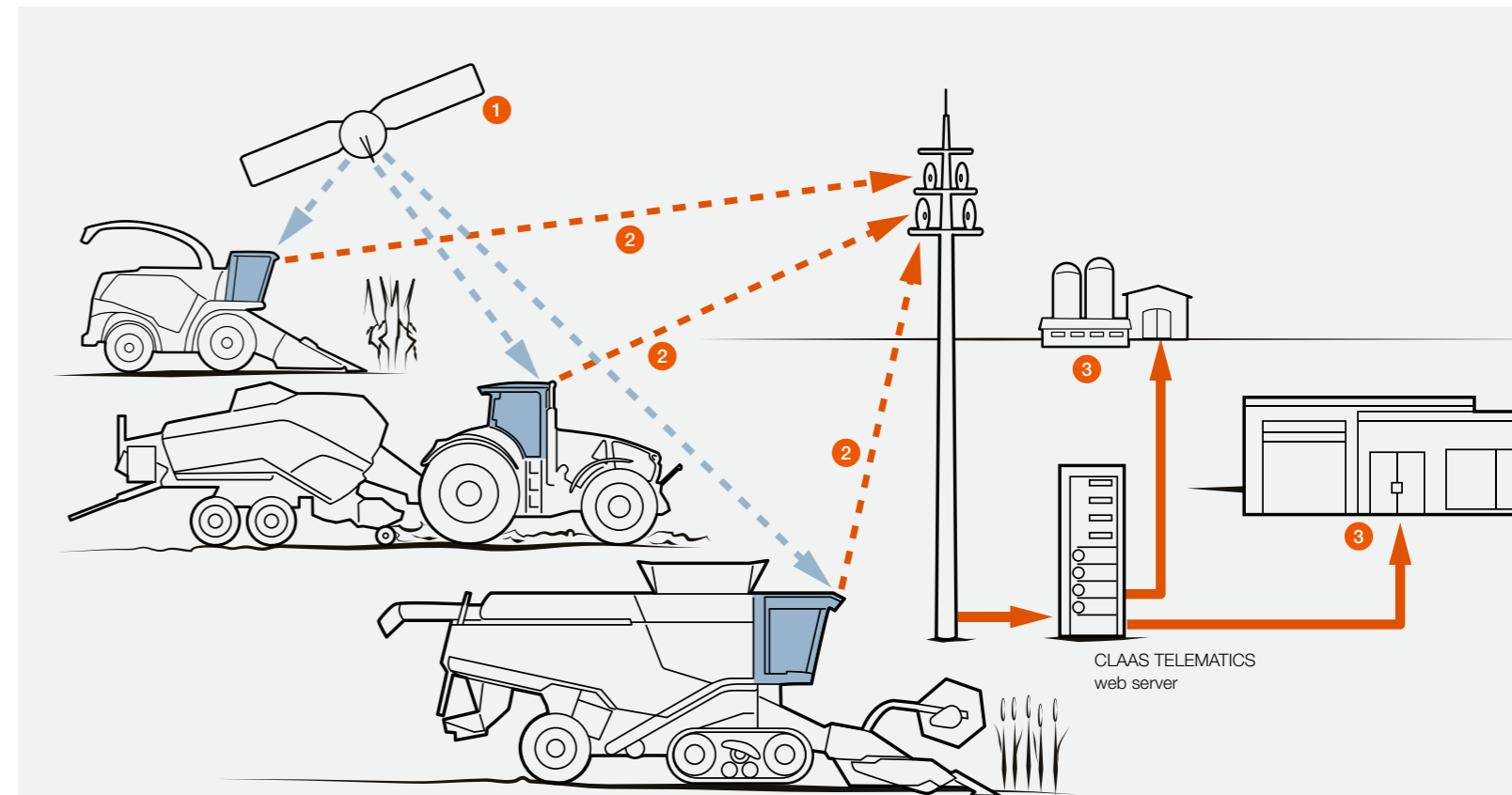
This saves on unnecessary adjustment tasks when changing implement or driver. Just attach the implement, load the implement in CEBIS and start work. Tablet-type operation makes creating new implements child's play.



CLAAS TELEMATICS:

- Improve work processes: operating time analysis
- Optimise settings: remote monitoring
- Simplify documentation: data collection
- Faster servicing: remote diagnostics.

TELEMATICS allows you to call up any information about your machine at any time from any location. The data collected is sent to the TELEMATICS web server at regular intervals via the mobile phone network. This enables you or an authorised service partner to access and evaluate the relevant information via the internet.



- 1 Machines receive signals transmitted by GPS satellites.
- 2 Machines send the GPS coordinates, machine-related performance data and reports to the TELEMATICS web server via the mobile phone network.
- 3 This data is directly accessible to farms or service partners via the internet.

The functions.

Operating time analysis

- Working time analysis
- Reduce downtime
- Review machine settings
- Optimise fuel consumption

Remote monitoring

- Position displayed in Google Earth®
- Current activity

Data collection

- Automatic data collection for documentation
- Secure storage on central server
- Standard interfaces for data export from TELEMATICS

Remote diagnostics

- Maintenance planning
- Remote diagnostics with CDS

For more information about TELEMATICS, see the CLAAS TELEMATICS brochure or ask your CLAAS dealer.



Fast maintenance.

Daily maintenance work should be as straightforward as possible – because we know from experience that nobody enjoys doing things that are complicated or inconvenient.

- The large, one-piece bonnet opens at the press of a button, providing access to all the engine maintenance points
- The oil can be checked and topped up on the left-hand side of the ARION when the bonnet is closed
- All daily maintenance tasks can be carried out without tools

Long oil-change intervals (engine 500 h, transmission and hydraulics 1,500 h) save a great deal of time and money. This means that less valuable working time is lost during the season and the tractor is where it should be – at work.

Fresh air for full power.

The large intake panels in the bonnet provide plenty of fresh air for cooling and for the engine air filter. Low flow rates at the intake panels help them to stay clean and permeable at all times.

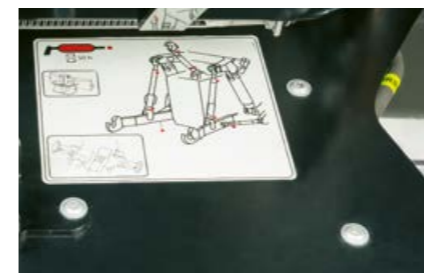
The radiator assemblies are supported by a robust frame and gas-filled shock absorbers open the radiator panels to two positions for thorough cleaning. Cleaning can therefore be carried out safely and conveniently as required.

The air filter is in an accessible location in the cool zone in front of the radiator panels so there are no obstacles to removing it. The generously sized air filter is designed for a long service life. Coarse dirt particles are removed in the filter housing, further extending the cleaning interval.



The battery and a tool storage compartment are handily located in the access ladder on the right-hand side.

The oil can be checked and topped up when the bonnet is closed.



A lubrication chart under the bonnet simplifies maintenance



Easy access to the cab air filter on the cab roof

Whatever it takes. CLAAS Service & Parts.



Your requirements count.

You can always rely on us: we'll be there whenever you need us. Everywhere. Fast. Reliable. 24 hours a day if necessary. With a complete solution for your machine or business. Whatever it takes.

ORIGINAL parts and accessories.

Specially matched to your machine: precision-manufactured spare parts, high-quality consumables and useful accessories. We will supply exactly the right solution from our comprehensive product range to ensure that your machine is 100% reliable. Whatever it takes.

For your business: CLAAS FARM PARTS.

CLAAS FARM PARTS offers one of the most comprehensive spare parts programmes, regardless of brand and sector, for all agricultural applications on your farm. Whatever it takes.

Always up to date.

CLAAS dealers are among the most efficient agricultural technology businesses in the world. Our service teams are ideally qualified and equipped with the all-important special tools and diagnostic systems. CLAAS Service stands for high-quality work which meets all your expectations with regard to expertise and reliability. Whatever it takes.

Planned reliability.

Our service products help you to increase machine reliability, minimise the breakdown risk and base your calculations on predictable costs. CLAAS MAXI CARE offers planned reliability for your machine. Whatever it takes.

Worldwide coverage from Hamm.

Our central spare parts warehouse delivers all ORIGINAL parts quickly and reliably all over the world. Your local CLAAS partner can supply the right solution for your harvest or your business within a very short time. Whatever it takes.

Problem solving by remote diagnostics: CLAAS TELEMATICS

CLAAS TELEMATICS on your machine brings two important advantages: fast assistance from CLAAS service technicians plus economic benefits for your work thanks to wireless networking. We can solve your problems on the spot – even when you can't see us. Whatever it takes.



The CLAAS Parts Logistics Center in Hamm, Germany, stocks more than 155,000 different parts and has a warehouse area of over 100,000 m².

Simply convincing.
An impressive list of features.



CPS.

- Half frame concept, designed for extreme loads and great flexibility
- Lively 4-cylinder engines from 125 to 165 hp
- Powerful 6-cylinder engines from 145 to 185 hp and even up to 205 hp with CPM
- Front loader fully integrated into the tractor for high stability and optimum handling
- Long wheelbase and balanced weight distribution
- Versatility on the move with 1.95 m diameter tyres (42" rim) from ARION 630
- Compact design with integral front linkage – fully road-compatible
- Fully powershifted HEXASHIFT transmission with HEXACTIV auto-shift function, cruise control and SMART STOP
- Continuously variable CMATIC transmission in all models with CEBIS or CIS+
- Up to four PTO speeds available (540/540 ECO / 1,000/1,000 ECO)

Comfort and convenience.

- 5-pillar cab: wide access, the open door protrudes a short distance only
- 4-pillar cab: continuous visibility on the left-hand side of the cab
- Three equipment options available: CEBIS, CIS+ or CIS:
 - CMOTION multifunction control lever in the CEBIS version
 - Multifunction armrest with DRIVESTICK in the CIS+ and CIS version
- 4-point cab suspension
- Driver's seats with active suspension and ventilation
- PROACTIV front axle suspension with CLAAS suspension kinematics
- Front and rear linkage with vibration damping
- Optimum access to all maintenance points
- Integrated storage compartments and toolbox
- GPS PILOT with S10 and S7 touchscreen terminal
- CSM headland management
- Implement management
- TELEMATICS
- ISOBUS

ARION		660	650	630	610	550	530	510
Engine								
Manufacturer		DPS	DPS	DPS	DPS	DPS	DPS	DPS
Number of cylinders		6	6	6	6	4	4	4
Cubic capacity	cm ³	6788	6788	6788	6788	4525	4525	4525
Variable geometry turbo		●	●	●	●	–	–	–
Twin turbo (two fixed geometry turbochargers, including one with wastegate)		–	–	–	–	●	●	●
Rated output (ECE R 120) ¹	kW/hp	129/175	129/175	114/155	99/135	114/155	99/135	85/115
Max. output (ECE R 120) ¹	kW/hp	136/185	136/185	121/165	107/145	121/165	107/145	92/125
Max. output with CPM (ECE R 120) ¹	kW/hp	151/205	–	–	–	–	–	–
Engine speed at maximum output	rpm	2000	2000	2000	2000	2000	2000	2100
Type approval value for CMATIC models ²	kW	139	128	115	102	117	106	92
Type approval value for HEXASHIFT models ²	kW	–	139	115	102	117	106	92
Max. torque (ECE R 120) ¹	Nm	833	754	703	640	660	612	562
		(with CPM)						
Engine speed at max. torque	rpm	1500	1500	1500	1500	1500	1500	1500
Max. fuel tank capacity	l	370	370	370	370	245	245	245
Oil-change interval	h	500	500	500	500	500	500	500

CMATIC continuously variable transmission								
Transmission type		EQ 220	EQ 200	EQ 200	EQ 200	EQ 200	EQ 200	EQ 200
Speeds (min.-max.)	km/h	0.05-50/40	0.05-50/40	0.05-50/40	0.05-50/40	0.05-50/40	0.05-50/40	0.05-50/40
REVERSHIFT clutchless reverser		●	●	●	●	●	●	●

HEXASHIFT powershift transmission								
Ratios F/R		–	24/24	24/24	24/24	24/24	24/24	24/24
Min. speed at 2200 rpm	km/h	–	1.58	1.58	1.73	1.58	1.73	1.68
Max. speed	km/h	–	40/50	40/50	40/50	40/50	40/50	40/50
REVERSHIFT clutchless reverser		–	●	●	●	●	●	●
Powershift speeds		–	6	6	6	6	6	6
Electrohydraulically controlled ranges		–	4	4	4	4	4	4
Min speed with creep gear at 2200 rpm	km/h	–	0.40	0.40	0.43	0.40	0.43	0.42
Min. speed with super-creep gear at 2200 rpm	km/h	–	0.11	0.11	0.12	0.11	0.12	0.12

Rear axle								
Flanged axle		●	●	●	●	●	●	●
Quick-release axle		○	○	○	–	○	–	–
Electrohydraulically activated differential locks		●	●	●	●	●	●	●
Automatic differential lock		●	●	●	●	●	●	●
Park-lock		○	○	○	○	○	○	○
Max. rear tyres		710/60 R 42	710/60 R 42	710/60 R 42	710/60 R 38	650/65 R 38	650/65 R 38	650/60 R 38
Max. diameter of rear tyres	m	1.95	1.95	1.95/1.85	1.85	1.85	1.85	1.75
Oil-change interval	h	1500	1500	1500	1500	1500	1500	1500

PTO								
Wet multi-disc clutch		●	●	●	●	●	●	●
Remote control of engagement and emergency stop		●	●	●	●	●	●	●
540/1000		○	●	●	●	●	●	●
540/540 ECO and 1000/1000 ECO		○	○	○	○	○	○	○
Changeable PTO stub		●	●	●	●	●	●	●
1 3/8" PTO stub: 6, 8 and 21 splines		□	□	□	□	□	□	□
Automatic PTO engagement/disengagement		●	●	●	●	●	●	●

Four-wheel drive front axle								
Rigid front axle		–	–	●	●	●	●	●
Rigid and braked front axle		●	●	–	–	–	–	–
PROACTIV front axle suspension		–	–	□	□	□	□	□
PROACTIV front axle suspension with braked front axle		□	□	□	□	□	□	□
Automatic 4-wheel drive		●	●	●	●	●	●	●
Optimum turning radius	m	5.5	5.5	5.5	5.5	5.35	4.95	4.95

ARION		660	650	630	610	550	530	510
Hydraulics								
Load-sensing circuit 110 l/min		●	●	●	●	●	●	●
Load-sensing circuit 150 l/min		○	○	○	○	○	○	○
Max. operating pressure	bar	200	200	200	200	200	200	200
Number of mechanical spool valves (CIS)		2-4	2-4	2-4	2-4	2-4	2-4	2-4
Number of electronic spool valves (CEBIS / CIS+)		2-4	2-4	2-4	2-4	2-4	2-4	2-4
Two central electronic spool valves, operated from ELECTROPILOT		□	□	□	□	□	□	□
Flow rate control		●	●	●	●	●	●	●

Rear linkage								
Max. lifting capacity at ball ends	kg	8000	8000	8000	7500	8000	7500	7500
Continuous lifting power at ball ends	kg	5100	5100	5100	5100	5100	5100	5100
Vibration damping		●	●	●	●	●	●	●
External controls		●	●	●	●	●	●	●
Active wheel slip control		○	○	○	○	○	○	○
ISOBUS socket		○	○	○	○	○	○	○
25 amp socket		○	○	○	○	○	○	○

Front linkage								
Lift capacity	t	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Front PTO 1000 rpm		○	○	○	○	○	○	○
Vibration damping		●	●	●	●	●	●	●
Position control for CEBIS version		○	○	○	○	○	○	○
External operation		○	○	○	○	○	○	○
Additional hydraulic connections		○	○	○	○	○	○	○
External operation of additional connections		○	○	○	○	○	○	○
Trailer socket		○	○	○	○	○	○	○
25 amp socket		○	○	○	○	○	○	○

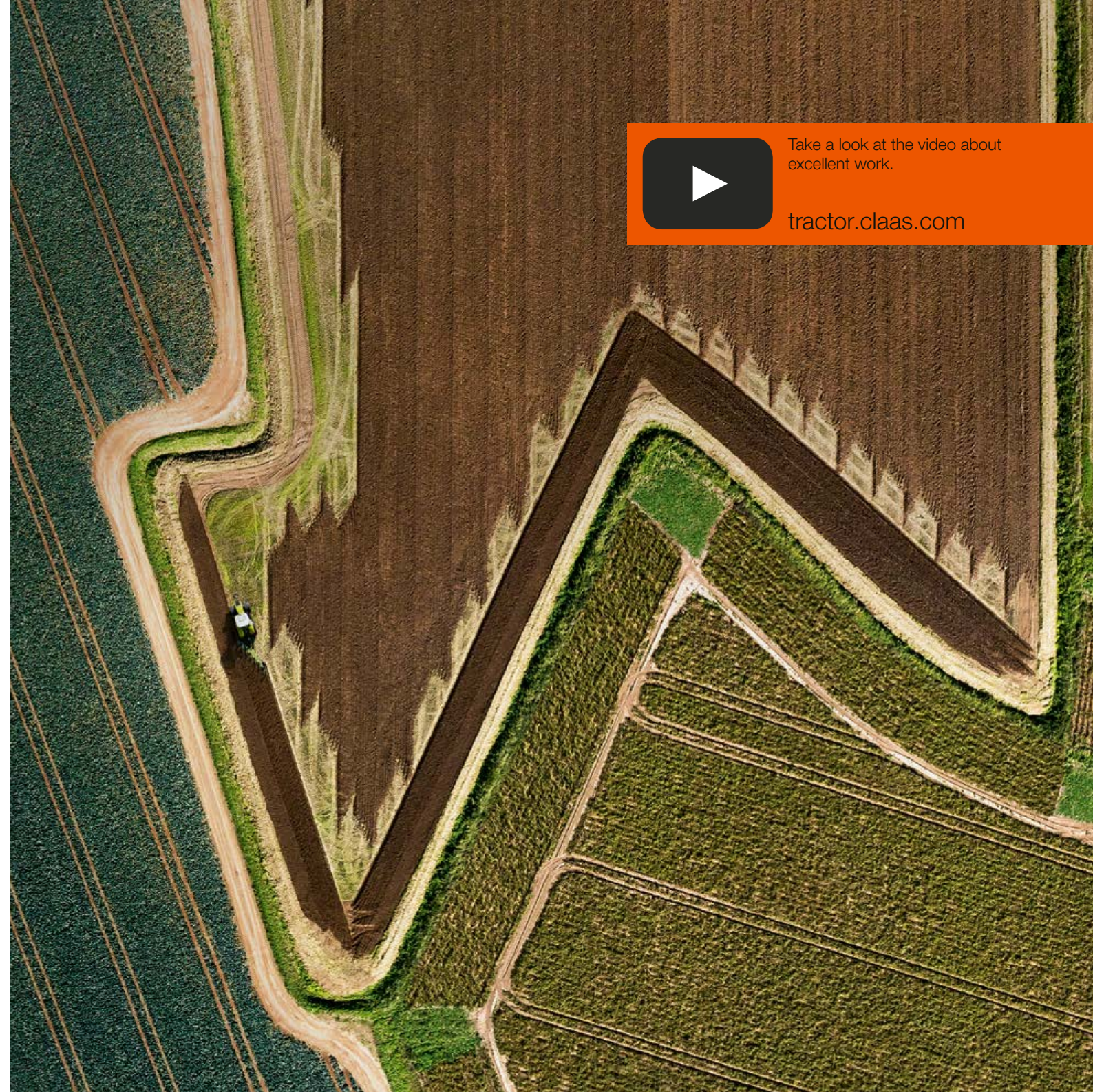
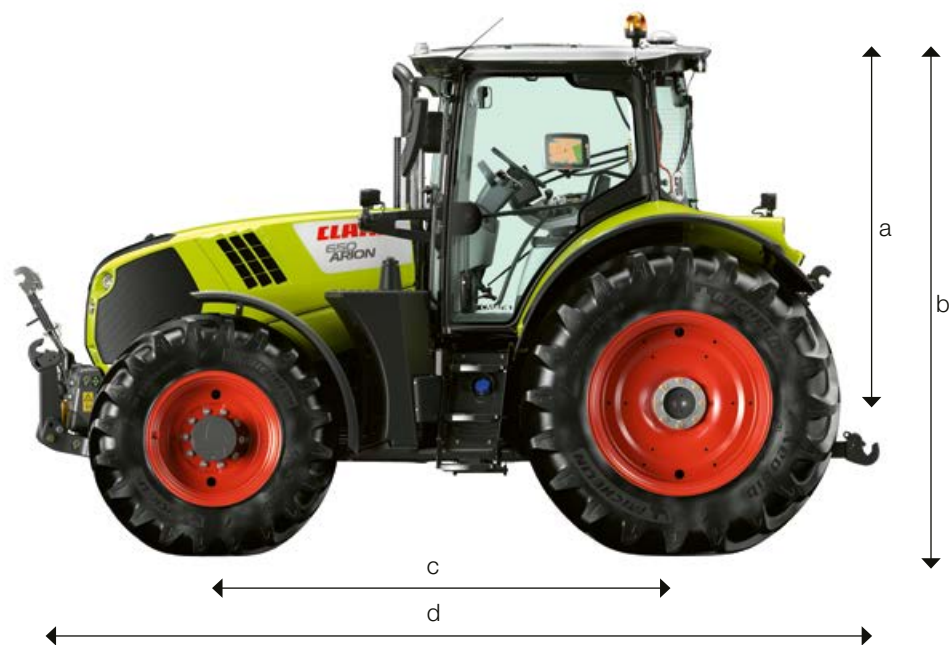
Cab								
CIS version		–	●	●	●	●	●	●
CIS+ version		●	○	○	○	○	○	○
CEBIS version		○	○	○	○	○	○	○
4-pillar cab		●	●	●	●	○	○	○
5-pillar cab		○	○	○	○	●	●	●
4-point suspension		●	●	●	●	●	●	●
Air conditioning		●	●	●	●	●	●	●
Automatic climate control		○	○	○	○	○	○	○
Passenger seat with integral cool box		●	●	●	●	●	●	●

¹ Meets ISO TR 14396

² Performance data fit criteria for admissibility

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 for photographic purposes in order to present the function clearly. To avoid any risk of danger, never remove these protective panels yourself. In this respect, 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.

ARION		660	650	630	610	550	530	510
Dimensions and weights								
Height: centre of rear axle to cab roof (a)	mm	2166	2166	2166	2166	2166	2166	2166
Overall height (b)	mm	3050	3050	3050	3050	3000	3000	3000
Rear tyres		20.8 R 38	20.8 R 38	20.8 R 38	20.8 R 38	20.8 R 38	18.4 R 38	18.4 R 38
Wheelbase (c)	mm	2820	2820	2820	2820	2564	2564	2564
Length (from front weight carrier to rear lower links) (d)	mm	4818	4818	4764	4759	4508	4503	4443
Weight	kg	7860-8335	6980-7830	6740-7600	6530-7470	6410-7260	6000-6940	5950-6890
Max. permissible total weight (40/50 km/h versions)	kg	12500	12500	11000	10250	11000	10250	10250



Take a look at the video about excellent work.

tractor.claas.com

Excellent work. Tractors from CLAAS.

CLAAS UK
Saxham
Bury St. Edmunds
Suffolk
IP28 6QZ
Tel 01284 763100
claas.co.uk
info-uk@claas.com

365FarmNet enables you to manage your entire agricultural business by means of a single, non-proprietary software solution. Interfaces to intelligent applications created by partners in the agricultural sector offer expert support for your business 365 days a year.
CLAAS is a 365FarmNet partner.

www.365farmnet.com



365FarmNet