

ARION
640 630 620 610
540 530 520 510

CLAAS

New rules.







ARION. New rules up to 175 HP.

"The heart of the tractor market" – this is often how the middle performance class from 100 to 170 hp is described, because this is where farmers, farms and farm contractors find the widest variety of models and equipment options. This means that each customer can assemble his ideal tractor exactly how he wants it.

With the three new model series in the ARION family, CLAAS offers impressive variety and opens up amazing new prospects: all the technical options that were previously restricted to the 200 hp tractors are now available from 105 hp. And even farms that favour high performance and conventional equipment are ideally catered for: with the new ARION 600 C series.

Unique comfort.

The CLAAS comfort concept is one of the great strengths of the ARION series and makes your work as comfortable as possible.

Enormous versatility.

Best example: the new top model, ARION 640. Where necessary, it can achieve an output of up to 175 hp, thanks to the CPM Powerboost. Power reserves which open up many new application options.

High efficiency.

The highly developed engines in the new ARION series, the advanced transmission technology and the tractive power concept are the best basis for extremely economical and efficient work.



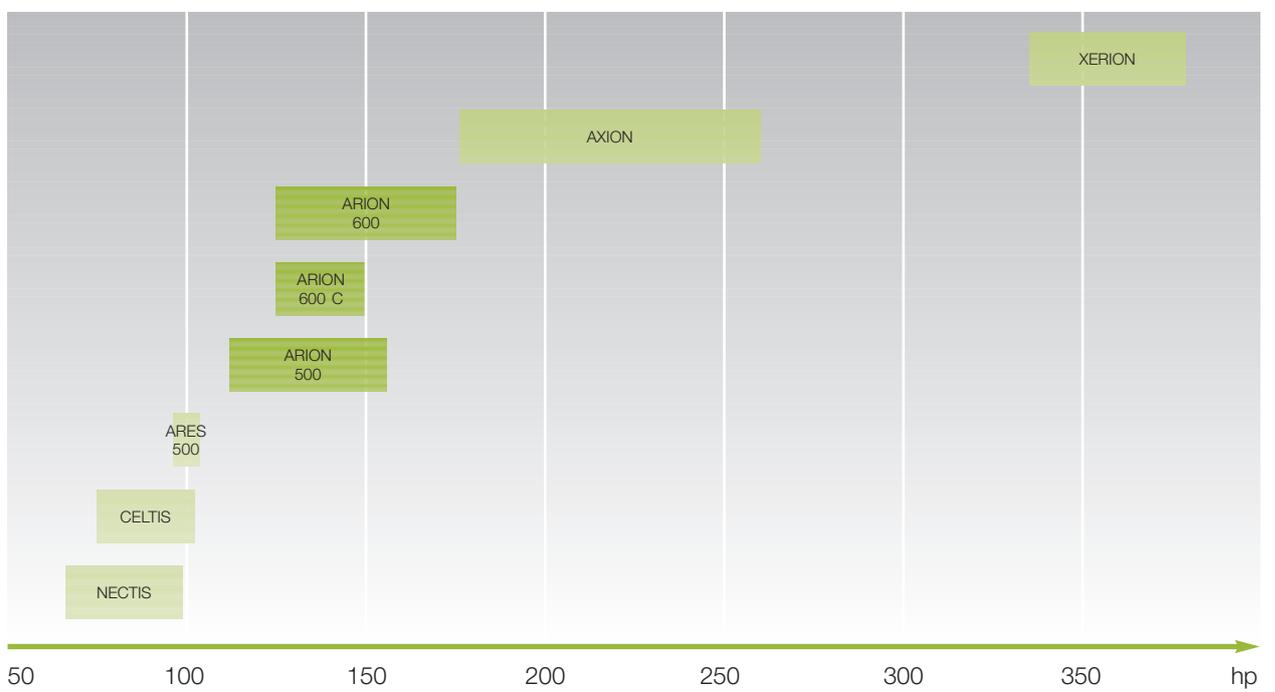


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ARION – a new performance class of 112 to 175 hp*.



*All performance data shows the maximum output in accordance with the ECE R 24 standard.



You can now demand much more between 112 and 175 hp.

Three new Ranges between 112 and 175 hp.

With the ARION series, CLAAS is also implementing fresh ideas in the middle performance class. The new models cover a large power range and meet the various demands of a typical working day.

For example, are you looking for a versatile 4-cylinder tractor? Then the ARION 500 series is the one for you. Or is there more of a need for a 6-cylinder? Then the ARION 600 is definitely your first choice.

And for those for whom comfort and operation are not the top priorities, there is an economical alternative: the ARION 600C. There is a separate brochure available for the ARION 600C which contains a lot more information and interesting details.

The 6-cylinder tractors from the ARION range: the 600 series.

A normal tractor with 38" rear wheels and an unladen weight of 5 to 6 t would usually be expected to have an engine output of no more than 150 hp. However, the new top model, the ARION 640, sets new standards by raising this limit by 25 hp. Thanks to the CLAAS POWER MANAGEMENT (CPM), the tractor achieves an impressive maximum engine output of 175 hp.

The 4-cylinder tractors from the ARION range: the 500 series.

The three ARION models 510, 520 and 530 have maximum outputs of 112 to 128 hp in accordance with ECE R 24. The new top model in the 500 series, the ARION 540, achieves an output of 135 hp. Thanks to the CLAAS POWER MANAGEMENT boost, it has the potential of reaching a maximum output of 155 hp, which can be used in almost all applications.



Variety of engines
ARION 6-cylinder
ARION 4-cylinder

ARION 600.
The 6-cylinder tractors from
125 to 175 hp.





Same power range as the ARES series, extended by the top model, ARION 640, thanks to the CPM power boost.

Anyone who is interested in tractors must of course also look at the performance data. Not always such an easy task. It is often a case of wading through mountains of figures and complicated terms: various standards, boost power, power rating, maximum output, PTO shaft output. It may often be the case that the output as sold and paid for is not actually of much use in the field. Therefore, be particularly critical when buying a tractor. It's worth it.

The new the ARION 640 top model is equipped with the CPM power boost. This provides the additional 20 hp boost power exactly when it is needed; that is, from gear C1, around 6 km/h on the field. This allows you to make the most of your tractor's performance potential. No additional tuning, which could, in some circumstances, put your warranty and operating licence at risk.

Engine output, ARION 600 series

ARION	Power rating	Max.	Boost
	kW/hp at 2,200 rpm	kW/hp at 2,000 rpm	kW/hp at 2,000 rpm
610	85/115	92/125	–
620	96/130	99/135	–
630	103/140	110/150	–
640	110/150	114/155	129/175

Variety of engines
ARION 6-cylinder
ARION 4-cylinder



The new top model in the 4-cylinder range: the ARION 540 with 155 hp engine output.

Nowadays, on many farms, life without a tractor with a 4-cylinder engine is just unimaginable. Its advantages are clear: it is compact and versatile, has very good front loading characteristics and a low gross weight. But more and more often, the "small" 4-cylinder has to carry out the work of a "large" 6-cylinder tractor.

This raises the issue of more power. CLAAS now has a clear solution: the ARION 540. Thanks to the CPM power boost, this new top model has a potential engine output of 155 hp both on the road and in the field. That is outstanding in the 4-cylinder segment and opens up many new areas of application.

Engine output, ARION 500 series

ARION	Power rating	Max.	Boost
	kW/hp at 2,200 rpm	kW/hp at 2,000 rpm	kW/hp at 2,000 rpm
510	77/105	82/112	–
520	85/115	90/122	–
530	92/125	94/128	–
540	96/130	99/135	114/155



CPM boost: useful for power take-off work.



CPM boost: useful for any work over 6 km/h.

ARION 500.

The 4-cylinder tractors from 112 to 155 hp.



CPM boost: useful on the road
and for in field work.

Variety of engines
ARION 6-cylinder
ARION 4-cylinder

Everyone agrees on one thing:
the new ARION is impressive.





Only those who really know what goes on at a farm can contribute to developing the optimum machines. Therefore, CLAAS works not only for the customer but also hand in hand with the customer. Experts are consulted and involved right from the early stages of development projects.

Prototypes are tested under the toughest practical conditions. Important experience values with existing machines are also analysed, so that knowledge can flow seamlessly into the development of new tractors. The result is a machine like the new ARION. Comfortable, economical, reliable. The kind you need and value every day. Everyone agrees on that.



"I am very happy with
the ARES 697.
But the new ARION 640 is clearly
even better."

Markus Stinn

The judgement of the customer plays an important role in the development of a new CLAAS tractor. Markus Stinn was one of the practitioners who test drove and evaluated the ARION as early as one year before it was launched on the market.



Farm profile, Dietz und Stinn KG,
51491 Overath.

- Germany, Bergisches Land
- 180 dairy cows plus breeding
- Average livestock performance 8,900 l, 4.2 % fat, 3.4 % protein
- 230 ha total area, of which 180 ha extensive grassland, 40 ha maize for silage
- Workforce: Sebastian Dietz, Markus Stinn, 1 apprentice





"Up to 175 hp along with efficient consumption – that does the trick."

The farm run by Sebastian Dietz (right) and Markus Stinn (left), has been using an ARES 697 ATZ for two years. The main priorities are mowing grass with a butterfly mower (DISCO 8550, 8.3 m cutting width), transport work with a 40 m³ chipping trailer and liquid manure spreading. Overall, the machine totals approximately 1,200 working hours per year.

In the "Bergisches Land" region in Germany, the demands are very high: mowing at 8 to 12 km/h, up to 22 hours non-stop operation and hill starts with a heavy trailer weight. "But this is no problem for the ARES 697", says a satisfied Markus Stinn. And even the driving comfort and transmission have impressed the farmers.

"However, at 145 hp, we are often working to the limit – it would be good to have some more power sometimes. The new ARION 640 could therefore be the ideal machine for our farm", says Markus Stinn, "as it has power reserves of up to 175 hp. And that's with efficient fuel consumption. Something else I liked very much during the test drive", he continues, "is the advanced comfort. The multifunction armrest means that all switch functions are within easy reach of your right hand and the CEBIS terminal is easy to understand. All in all, it's really great how CLAAS has once again brought about improvements."



Customer experience
 from Germany
 from France
 from the Netherlands



The farmer Joël Verger is the owner of a testing service for tractors and has already carefully field tested an ARION 540.



Earl Verger estate –
61100 La Carneille.

- France, Lower Normandy
- 180 ha, of which 140 ha grassland and 40 ha maize for silage
- 325,000 l milk
- 50 dairy cows, 60 young cattle, 30 beef cattle and 60 bulls per year
- ARES 656, ARES 657, replaced by ARION 540
- 2,500 hours per year, of which 2,000 hours with front loader



"The ARION 540 is extremely versatile"

Joël Verger

Although the use of telescopic loaders is ever more popular in the region, Joël Verger prefers a front loader tractor. The main reasons for this are greater versatility, low operational costs and easy maintenance.

The tractor works approximately 2,500 hours per year, using the front loader for up to 2,000 of those hours, mainly for distributing silage, spreading manure and stacking bales.

Straw has to be baled and then gathered on 120 ha of crop area located 40 km away from the farm. This requires both a good PTO shaft output and a high level of driving comfort on the road. When it comes to grassland work, the versatility of the ARION 540 is of great benefit to Verger: he uses his ARION mainly for the hay harvest and for spreading manure.

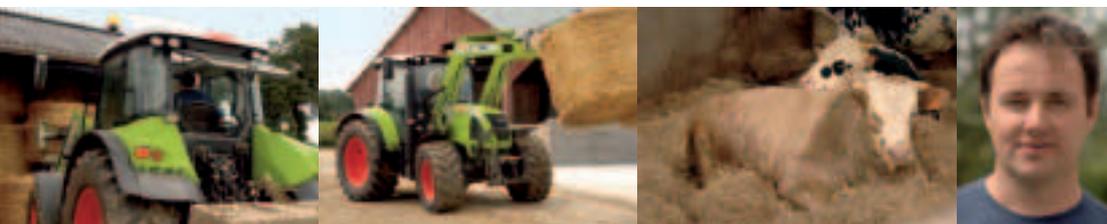
When cultivating maize for silage, the tractor is used mainly for direct seeding after the previous crop, using a front grubber and a seed drill at the rear. Output and good traction are required in this case.

"The ARION 540 is the ideal tractor for me", explains Verger. "With the additional boost power of 20 hp, the tractor achieves an output of up to 155 hp. That's of great use to me for transport and for sowing maize."

The ARION 540 has convinced Joël Verger when it comes to baling too: "The engine characteristics are so amazing that we can operate the light baler with the 540 ECO power take-off instead of the 540 power take-off that is actually stipulated."

"Besides this, the 4-cylinder engine requires very little space. This means that the ARION is very versatile and provides many advantages when working in the barn."

For direct seeding of maize, Joël Verger particularly values the HEXASHIFT transmission with the HEXACTIV power shift unit. He prefers the HEXASHIFT transmission to an infinitely variable transmission because of its various settings and good output.



Customer experience
from Germany
from France
from the Netherlands

"Its economic efficiency is a key factor."

Dinant Lammertink

In 2005, farm contractor Dinant Lammertink purchased two new CLAAS ARES 697. His experiences were good, which meant that these were followed by a third ARES 697 in 2006 and a new AXION 820 in 2007.



Farm contractor
Lammertink,
7475 NG Markelo.

- Netherlands
- 12 permanent employees plus temporary staff
- Agricultural contract work
- Road and footpath construction
- Total of 9 tractors in operation, of which 3 ARES 697, 1 AXION 820
- Average 1,800 operating hours/tractor/year





The farm contractor's customer base consists mostly of small-structured farms. "We are unable to use the very large tractors but prefer the lighter tractors", reports Dinant Lammertink. The size, manoeuvrability and tractive force capability of the ARES 697 are therefore ideal for the contractor's varied spectrum of work, e.g. for liquid manure spreading with 10 m³ liquid manure vats and an 8 m wide grassland injector or for transport work with a 22 t chipping trailer or 18 t dumpers.

As Lammertink had purchased two ARES 697 in 2005 and was very pleased with them, he bought another ARES 697 and finally an AXION 820. With a capacity of around 1,800 working hours/year, all the CLAAS tractors have proved to be outstanding. "They have the right combination of output, fuel consumption and reliability, which means that the economics work too", comments Dinant Lammertink.

Lammertink is also pleased with the working comfort of the CLAAS tractors. He praises the sprung cab as well as the HEXASHIFT transmission: "Better than a power shift transmission but still easy to use, so I can let any driver take the wheel, no problem at all!" On his AXION, Lammertink values the multifunction armrest and the CEBIS terminal: "The control concept offers options that were previously only available on tractors with infinitely variable transmissions."

Although Lammertink is satisfied overall, there are some situations in which the ARES 697 could do with a few more hp: for example, during the maize harvest, when they have to lift the 22 t chopping trailer onto the silage clamp. Nevertheless, Lammertink believes that the next tractor will be another ARES tractor: "With our customer base, we have a particular need for the lighter tractors with decent hp. If, in future, CLAAS were able to offer a power boost with "additional output on request" on these machines too, I would be very happy."



Customer experience
from Germany
from France
from the Netherlands

Demand more comfort. Your working day is hard enough.

For the perfect overview:
the CEBIS terminal

New variants,
some even with mechanical control
valves and CIS

Everything in hand at first go:
the multifunction armrest
with DRIVESTICK

PROACTIV sprung front axle with
independent wheel suspension
(optional)





A further ray of light: the new light concept with intuitive operation. Up to 14 spotlights, 4 of them Xenon lights (optional)

Always keep your cool: the automatic climate control system (option)

A good space to work in: the pneumatically sprung low-frequency seat (optional)

Vibration dampening as standard on rear linkage

Unique in the performance class: the 4-point cab suspension

The optimum 2.82 m wheel base (ARION 600): for directional stability and extreme comfort

Unique comfort:
CLAAS comfort concept
CIS – CLAAS INFORMATION SYSTEM
DRIVESTICK
Multifunction armrest
CEBIS



The CLAAS comfort concept is much more than just one equipment feature.

A tractor driver spends up to 2,000 hours every year on the tractor seat. That's a long time. Individual control elements are activated tens of thousands of times during those 2,000 hours. That's a lot of work. To make the working day as pleasant as possible for every driver, CLAAS is the only manufacturer in this performance class to supply the 4-point cab suspension combined with complex independent-wheel suspension of the front axle.



The CLAAS comfort concept. To keep you sitting pretty. With every thing to hand.



We have thought of everything to make your working day easier:

- The new instrument panel – well laid-out and functional
- The new steering column with narrower panelling guarantees better visibility of the instruments
- As standard: self cancelling indicators
- New air outlets in the instrument panel provide draught-free air conditioning
- Standard on board: air conditioning, automatic climate control system optional
- The new angle of the steps makes access easier
- The cab: unusually spacious in this class
- Unique: the 4-point cab suspension
- Up to 8 front and 6 rear headlights – also provide good lighting for areas to the right and left of the tractor
- As an option: Xenon spotlights and electrically adjustable mirrors



Air conditioner as standard.

Unique comfort:

CLAAS comfort concept

CIS – CLAAS INFORMATION SYSTEM

DRIVESTICK

Multifunction armrest

CEBIS



The CLAAS INFORMATION SYSTEM CIS always keeps you up to date:

If the ARION (instead of the CEBIS terminal) is fitted with mechanical control valves, the CIS replaces the CEBIS function in the instrument panel.

ARION	With CIS	With CEBIS
Multifunction armrest	•	•
DRIVESTICK	•	•
PTO shaft management	•	•
Mechanical control valves	•	–
CIS in instrument panel	•	–
Electronic control valves	◦ (2)	•
CEBIS terminal	–	•
Headland management CSM	–	•
Engine speed memory	◦	•
Indicator reset mechanism	•	•
ELECTROPILOT	◦	◦

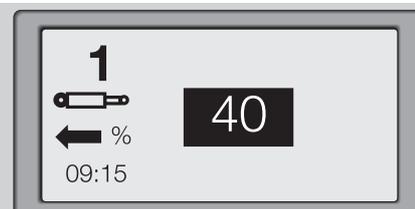
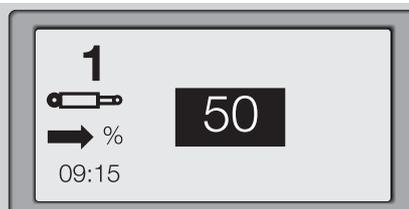
• standard ◦ optional – not available

With its compact design, the CIS display provides the same user ergonomics as the CEBIS terminal: all settings can be operated using a control knob and the "ESC" key.

The following functions can be set using the CIS:

- HEXACTIV power shift unit switching points
- HEXASHIFT transmission start gear
- Aggressiveness of REVERSHIFT clutchless reverser
- Time and quantity adjustment for the electronic control valves on the ELECTROPILOT (optional)
- On-board computer functions such as area processed, fuel consumption, area output
- Displaying the maintenance intervals

On this variant, there are two optional electronic control valves which can be conveniently operated using the ELECTROPILOT on the multifunction armrest.



Fully informed with mechanical control valves. Thanks to CIS.



The advantages of the variant with CIS display and mechanical control valves:

- All the information you need shown on the HEXASHIFT display on the A-pillar and CIS
- New steering columns with automatic indicator reset mechanism
- Optional: ELECTROPILOT with 2 electronic control valves
- Fitted with multifunction armrest and DRIVESTICK for transmission operation as standard
- Up to 4 mechanical control valves with float setting
- Easy to operate, even when drivers change

Adjustment example: adjusting flow and time control of an ELECTROPILOT control valve with the CIS display.



Unique comfort:
CLAAS comfort concept
CIS – CLAAS INFORMATION SYSTEM
DRIVESTICK
Multifunction armrest
CEBIS



The unique DRIVESTICK is intuitively handled, and allows full control via the HEXASHIFT transmission.

The driver's hand rests on the armrest. All switching functions can be performed with only slight movements of the thumb and index finger. This means no more fumbling around when switching. You'll be enthused by the ARION driving comfort from the very first test drive.



Progressive technology ready to hand.

Your advantages:

- Intuitive operation, even with different drivers
- Makes for more effective, stress-free work
- Steer motion sequences with simple hand movements
- Full concentration on the essential working processes
- Ergonomic hand rest provides more comfort, especially on long working days
- Smooth running control elements
- No relative movement between body and armrest, due to attachment to the seat

■ Shifting operation Powershift +/- ■ Shifting operation range +/- ■ Slip shift function



Unique comfort:

CLAAS comfort concept
CIS – CLAAS INFORMATION SYSTEM
DRIVESTICK
Multifunction armrest
CEBIS

Optimum combination. CEBIS and the multifunction armrest.

Additional functions in the CEBIS variant:

- Up to 5 electronic control valves on the multifunction armrest
- Large colour CEBIS terminal
- Headland management
CLAAS Sequence Management (CSM)
- Engine speed memory
- Device memory
- Work order processing and hectare counter
- Adjusting the flow for all control valves
(separate for each direction)
- Time control for all control valves
- Remote control for a control valve at the rear
- Fuel measuring device and display





Operation for the rear linkage and headland management CSM

DRIVESTICK for operating the HEXASHIFT automatic transmission

Hand throttle

Activation of HEXACTIV automatic transmission and push switch for 2 stored engine speeds

Rear linkage depth adjustment

ELECTROPILOT for proportional operation of 2 electronic control valves

F1 and F2 function, e.g. for direct access to task management

Comfortable and proportional operation of up to 3 electronic control valves

The ergonomically perfect armrest.

It has been completely redeveloped, provides the best ergonomics and is the linchpin for stress-free, effective working: the new multifunction armrest. It is the result of comprehensive analyses of the operating processes in the cab: frequently required functions can be found on the multifunction armrest, and lesser required functions are located on the right-hand side console.

Unique comfort:
 CLAAS comfort concept
 CIS – CLAAS INFORMATION SYSTEM
 DRIVESTICK
 Multifunction armrest
 CEBIS



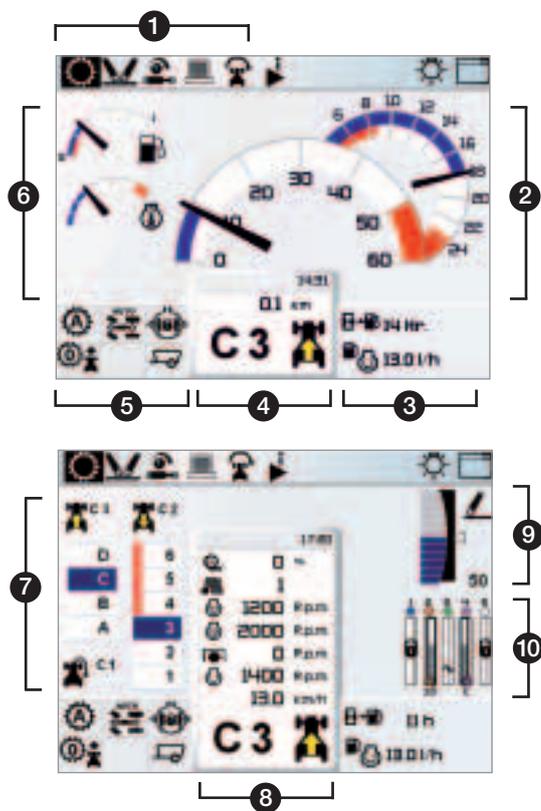
With CEBIS, you can now experience in the new ARION the premium technology that has proven itself a thousand times over in LEXION and XERION. This sophisticated terminal allows complete control of all machine functions using a large, easy-to-read display and easy operation via one control knob. Sensible, straightforward and functional. Like everything in the new ARION.

CEBIS on the road

1. Menu bar
2. Ground speed and rpm
3. User-defined information
4. Status display, transmission and direction of travel
5. Vehicle status information
6. Tank and temperature display

CEBIS in the field

7. Expanded transmission display
8. Detailed view of working parameters
9. Status display front and rear linkage
10. Control valve settings status



After one recording, CLAAS SEQUENCE MANAGEMENT undertakes the work sequences on the headland – as simple as a cassette recorder with record – play – pause – stop.

Simply everything under control. With CEBIS.

What separates CEBIS from other tractor terminals:

- Just 2 elements for operation: "control knob" and ESC
- Clear graphic display and easy-to-understand symbols
- Quick access to submenus through DIRECT ACCESS
- Integrated on-board computer as standard for checking area output, fuel consumption, job data
- Attractive, easy-to-read, colour screen layout
- Two different screen layouts to choose from as standard, one for road travel and one for field work

Your advantages:

- You always have an overview of all relevant processes and statuses
- It is easy to operate and intuitive
- You leave nothing to chance because you are always properly informed of everything
- You can concentrate more on the work, because CEBIS automatically eases your workload

CEBIS quick access with DIRECT ACCESS.



Activate function.

Press DIRECT ACCESS key.

Change settings directly in submenu.

Unique comfort:

CLAAS comfort concept
CIS – CLAAS INFORMATION SYSTEM
DRIVESTICK
Multifunction armrest
CEBIS

It's incredible what the new ARION can pull, lift and transport.

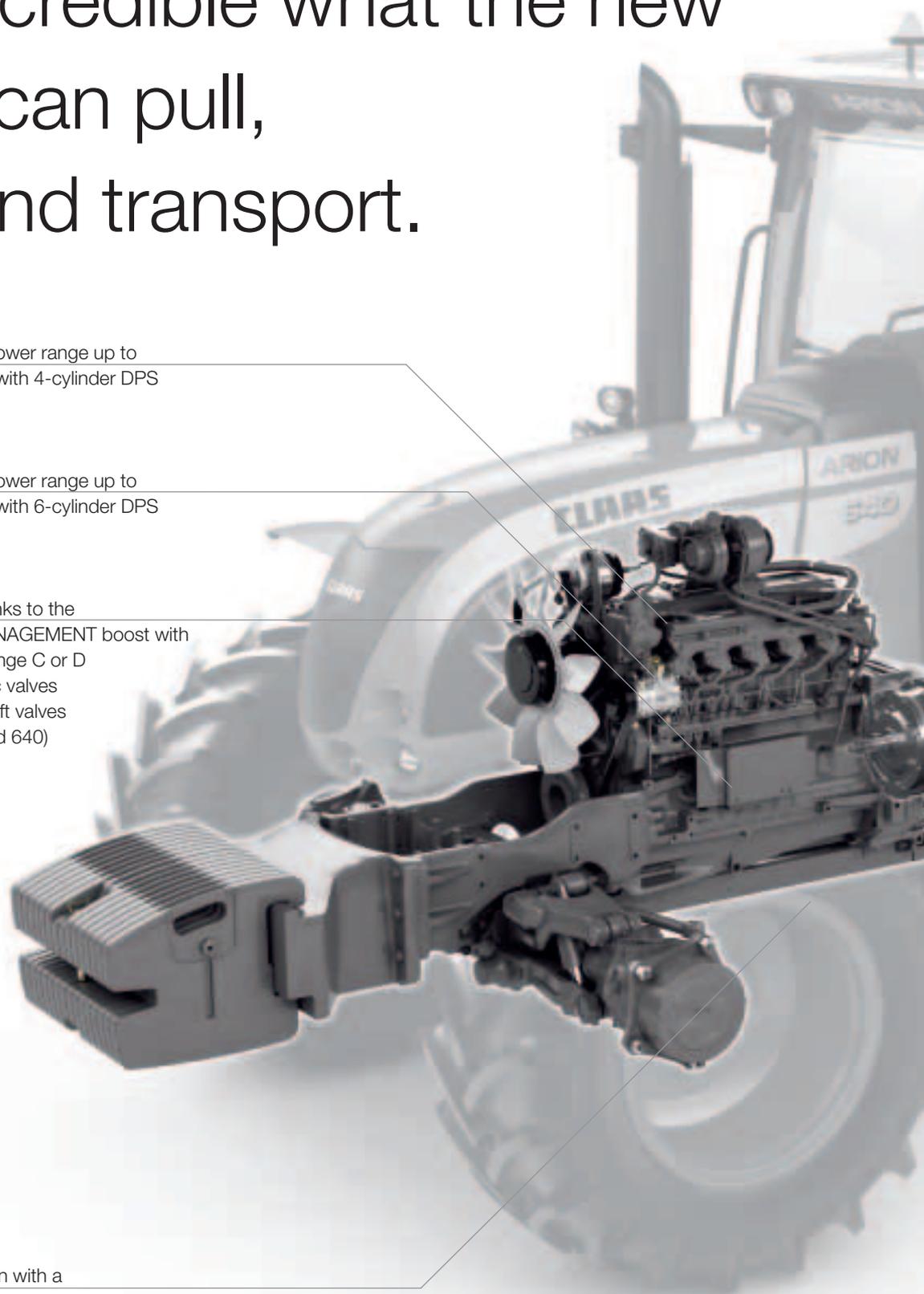
ARION 500 – High power range up to
155 hp max. output with 4-cylinder DPS
engines

ARION 600 – High power range up to
175 hp max. output with 6-cylinder DPS
engines

Additional 20 hp thanks to the
CLAAS POWER MANAGEMENT boost with

- transmissions in range C or D
- load on in hydraulic valves
- load on in PTO shaft valves
(on ARION 540 and 640)

The ideal combination with a
CLAAS front loader





High continuous lifting power from 5,100 kg on the ARION 640 (measured at 610 mm)

From 110 m/h to 50 km/h with the HEXASHIFT transmission

Low power to weight ratio from 34 kg/hp (46 kg/kW) for low fuel consumption during partial-load work

Enormous versatility:
Output and dimensions
Engines
Transmission
Hydraulics and power take-offs
Front loader

No matter what you demand of it, the ARION always cuts a fine figure.

Short overall length



Long wheel base

ARION 600 = 2.82 m / ARION 500 = 2.56 m

Short overall length for:

- good manoeuvrability
- short vehicle length on the road
- good visibility
- good guidance of front attachment devices

Long wheel base for:

- high level of driving comfort
- directional stability
- higher tractive power due to better weight distribution
- good and secure road holding
- higher lifting power due to better weight distribution



Up to 175 hp with boost

Up to 175 hp usable engine output:

- in cultivation from C1, approx. 6 km/h
- during sowing – heavy power take-off work
- during transport work
- during baling

Good power to weight ratio:

- for low fuel consumption during light work
- for low ground pressure during cultivation work
- for dynamics in road travel
- for a high permissible load capacity
- weight distribution front/rear 47 % / 53 %

The power to weight ratio can be increased through ballasting if a higher pulling force is required.

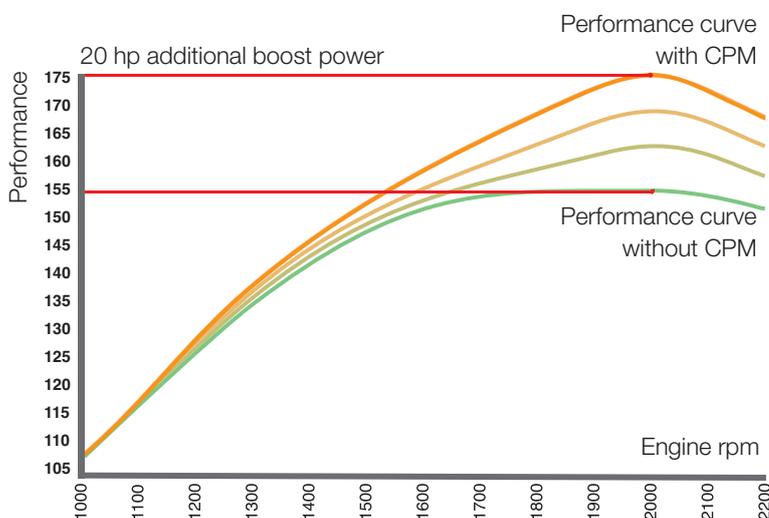


Power to weight ratio from only 34 kg/hp (46 kg/kW)

Enormous versatility:

- Output and dimensions
- Engines
- Transmission
- Hydraulics and power take-offs
- Front loader

When others have reached their limit, the ARION has another 20 hp boost reserve.



CLAAS POWER MANAGEMENT CPM

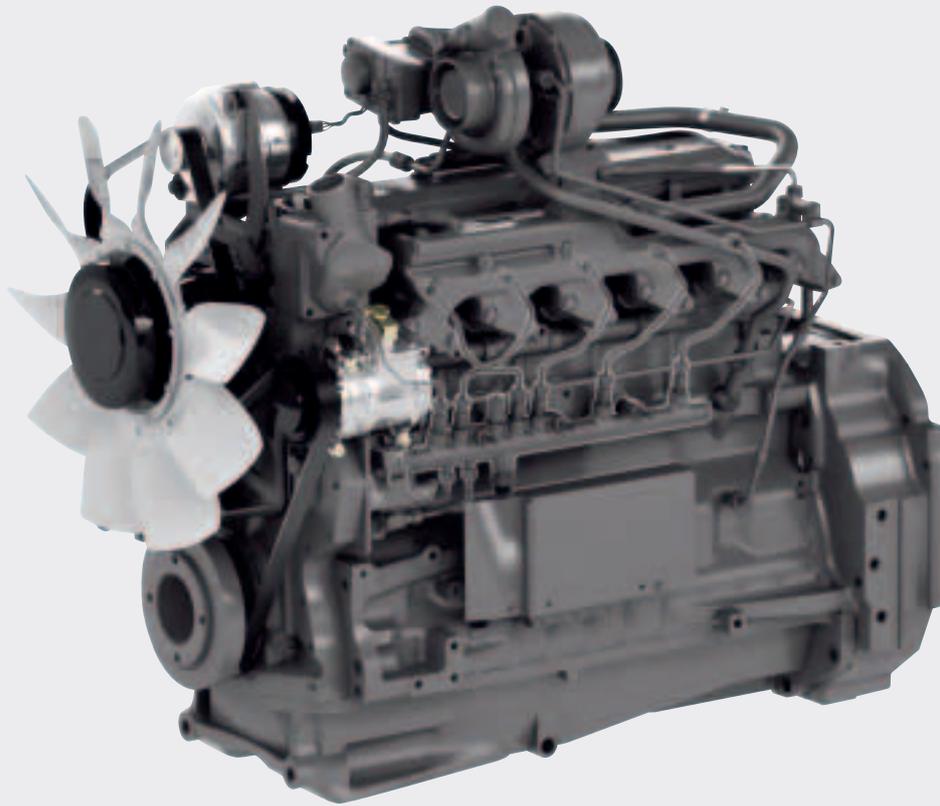
The top models, ARION 540 and ARION 640, are equipped with the innovative CLAAS POWER MANAGEMENT system. Depending on the required tractive power, PTO shaft output or hydraulic power reduction, up to 20 hp of additional engine output are released in stages under the following conditions:

- transmission in range C or D (C1 = 8 km/h at 1,900 rpm.)
- reduction in hydraulic power
- reduction in PTO shaft output

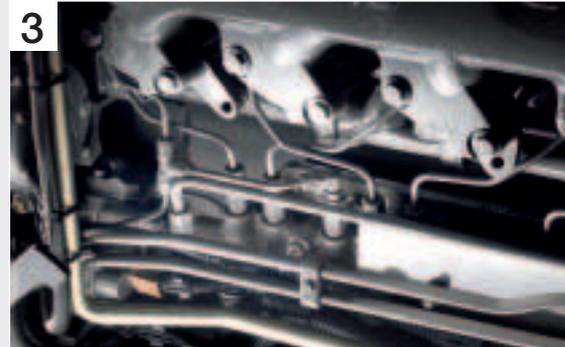
The additional boost power is released by the CPM in 6 stages. It therefore never releases more fuel-hungry power than is actually required.

Examples for applications where the additional output of up to 20 hp from the CPM is used.





1 2



1) DPS 6.8 I 6-cylinder engine

- Meets TIER-3 emissions standard
- 4-valve cylinder head
- Air-to-air charge air cooling
- Up to 43 % torque increase
- Modern CPM boost technology
- Up to 10 hp reserve power
- Electronically controlled
- 500 h oil change interval

2) Variable geometry turbo (VGT)

For a high torque even at low engine speeds, the turbine blades are adjusted according to the speed and load. No more "turbo lag" experienced and reduced fuel consumption.

3) Common rail injection system

Common rail means improved response characteristics, lower fuel consumption and a more precise adjustment of the engine to all operating statuses.

4) Cooled exhaust gas recirculation

The recirculation of part of the exhaust gas flow significantly reduces the pollutant emissions and increase the efficiency of the fuel burn, therefore reducing fuel consumption..



Enormous versatility:

Output and dimensions

Engines

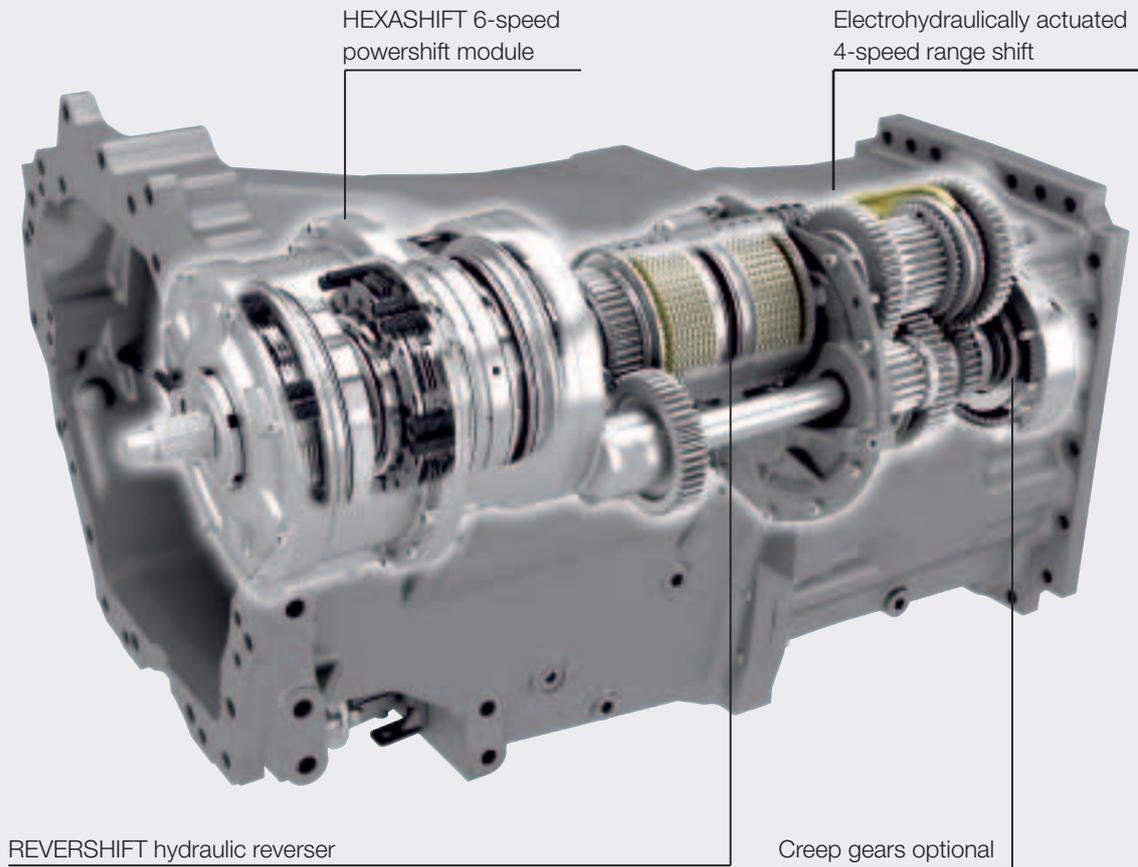
Transmission

Hydraulics and power take-offs

Front loader

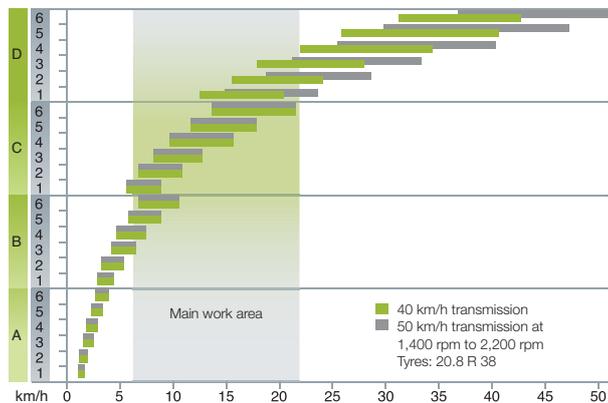
Easy shifting with the
unique HEXASHIFT
automatic transmission.





The HEXASHIFT automatic transmission from CLAAS.

It supports you with the best high technology. Thanks to HEXASHIFT and the DRIVESTICK, you can easily switch between the 6 powershift speeds and the 4 automatic ranges with your fingertips. Or switch automatically with the HEXACTIV power shift unit.



CLAAS HEXASHIFT offers clear advantages.

- No more range shifting with the clutch
- Good gear ranges in the main work area
- Fully automatic shifting operation with HEXACTIV power shift unit
- Good efficiency in the field and on the road for low fuel consumption
- Creep gear options up to 110 m/h
- Convenient setting options with CEBIS
- High operating comfort with the DRIVESTICK
- Engine/transmission management for smooth changes in range and powershift shifting operations

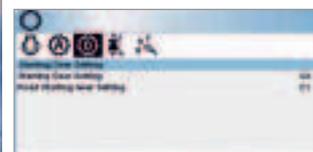
Enormous versatility:

- Output and dimensions
- Engines
- Transmission
- Hydraulics and power take-offs
- Front loader



The attractive HEXASHIFT innovations on the ARION.

1. The starting gear can be individually adjusted via the CEBIS or CIS terminal



2. Infinite adjustment of the shift points for the automatic power shift unit via the new CEBIS or CIS



3. The modulation of the REVERSHIFT reverser can be changed in the CEBIS or CIS menu



The settings indicated above are carried out via the CEBIS terminal. On the variant with mechanical control valves, the values are set with the CIS terminal on the instrument panel.

The ARION changes gear for you, so you can concentrate on other tasks.

3 different
driving
strategies

1. Manual shifting

Mode

- Plough switch pressed (field mode)
- HEXACTIV switch not pressed

Switching

- Range shifting by pressing the DRIVESTICK through the stop
- Powershift shifting (1–6) by tapping the DRIVESTICK

2. Powershift automatic, ranges manual

Mode

- Plough switch pressed (field mode)
- HEXACTIV key pressed

Switching

- Range shifting (A-D) by pressing the DRIVESTICK
- Automatic powershift speed switching

3. Powershift and ranges automatically

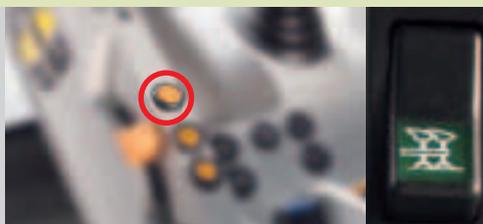
Mode

- Plough switch not pressed (road travel mode)
- HEXACTIV key pressed

Switching

- Range shifting automatic
- Automatic powershift speed switching

Manual intervention for shifting with the DRIVESTICK is possible at any time even in automatic mode



Enormous versatility:

Output and dimensions

Engines

Transmission

Hydraulics and power take-offs

Front loader

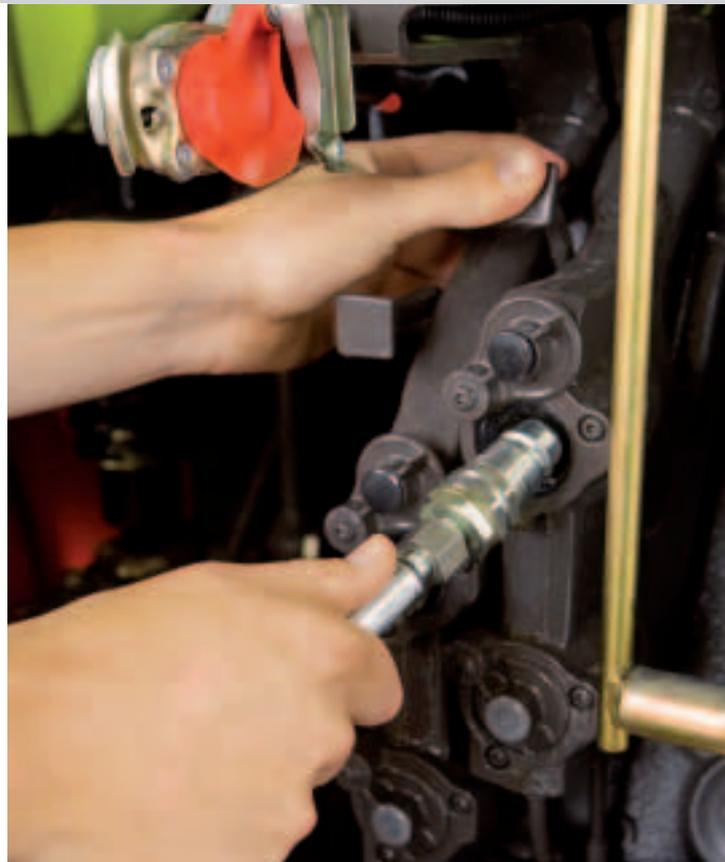
The new rear end of the ARION – sophisticated down to the smallest detail.

The more powerful the equipment,
the more important the hydraulics.

- Load sensing hydraulic system with 110 l/min output (optional on the ARION 500)
- Easily accessible operation of 4 mechanical control valves on the right-hand side console
- In conjunction with CEBIS: the operation of up to 5 electronic control valves on the multifunction armrest
- All control valves have time and quantity controllers (only in conjunction with CEBIS)

The convenient PTO
equipment is impressive.

- 540/1,000 power take-off is standard
- Optional 540/540E/1,000/1,000E power take-off
- Ground speed power take-off available as an option
- Automatic PTO control when lifting and lowering the linkage
- Flange PTO is standard
- Rear actuation is standard





Full of good ideas: the rear end of the tractor.

- Very neat design
- Completely new hydraulic valve connections with very good accessibility and release levers for coupling even under pressure
- Robust dust caps and leak oil tank for cleanliness
- Large diameter couplers for large hydraulic plugs
- Easily accessible arrangement of connections for hydraulic or pneumatic brakes
- Hydraulic top link (optional)
- Robust and simple top link holder
- Very good visibility of the drawbar coupling and lower links
- Both mud guards are fitted with remote controls for linkage, PTO shaft and an electronic control valve (CEBIS only)
- Very good side visibility thanks to sloped mud guards
- Long reaching mudguards to reduce mud splash on the tractor
- Power beyond preparation available ex-works
- 5.1 t continuous lifting power for the ARION 640 (measured 610 mm behind the coupling hooks)

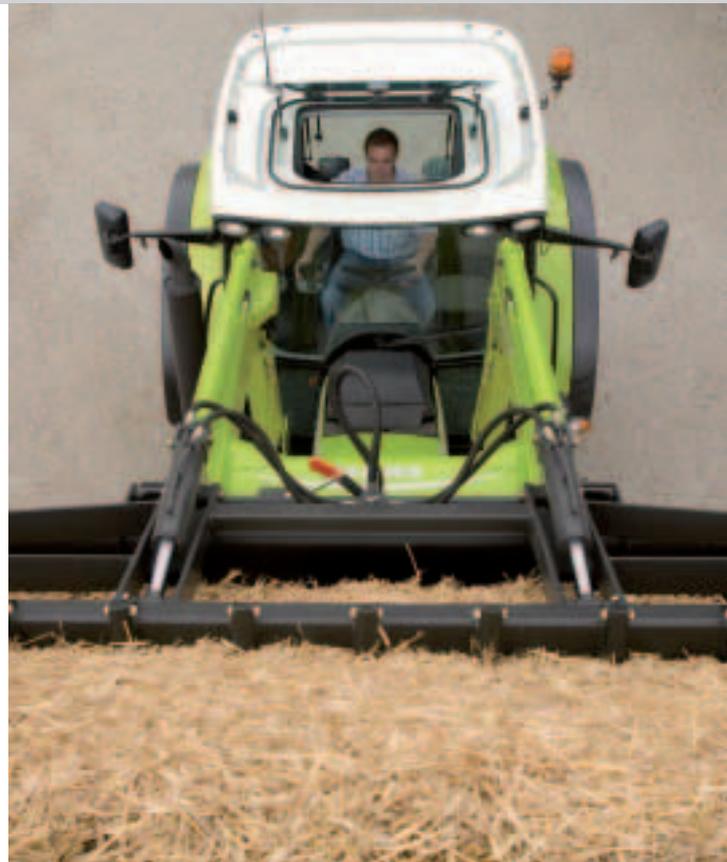
Enormous versatility:

Output and dimensions
Engines
Transmission
Hydraulics and power take-offs
Front loader

Whatever you have in mind: Choose the right front loader.

No compromising comfort.
Not even with front loader work.

The new CLAAS front loaders have convincing, high-quality technology and perfect processing capability. They are the ideal supplement to the CLAAS ARION. It's not just the operation of the various variants that's perfect, but also the view of the equipment.



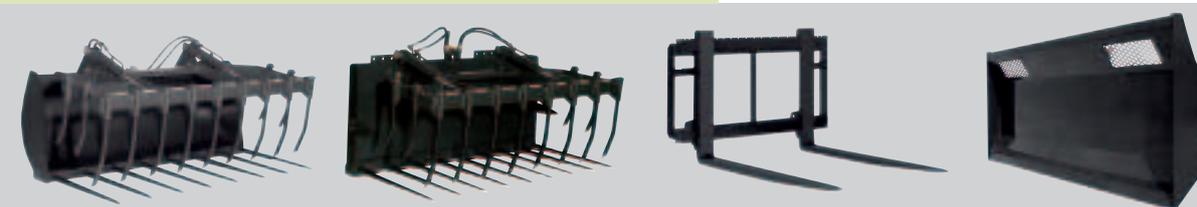


A lot of things speak in favour of the CLAAS front loader.

- Front loader pre - equipment, tested to withstand the greatest loads, available ex works
- A very good view of the working area through the glass sunroof
- Ideal for good visibility, and for preventing damage: hoses integrated in the front loader
- Three convenient operating variants to choose from: PROPILLOT, FLEXPILLOT, ELECTROPILLOT
- PCH hydraulic self-levelling for optimum, high-precision loading capacity
- FITLOCK system for quick and convenient attaching/detaching
- MACH quick attachment coupler for electrics and hydraulics
- SHOCK ELIMINATOR vibration dampening for extreme driving comfort
- Excellent lifting power and a wide selection of tools
- And not forgetting the full CLAAS service



ARION	FL 100	FL 120	FL 150
510	•	–	–
520	•	•	–
530	–	•	–
540	–	•	–
610	•	•	–
620	–	•	–
630	–	•	•
640	–	–	•
Lift capacity kg	2,190	2,490	2,670
Lifting height m	4.00	4.15	4.60



Enormous versatility:
 Output and dimensions
 Engines
 Transmission
 Hydraulics and power take-offs
 Front loader

It pays to rely on effectiveness and economic efficiency.

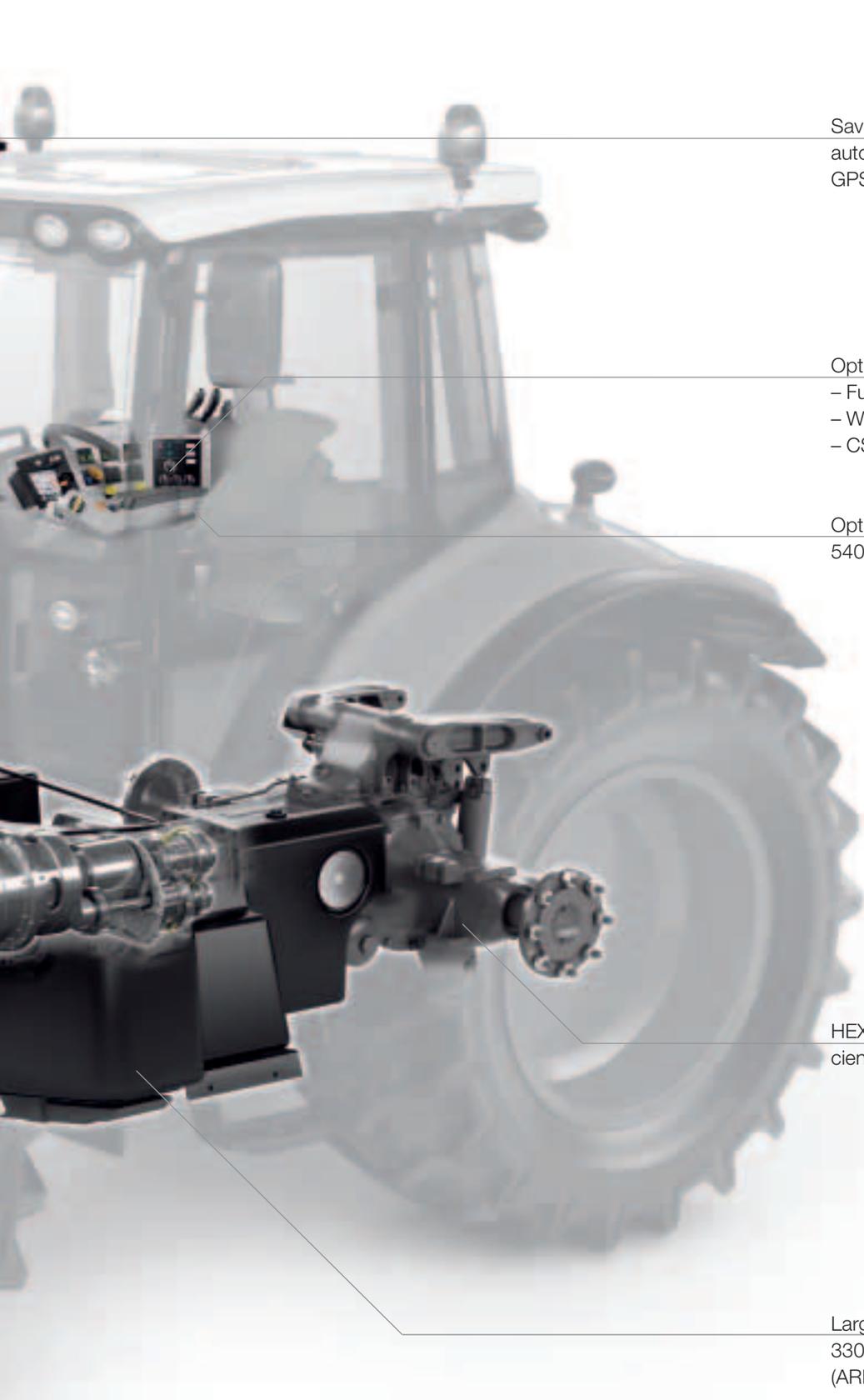
Maintenance and accessibility made
easy thanks to one-piece bonnet

Fuel-saving engine technology:

- Variable VGT turbo
- Cooled, external exhaust gas recirculation
- 4-valve cylinder head
- Common rail injection system
- Controlled visco fan
- Electronic injection

Electronic engine/transmission
management





Save up to 10 % costs with the automatic steering system GPS PILOT and EYE DRIVE

Optional CEBIS with:

- Fuel consumption indicator
- Work order processing
- CSM headland management

Optional: 4 power take-off speeds: 540/540 ECO, 1000/1000 ECO

HEXASHIFT transmission, very efficient, with low fuel consumption

Large fuel tanks with up to 330 l capacity (ARION 600) / 250 l (ARION 500)

High efficiency:

Fuel efficiency
Maintenance
GPS PILOT



Whether 4-cylinder or 6-cylinder: up to 550 rpm constant power range and a steep torque increase – impressive performance data of the new ARION.

And higher output means lower diesel consumption. Thanks to the engine technology and CLAAS POWER MANAGEMENT not a single valuable litre of diesel is wasted. Additional output is only mobilised if it is actually required. This means long periods of work in the field thanks to lower consumption. Large fuel tanks have further positive advantages, in that they can hold up to 250 l in the ARION 500 models and 330 l in the ARION 600 models.

The automatic HEXASHIFT transmission makes another valuable contribution to particularly effective and economic working. It is characterised by an excellent degree of efficiency, guaranteeing optimum engine speed and a working speed which always brings you the best in every application. In whichever speed range you're working, economic efficiency is the highest imperative.

Favourable consumption thanks to ARION technology.

- Optimised transmission and rear axle for a high degree of efficiency
- Engines with
 - variable turbo
 - exhaust gas recirculation
 - 4-valve cylinder head
 - common rail injection system
 - controlled visco fan
 - electronic injection
- Low power to weight ratio
- Electronic engine/transmission management
- CLAAS POWER MANAGEMENT CPM with step-by-step release of additional engine output (ARION 540/640)
- 40 km/h or 50 km/h at reduced speeds

We cannot lower
the price of diesel.
But we can lower
how much is burnt.



High efficiency:

Fuel efficiency

Maintenance

GPS PILOT

Shorter maintenance times, longer intervals.



Quick maintenance thanks to easy accessibility.

Even during maintenance, the new ARION clearly scores points. The one-piece bonnet allows you quick and easy access to all service and maintenance points.

In this way, all maintenance work can be carried out with just a few simple actions.

- Simple oil check
- Easy to top up
- Quick air filter cleaning/replacement
- Problem-free cleaning of the cab air filter
- Each cooler is easily accessible





Lower costs thanks to long maintenance intervals.

The new ARION shines with particularly long service intervals. This means that you can run very many successful operations, and still have time left for maintenance. And you don't need to worry about forgetting when the next service is due. CEBIS or CIS will do the checking for you, and notify you in good time. Good to know, isn't it?

Your advantages:

- You have access to the most important maintenance points
- CEBIS or CIS keeps you up to date with regard to the maintenance status
- You can carry out simple maintenance operations yourself
- Long intervals allow you more flexibility of operation
- Long-term maintenance also means lower costs



High efficiency:

Fuel efficiency

Maintenance

GPS PILOT

With the GPS PILOT or EYE DRIVE, you can also save a load of money.

Optimising operating costs.

Research into tillage systems show that there is usually an increase in overlap for greater working widths that do not make use of a guidance system. That means 7 % diesel fuel, machine costs, fertiliser and pesticide, which could easily be saved with a modern self-levelling system.

Increase the quality of your work.

CLAAS steering systems ease the driver's workload. They show him in advance which direction to take and automatically steer the tractor to the best track. This prevents errors and allows the driver to concentrate on the machine settings – a significantly better working result.



The Omnistar HP receiver for GPS signal and GPS reference signal.



The GPS receiver on the baseline high-pressure system. This includes an extra radio receiver for the reference signal.



Correction signal as required.

CLAAS has set up its range of systems in such a way that you can easily extend them at any time. This applies just as much to the terminal technology as to using any of today's essential correction signals.

Omnistar HP GPS PILOT

- Accuracy +/- 5 to 10 cm
- DGPS dual frequency
- Correction signal received by satellite
- Monthly or annual licence fee for the reference signal

GPS PILOT RTK

- Accuracy +/- 2 to 3 cm
- Mobile (3 km reach) or stationary reference station (20 km reach)
- No licence fees
- Maximum steering precision
- Reference signal can be set by the local dealer
- For fleets of machinery or for outsourcing

GPS PILOT Baseline HD

- Accuracy +/- 5 to 10 cm
- Own mobile reference station
- Reach 3–5 km
- Public reference signal
- Reference station can be used by more than one machine at the same time

EYE DRIVE

- 3D camera in the tractor front mounting
- Accuracy +/- 5 cm
- Steering hydraulics can be combined with the GPS PILOT
- Tractor follows the rows of plants, machine tracks, banks, swaths



The EYE DRIVE camera on the front mounting.

High efficiency:

Fuel efficiency

Maintenance

GPS PILOT

ARION

		ARION 510	ARION 520	ARION 530	ARION 540	ARION 610	ARION 620	ARION 630	ARION 640
MOTOR									
Manufacturer	DPS	DPS	DPS	DPS	DPS	DPS	DPS	DPS	DPS
Number of cylinders/intake		4/TI	4/TI	4/TI	4/TI	6/TI	6/TI	6/TI	6/TI
Cubic capacity	cm ³	4,525	4,525	4,525	4,525	6,788	6,788	6,788	6,788
Nominal engine speed	rpm	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Output at nominal engine speed (ISO TR 14396)	kW/hp	81/110	88/120	96/130	99/135	88/120	99/135	107/145	114/155
Max. output (ISO TR 14396)	kW/hp	86/117	93/127	98/133	103/140	96/130	103/140	114/155	118/160
Max. output with CPM (ISO TR 14396)	kW/hp	–	–	–	118/160	–	–	–	132/180
Output at nominal engine speed (ECE R 24)	kW/hp	77/105	85/115	92/125	96/130	85/115	96/130	103/140	110/150
Max. output (ECE R 24)	kW/hp	82/112	90/122	94/128	99/135	92/125	99/135	110/150	114/155
Max. output with CPM (ECE R 24)	kW/hp	–	–	–	114/155	–	–	–	129/175
Max. output at engine speed	rpm	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Constant output	rpm	400	500	500	550	400	400	550	500
Engine speed at max. torque	rpm	1,650	1,650	1,650	1,650	1,650	1,650	1,650	1,650
Max. torque (ISO TR 14396)	Nm	477	526	541	585	534	580	633	657
Max. torque with CPM (ISO TR14396)	Nm	–	–	–	619	–	–	–	718
Max. torque (ECE R 24)	Nm	470	520	530	577	527	571	630	656
Max. torque with CPM (ECE R 24)	Nm	–	–	–	610	–	–	–	710
Electronically controlled injection pump		•	•	•	•	•	•	•	•
Air filter dust aspiration		•	•	•	•	•	•	•	•
Max. fuel capacity	l	250	250	250	250	330	330	330	330
Oil change interval	h	500	500	500	500	500	500	500	500
TRANSMISSION									
Version V/R		24/24	24/24	24/24	24/24	24/24	24/24	24/24	24/24
Min. speed	km/h	1.6	1.6	1.6	1.6	1.6	1.7	1.5	1.6
Max. speed	km/h	40	40/50	40/50	40/50	40/50	40/50	40/50	40/50
REVERSHIFT clutchless reverser		•	•	•	•	•	•	•	•
Number of Powershift Speeds		6	6	6	6	6	6	6	6
Electrically controlled ranges		4	4	4	4	4	4	4	4
HEXACTIV		○	○	○	○	○	○	○	○
Creep range	km/h	0.41	0.41	0.41	0.41	0.41	0.42	0.38	0.41
Extra-slow	km/h	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11
Oil change interval	h	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
REAR AXLE									
Electrohydraulically connected differential locks		•	•	•	•	•	•	•	•
Automatic differential locks		•	•	•	•	•	•	•	•
Max. rear tyres		600/65 R38	650/65 R38	650/65 R38	650/65 R38				
PTO									
Wet multi-disc clutch		•	•	•	•	•	•	•	•
Remote control switch-on and emergency stop		•	•	•	•	•	•	•	•
540/1,000		•	•	•	•	•	•	•	•
540/540(E)/1,000/1,000(E)		○	○	○	○	○	○	○	○
PTO shaft*		○	○	○	○	○	○	○	○
Replaceable PTO shaft end		•	•	•	•	•	•	•	•
Shaft splines		6/21	6/21	6/21	6/21	6/21	6/21	6/21	6/21

* Standard in UK

4-WD FRONT AXLE

Electrohydraulic operation		•	•	•	•	•	•	•	•
Automatic 4-WD		•	•	•	•	•	•	•	•
Max. steering angle	°	55	55	55	55	55	55	55	55
Castor angle	°	6	6	6	6	6	6	6	6
Angle of oscillation	°	10	10	10	10	10	10	10	10
Steering radius	m	4.4	4.5	4.5	4.5	4.8	4.9	4.9	4.9
Track	mm	1,950	1,950	1,950	1,950	1,950	2,050	2,050	2,050
with tyres		13.6 R 28	14.9 R 28	14.9 R 28	14.9 R 28	14.9 R 28	16.9 R 28	16.9 R 28	16.9 R 28
Wet multi-disc clutch		•	•	•	•	•	•	•	•
PROACTIV sprung front axle		○	○	○	○	○	○	○	○
Fixed fenders		○	○	○	○	○	○	○	○
Pivoting fenders		○	○	○	○	○	○	○	○

HYDRAULICS

Open hydraulic circuit		•	•	•	•	–	–	–	–
Output at rated speed	l/min.	60	60	60	60	–	–	–	–
Max. operating pressure	bar	200	200	200	200	–	–	–	–
Load sensing circuit		○	○	○	○	•	•	•	•
Output at rated speed	l/min.	110	110	110	110	110	110	110	110
Max. operating pressure	bar	200	200	200	200	200	200	200	200
Number of control valves (min./max.)		2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6
Quantity control		•	•	•	•	•	•	•	•
ELECTROPILOT 4-way control		○	○	○	○	○	○	○	○

REAR LINKAGE (measured values)

Max. lifting power	kg	6,500	6,500	6,500	6,500	6,500	6,500	6,900	8,000
Continuous lifting power at 610 mm	kg	4,100	4,100	4,100	4,100	4,100	4,100	4,200	5,100
Lifting range	mm	745	745	745	745	745	745	748	812
Vibration dampening		•	•	•	•	•	•	•	•
Active slip control		○	○	○	○	○	○	○	○
Trailer hydraulic brake		○	○	○	○	○	○	○	○
Compressed-air brake system		○	○	○	○	○	○	○	○
Trailer plug		•	•	•	•	•	•	•	•
25 amp socket		○	○	○	○	○	○	○	○

CABIN

4-point suspension		•	•	•	•	•	•	•	•
Air conditioning		•	•	•	•	•	•	•	•
Automatic climate control system		○	○	○	○	○	○	○	○
Multifunction armrest		•	•	•	•	•	•	•	•
CIS with mechanical control valves		•	•	•	•	•	•	•	•
CEBIS with electronic control valves		○	○	○	○	○	○	○	○
Passenger seat		•	•	•	•	•	•	•	•
Cooler compartment		○	○	○	○	○	○	○	○

DIMENSIONS

ARION 510 ARION 520 ARION 530 ARION 540 ARION 610 ARION 620 ARION 630 ARION 640

HEIGHT

Rear wheels		16.9 R 38	18.4 R 38	18.4 R 38	18.4 R 38	18.4 R 38	20.8 R 38	20.8 R 38	20.8 R 38
Front wheels		13.6 R 28	14.9 R 28	14.9 R 28	14.9 R 28	14.9 R 28	16.9 R 28	16.9 R 28	16.9 R 28
Centre rear axle – cab upper edge (a)	mm	2,156	2,156	2,156	2,156	2,180	2,180	2,180	2,180
Overall height (b)	mm	2,956	2,981	2,981	2,981	3,005	3,055	3,055	3,055

LENGTH

Wheel base (c)	mm	2,560	2,560	2,560	2,560	2,820	2,820	2,820	2,820
Clearance, rear axle – lower link (d)	mm	1,198	1,198	1,198	1,198	1,198	1,198	1,198	1,198
Length (e) (with jerrican weights and coupling device)	mm	4,889	4,889	4,889	4,889	5,155	5,155	5,155	5,155

GROUND CLEARANCE

Front axle (f)	mm	491	516	516	516	516	541	541	541
Rear axle (g)	mm	483	508	508	508	508	535	549	549

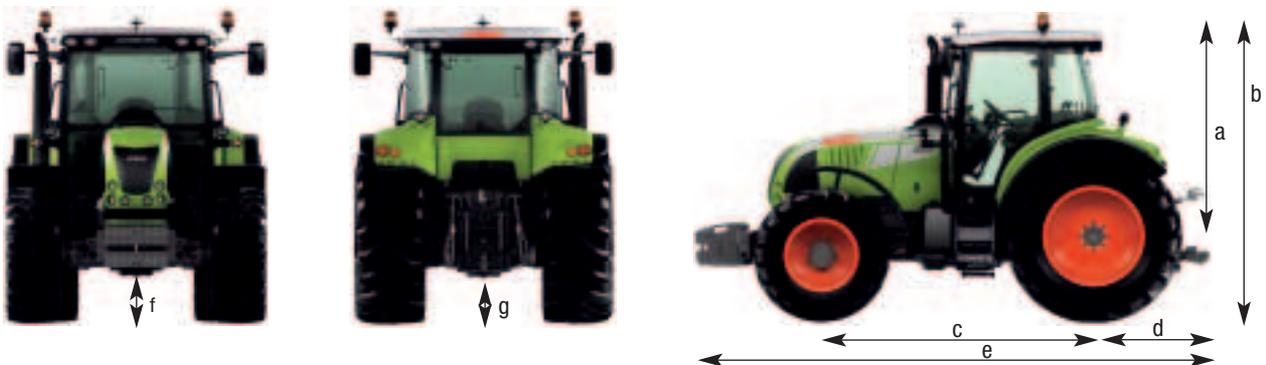
WEIGHTS (standard tyres, with oil and fuel, fixed front axle, with driver)

Rear wheels		16.9 R 38	18.4 R 38	18.4 R 38	18.4 R 38	18.4 R 38	20.8 R 38	20.8 R 38	20.8 R 38
Front wheels		13.6 R 28	14.9 R 28	14.9 R 28	14.9 R 28	14.9 R 28	16.9 R 28	16.9 R 28	16.9 R 28
Weight without ballast	kg	5,380	5,470	5,470	5,470	5,720	5,950	6,220	6,260
PROACTIV weight	kg	+ 179	+ 179	+ 179	+ 179	+ 179	+ 179	+ 227	+ 227
Max. ballast weights ex-works	kg	804	804	804	804	804	954	954	954
Weight distribution with ballast (rear/front)	%	46/54	46/54	46/54	46/54	47/53	46/54	47/53	47/53
Max. permissible gross weight (40 km/h version)	kg	8,800	8,800	8,800	8,800	8,800	10,250	11,000	11,000
Max. permissible gross weight (50 km/h version)	kg	–	8,800	8,800	8,800	8,800	8,800	9,250	9,250

TYRE TABLE

Rear tyres	Front tyres								
16.9 R 38 (420/85 R 38)	13.6 R 28 (340/85 R 28)	•	•	•	•	•	–	–	–
480/70 R 38	380/70 R 28	•	•	•	•	•	–	–	–
540/65 R 38	440/65 R 28	•	•	•	•	•	–	–	–
18.4 R 38 (460/85 R 38)	14.9 R 28 (380/85 R 28)	•	•	•	•	•	•	•	–
600/65 R 38	480/65 R 28	•	•	•	•	•	•	•	–
520/70 R 38	420/70 R 28	•	•	•	•	•	•	•	–
20.8 R38 (520/85 R 38)	16.9 R 28 (380/85 R 28)	–	–	–	–	–	•	•	•
580/70 R 38	480/70 R 28	–	–	–	–	–	•	•	•
650/65 R 38	540/65 R 28	–	–	–	–	–	•	•	•
600/60 R 38*	480/60 R 28*	•	•	•	•	•	–	–	–
650/60 R 38*	520/60 R 28*	•	•	•	•	•	•	•	•

*XEOBIB • Standard ○ Option – not available



CLAAS continually strives to adapt its products to better meet practical requirements. We therefore reserve the right to change technical specifications. Information and illustrations are only to be considered as an approximation and may include optional equipment that is not supplied as standard. This brochure has been printed for world-wide distribution. 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. This was done merely to explain more clearly how an item operates and must on no account be undertaken without authorisation, in order to avoid any risk of danger. All machines are supplied in accordance with applicable machinery directives.

ARION
Specifications

Automatic steering systems GPS
PILOT and EYE DRIVE (optional)

CEBIS terminal with up to 5 elec-
tronic control valves (optional)

CIS display and up to 4 mechanical
plus 2 additional electronic control
valves with ELECTROPILOT
(optional)

Multifunction armrest with
DRIVESTICK as standard

DPS 4.5 I 4-cylinder (ARION 500)
DPS 6.8 I 6-cylinder (ARION 600) with:

- Common rail injection system
- 4-valve technology
- VGT turbo
- charge-air cooler
- external, cooled exhaust gas
recirculation

One-piece bonnet

Up to 14 spotlights,
4 of them Xenon lights (optional)

Glass sunroof (optional)

New rear hitch control
with optional slip control

Redeveloped CAN BUS
electronic systems

New mud guard design

New hydraulic connections

PROACTIV sprung front axle
(optional)

Optimised HEXASHIFT transmission

Long wheel base

Load sensing hydraulics

Large fuel tanks
with a capacity of up to 330 l
(ARION 600) or 250 l (ARION 500)

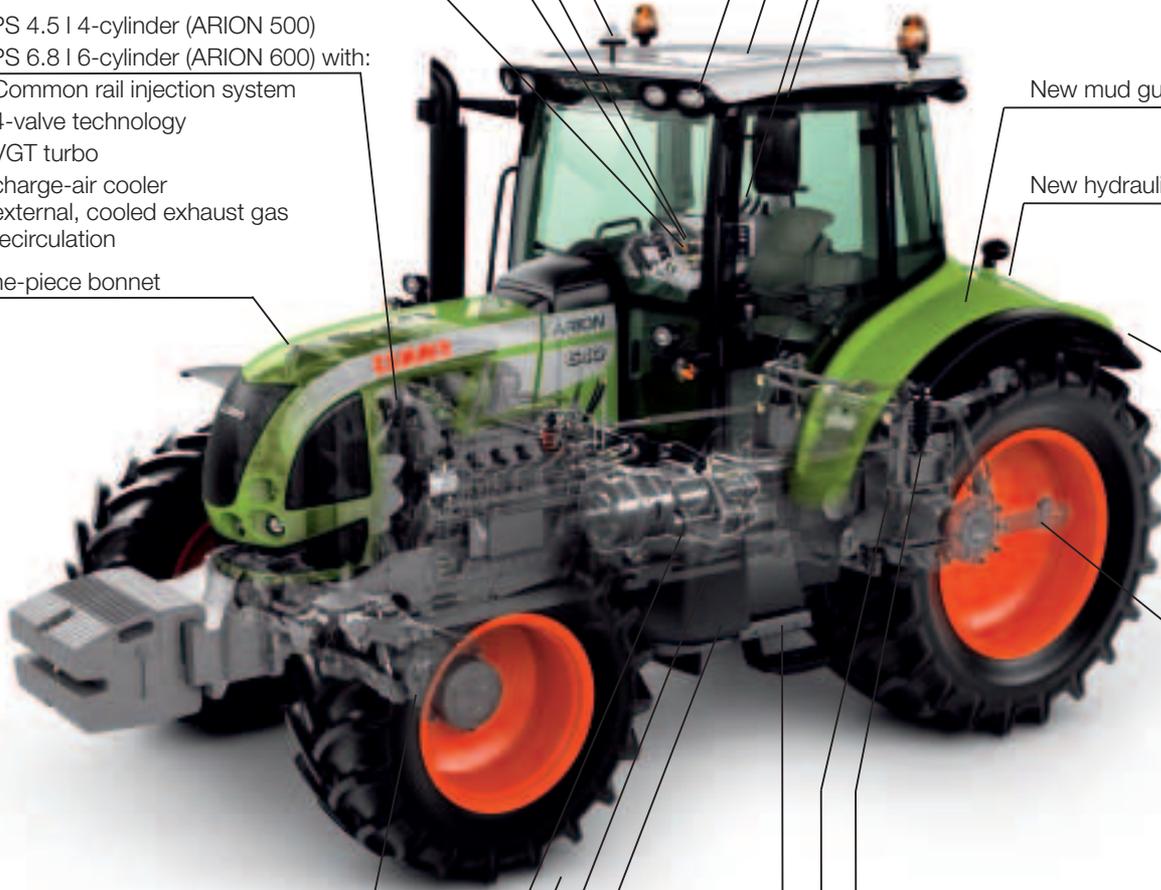
5.1 t continuous lifting power
at 610 mm on the ARION 640

Remote control on the mud guard
for linkage, PTO shaft
and a electronic spool valve

4-point cab suspension

Automatic PTO control

40 or 50 km/h at 1,900 rpm.
available on all models
Exception: ARION 510 - only 40 km/h





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10/07 (Be) englisch 30