

Tractors

AXION 950 940 930 920





#### The AXION 900.

More than ten successful years on the market speak for themselves: in a very short time, CLAAS has become established throughout Europe as one of the leading tractor manufacturers. In 2011 CLAAS added the AXION 900 to its family of large tractors delivering over 400 hp. With its enormous pulling power, ease of operation and wealth of intelligent systems, the AXION 900 opens up great potential in many highly demanding applications and has quickly become a standard feature of the range.



When massive pulling power joins forces with maximum user-friendliness to deliver unrivalled versatility and performance – you are sitting in the AXION 900.

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# CPS - CLAAS POWER SYSTEMS.

#### 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.





## Performance packaged.



#### Strong at heart.

A 6-cylinder, 8.7 I FPT (Fiat Power Train) Cursor 9 engine gets to work under a one-piece bonnet. The engine meets the requirements of the Stage IIIB (Tier 4i) emissions standard by means of exhaust aftertreatment with urea, and uses the latest common rail 4-valve technology, charge-air cooling and a wastegate turbocharger.

#### Visctronic – economical fan control.

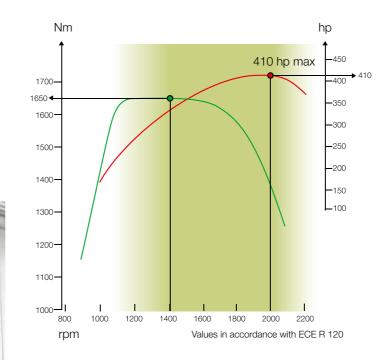
With Visctronic electronic fan control the fan speed can be precisely aligned with engine temperature and load, directly linked to the engine ECU, ensuring that the engine always runs at the optimum temperature. The reduced fan speed lowers the noise level and saves valuable fuel with no unnecessary impact on output, which can then be converted into tractive power.

#### Constant output.

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.



#### AXION 950



#### Full potential in any situation.

The multiple uses of a tractor in this class demand full potential in every speed range. The AXION's power is always available, even from a standing start. And the ECO PTO is designed to work at full torque and maximum output.

AXION	Maximum torque	Maximum output
	ECE R 120	ECE R 120
950	1650 Nm	410 hp
940	1550 Nm	380 hp
930	1450 Nm	350 hp
920	1350 Nm	320 hp









Engine



## Cleaning up.

#### Greatest pollutant reduction of all time.

There is no doubt that the introduction of the Stage IIIB (Tier 4i) emission regulations is the most important step to date in the control of pollutant emissions. These regulations require a 90% reduction in particulate matter (PM) as well as a 50% cut in nitrogen oxide (NO<sub>x</sub>) content. The implementation of Stage IV (Tier 4) will bring a further reduction in PM and (NO<sub>x</sub>) emissions to almost zero.

#### SCR – the urea-based solution.

SCR stands for selective catalytic reduction, a process in which nitrogen oxides 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 tank.

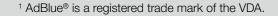
#### Fully integrated SCR system.

When designing the AXION 900, all the components required for exhaust aftertreatment were considered from the outset. This means that full visibility and accessibility are guaranteed. The SCR catalytic converter is safely housed under the bonnet where it receives a constant flow of cooling air.

#### Never lets you down.

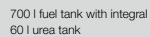
For particularly cold conditions, a cold-start system is available to heat the engine cooling water, battery, fuel filter and SCR system. The urea tank is heated as standard and is also protected from the cold by the insulating effect of being integrated into the fuel tank. The SCR system lines are also emptied automatically when the engine is switched off to protect against freezing.







For more information, please visit: axion900.claas.com



SCR

# CMATIC. Continuously variable for real performance.





#### Efficient and easy to use.

CMATIC is the name of the continuously variable transmission technology used in CLAAS tractors. In the AXION 900 series a ZF Eccom transmission provides efficient conversion of engine power. In this split-power, continuously variable transmission, the four mechanical ranges are automatically selected by multidisc clutches. There is no need to shift between ranges manually.

The high mechanical component of the CMATIC transmission provides outstanding efficiency and low fuel consumption in every speed range.

#### Exploiting real potential.

At speeds of 0.05 km/h to 50 km/h, the full power of the transmission can be used in either direction because power is transmitted mechanically even in reverse. What's more, every gear ratio can be used at every engine speed. The AXION 900 therefore offers enormous potential for use all year round.

With engine speeds of 1,600 rpm at a top speed of 50 km/h and 1,500 rpm at 40 km/h, the AXION 900 also demonstrates its capabilities in transport operations.

If the accelerator is not depressed, the transmission is in powered zero mode and maintains its position 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.









## Optimised settings.

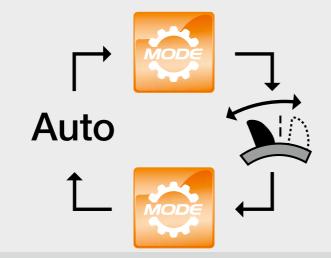
#### Simple, straightforward operation.

The CMATIC transmission has three operating modes: AUTO (foot pedal), CMOTION (hand control) and manual mode. Forward speed can be controlled by the accelerator pedal or the CMOTION. In these two modes, engine speed and transmission ratio are adjusted automatically – for optimum efficiency and optimised fuel consumption.

#### Accelerator pedal or CMOTION.

A button in the armrest enables the driver to switch between modes while the tractor is moving. However, manual mode can only be activated in CEBIS. In manual mode, the driver chooses the engine speed and transmission ratio. Automatic engine and transmission control is not active. The active mode at any given time is displayed on the CEBIS.

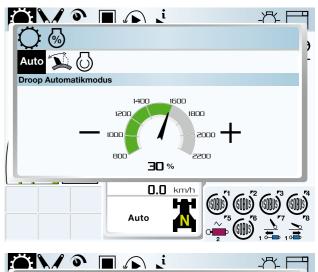


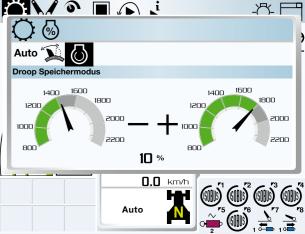


#### At the push of a button.

The engine speed at full load can be adjusted quickly and easily using the engine droop settings. The CEBIS clearly displays your set engine loading. When a constant engine speed is activated, i.e. during PTO work, the driver can specify a different droop setting, typically one that retains the engine speed to the required PTO shaft speed.

The engine droop can be specified separately for the individual drive modes and both engine speed memories. The engine droop can therefore be tailored to the application in hand at the push of a button, e.g. moving from the road to the field when transporting slurry. The CMATIC transmission technology from CLAAS enables you to use all 400 hp economically and productively.





Auto Acce

14

or I

CMOTION



*M*anual



For more information, please visit: axion900.claas.com

## 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 on the CEBIS and can be changed while the tractor is in motion using the two buttons on the CMOTION multifunction control lever.

The lower the maximum preset value for the range, the more accurately the forward speed can be controlled. Cruise control speeds can be saved in all three ranges while the tractor is moving, either in CEBIS or using the button on the CMOTION.

With CMATIC every driver can create his own profile according to the job in hand. Intelligent CMATIC transmission technology enables you to use all 400 hp economically and productively – with maximum operator comfort.



#### Stopping power.

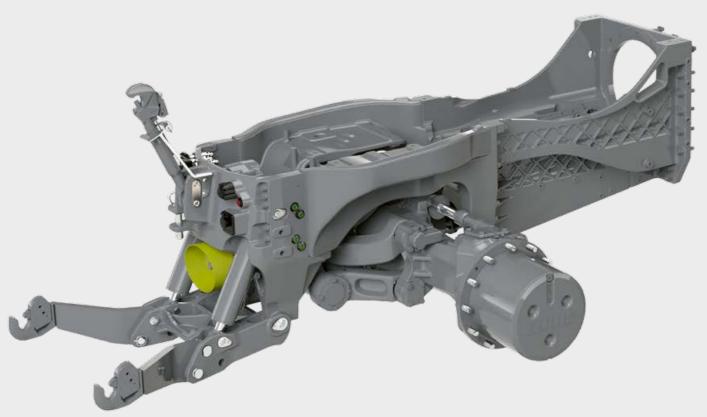
The CMATIC transmission offers different ways of adapting braking to the job in hand:

- Increase the engine braking effect: when the accelerator pedal is released and the CMOTION is pulled back, the engine braking effect is intensified and brake wear is reduced
- Driving down an extremely steep hillside with a heavy trailer: by pressing the CMOTION when the trailer brakes are on, you can tension the brakes on the tractor/trailer combination when starting from stationary on hills. This function can be used at speeds of up to 10 km/h.





CMATIC



## CLAAS tractor concept. 400 hp – for real.

#### Real stability. The true sign of a 400 hp tractor.

CLAAS has drawn on experience gained in developing standard tractors and XERION high-horsepower tractors delivering up to more than 500 hp to create a completely new solution for the AXION 900 - for endurance work under extremely challenging conditions. The engine is housed in a strong frame section with an integrated engine oil sump which perfectly absorbs all the forces associated with the front linkage and front axle carrier. In practice, this means:

- Excellent steering lock angle for maximum manoeuvrability
- Optimum access to the entire engine compartment and all maintenance points
- High ground clearance with drive shaft integrated into the frame section with a bolted cover for protection
- All services securely routed within the frame section



#### Long wheelbase - compact design.

To transfer 400 hp to the ground, the design must be just right. The AXION 900 ticks all the boxes. It has a wheelbase of 3.15 m, but its outstanding design makes it manoeuvrable in the field and easy to drive on the road. And naturally, its overall length with an implement attached remains within the legal limits.

Additional front ballast is not needed for many tasks particularly transport operations – as the long wheelbase and optimum weight distribution transfer the tractor's tractive power to the ground. This saves fuel and reduces tyre wear on the road.





Construction

For more information, please visit: axion900.claas.com

## Immense tractive power.



#### Fully balanced.

With so many front and rear axle ballast options, the AXION 900 is easily adapted to every application. This is the only way of exploiting its full performance potential without unnecessary losses.

Wheel weights per rear	axle wheel, in kg
38" rim	42" rim

30 11111	42 11111	
100	400	
367	667	
634	856	



#### Flexible front weight options

	600 kg		900 kg
+	600 kg	+	600 kg
=	1200 kg	=	1500 kg



#### Power and endurance.

All AXION 900 models can be specified with massive 2.15 m diameter rear tyres. Tyres up to 1.70 m diameter are used on the front axle. The numerous tyre options make the AXION 900 capable of any type of work. Even with the biggest tyres (900/60 R 42) the tractor has an external width of less than 3.0 m, making it flexible on the road and gentle on the field.

#### A broad base.

#### AXION 900 footprint:

- Rear tyres up to 900 mm wide and 2.15 m in diameter
- Front tyres up to 1.7 m in diameter
- Dual tyres ex factory, with flange mounting<sup>1</sup>



<sup>1</sup> Dual tyres are not available in all countries. Please refer to your dealer's price list.

For more information, please visit: axion900.claas.com

Construction

For more information, please visit: axion900.claas.com



Safe on the road.

#### Safe braking.

All AXION 900 models have a permitted total weight of 18 t in the 40 km/h and 50 km/h versions. In the 50 km/h version the front axle is fitted with disc brakes as standard. The front axle of the 40 km/h version can also be fitted with disc brakes as an option. The braking systems on the front and rear axles provide maximum safety and stability on braking.

#### Automatic adjustment.

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.



#### REVERSHIFT with park-lock function.

In addition to the familiar, easy-to-use clutchless reverser, the REVERSHIFT lever also has an integral park-lock function which provides a very easy way of keeping the AXION 900 stationary. For even greater safety, the park-lock function is automatically activated in the following situations:

- When the engine is switched off
- When the engine is switched on
- If the accelerator or CMOTION have not been touched for a few seconds while the vehicle is stationary, regardless of the current REVERSHIFT lever position
- As soon as the driver's seat is vacated when the vehicle is stationary

#### Trailer brake system.

The AXION 900 can be fitted with a pneumatic and a hydraulic trailer brake system in order to meet country-specific requirements. Both systems can be operated simultaneously and the connections are easily accessible on both sides of the drawbar.

Construction

## Use 400 hp. For real.





The right speed at the touch of a button.

Three different PTO options are available for the AXION 900:

- 1,000 rpm as standard
- 540 ECO / 1,000 rpm
- 1,000 / 1,000 ECO rpm

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

The integral freewheel on the rear PTO makes implement hitching simple.

#### Standing start.

The AXION 900 transfers its full power from a standing start and at low forward speeds.

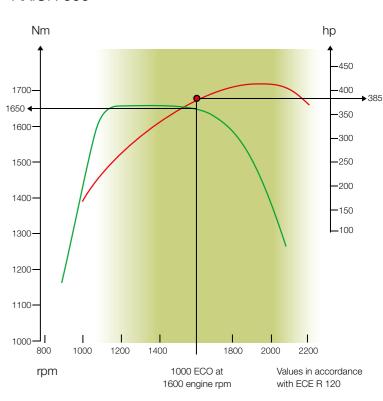
In ECO mode over 90% of maximum engine power (e.g. 385 hp in the AXION 950) can be transmitted via the PTO shaft, enabling even heavy implements to be operated at a reduced engine speed.

#### Rotational speeds:

- 1,000 rpm ECO at 1,600 engine rpm
- 540 rpm ECO at 1,450 engine rpm

In 1,000 ECO mode the engine can operate at the optimum engine speed. Four bolt-on PTO stubs ensure that the AXION 900 can be adapted to any implement.

#### AXION 950



External controls for front and rear









PTO



## Rapid pressure build-up.

#### Excellent hydraulics.

The AXION 900 has a load sensing hydraulic system with flow volumes of 150 l/min or 220 l/min. It has up to six electronic spool valves at the rear and a maximum of two for front mounting. All spool valves have time and volume control and are designed for non-stop operation with continuous flow volumes.

The hydraulics are controlled by proportional rocker switches in the armrest, the ELECTROPILOT or the CMOTION. One spool valve can be assigned to the function buttons on the CMOTION.

External controls at the rear and on the front linkage can also be assigned to any spool valve.



#### Pressure-free connections and no mess.

All the hydraulic couplings at the rear of the AXION 900 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 keep the area around the spool valves free of oil.

Power-beyond connections are provided at the rear for implements which have their own spool valves. The advantages of this are as follows:

- Hydraulic oil is supplied to the attached implement as required.
- Large line cross-sections and non-pressurised return flow reduce power losses
- Fixed mounting plate with couplers for smooth connection between tractor and attached implement
- Large flat couplings minimise oil heating and prevent oil losses during coupling

It's easy to set up spool valve functions in CEBIS



Hydraulics

## Leaves nothing behind.

#### The rear linkage.

All AXION 900 models have a maximum lifting capacity of 11 t which enables them to carry the heaviest of implements. The configuration of the rear hydraulic system can be tailored to individual requirements:

- Cat. III or Cat. IV lower links
- Mechanical or hydraulic top link, Cat. III or Cat. IV
- Manual or automatic stabilisers available for both lower links
- Wheel slip control available
- External controls on both mudguards



#### Direct adjustment.

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

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

The rear linkage can be moved to the pre-set working depth or transport position at the touch of a button on the CMOTION. The current position can be changed manually at any time via a two-stage incremental adjustment system. The linkage moves back to the pre-set position when the working position is activated again.





External controls for the rear linkage, PTO and one freely selectable spool valve

The working depth of the rear linkage is set using the dial on the armrest.



Rear linkage



Fully integrated.

#### Front linkage.

All AXION 900 models can be fitted with two different front linkages at the factory:

- 5.0 t for implements and ballasting
- 6.5 t for particularly heavy implements

The modular construction means that retrofitting can be carried out easily.

The AXION 900 series is the first to have a fully integrated front linkage, designed specifically for this power class. The front axle carrier and the special structural component for the engine are designed to absorb any forces generated, meaning no additional supports or rails are required.

#### Compact construction

- Short distance between front axle and coupling points
- Good implement handling and short overall length



Compact dimensions





#### Always connected.

Hydraulic and electrical interfaces for many applications are incorporated into the front linkage:

- Two double-acting spool valves
- Free-flow return line
- 7-pin socket
- ISOBUS socket

#### Front linkage position control.

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

External controls for the front linkage and one spool valve

Front linkage



## Complete comfort.

# FLAAS AXOSIS SES

#### Developed with farmers.

When developing the AXION 900, we involved customers from many countries at a very early stage. We showed them our initial designs for the new cab so that suggestions and criticisms from farmers could be taken into account from the outset. Position and layout of the controls, connections and brackets, visibility in the cab – these are just some of the topics that were important to our customers.

The design of many of the controls and the positioning of the CEBIS monitor in the armrest are largely based on the design of CLAAS harvesters. The CMOTION multifunction control lever, in particular, has become an essential feature of CLAAS machines. In the ARION 600 / 500, XERION 5000–4000 and the LEXION the CMOTION is conquering the market. The same is true of CEBIS: its controls and menu structure are the same in all machines. Whether drilling or harvesting – you always have the upper hand.

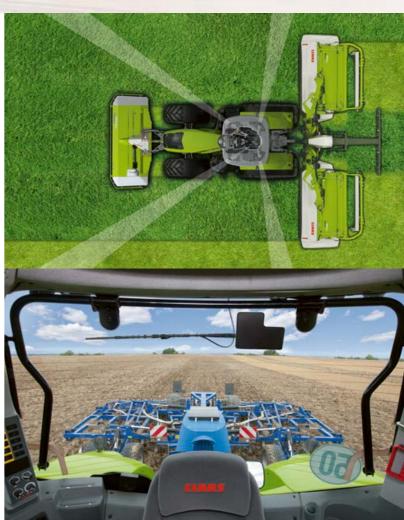


#### 4-pillar concept.

With the launch of the AXION 900 CLAAS introduces a completely new generation of cabs. The CLAAS 4-pillar cab offers some distinct advantages:

- Clear view of the full working width of attached implements.
- Large-volume cab creates an extremely spacious working environment
- Continuous windscreen

The special positioning of the rear cab pillars gives the driver an excellent view of the implement and hitch area. The convex rear window also provides a clear view of the rear coupling points, allowing safe, accurate implement attachment.





The convex rear window has a wide opening angle.

Cab

## Ergonomics made by CLAAS.



#### Comfort right from the start.

With CLAAS, the driving experience starts even before you enter the cab. You can reach the door handle from the ground, enabling you to open and close the door safely. Wide, self-cleaning steps with grab rails provide hazard-free access to the cab.



### A ladder on the left-hand side provides safe access for cleaning and maintenance work.

#### 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. Fully adjustable steering column with tilt and telescope.

The instrument panel is always in full view because it is mounted on the steering column and moves with it. This makes it easy to read all the key information, even during transport operations on the road. Engine temperature, fuel tank level, compressed air supply and travel speed are all available here, as well as on the CEBIS monitor. The curved design of the instrument panel provides an excellent view of all displays.





The steering column swings out of the way when the middle pedal is pressed.

Cab



## Logical throughout.

#### A place for everything.

All the main controls are integrated into the right armrest:

- 1 CMOTION multifunction control lever
- 2 Control panel for drive mode, ELECTROPILOT activation, function buttons, engine speed memory
- 3 CEBIS monitor
- 4 ELECTROPILOT with up to four double-acting spool valves
- 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 Spool valves
- 11 Four-wheel drive, differential lock, automatic PTO engagement/disengagement, front axle suspension

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



## Control panel (11) in the armrest: four-wheel drive, differential lock, automatic PTO engagement/

disengagement and front axle suspension

#### Everything in full view.

Many functions can be controlled using the rotary switches and buttons on the B-pillar:

- 1 PTO speed selection
- 2 Rear linkage settings
- 3 Rear linkage status display
- 4 Operation of the electronic linkage control (ELC)
- 5 Main switch for battery, electronic spool valves, CSM, steering system

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 can be operated comfortably with an excellent view of the attached implement. Fine adjustment of the electronic linkage control settings can then take place while work is in progress. Two additional buttons for raising and lowering the rear linkage also make implement attachment easier.





Cab

39

## 400 hp at your fingertips.



#### CMOTION multifunction lever.

The CMOTION makes using the main functions of the AXION 900 more convenient and more efficient. Functions are controlled using your thumb and forefingers, allowing your hand to stay in one place for most of the time and preventing fatigue. The height and position of the padded armrest are adjustable.

#### Rear linkage operation.

All the functions needed for the rear linkage are located on the CMOTION:

- Lower to preset working position
- Raise to the preset lift height position
- Incremental adjustment of lifting and lowering at two speeds (slow/fast)

Press and hold the lower button to engage quick entry.





#### Everything under control.

- 1 Start up/change direction
- 2 Rear linkage
- 3 GPS PILOT
- 4 Headland management CSM
- 5 Function buttons F7/F8 and selectable spool valve
- 6 Cruise control
- 7 Change range
- 8 Function buttons F5/F6

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

The following functions can be accessed via the function buttons:

- ISOBUS-enabled implements
- Event counter on/off
- Spool valve





CMOTION



For more information, please visit: axion900.claas.com



Intelligence comes as standard.

#### Reliable operation.

The CEBIS monitor and controls are integrated into the armrest. The driver's arm lies on the armrest while he enters the settings in CEBIS so there is no need to compensate for steering movements. This means that all functions can be set immediately and accurately while you work.

#### CEBIS operation.

The basic machine settings are entered using the CEBIS rotary switch: to select a menu item or set a parameter, turn the switch to the right or left and confirm your selection by pressing it. Use the ESC button to leave the menu selected.

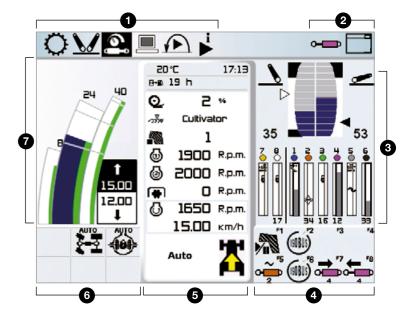
Press the DIRECT ACCESS button to open the last activated function, which appears at top right on the CEBIS (1). This saves time and makes it easy to optimise machine settings.

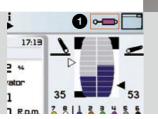
#### An eye-catching 21 cm screen.

- Menu bar
- 2 DIRECT ACCESS display
- 3 Status of front/rear linkage and spool valves
- 4 Function key assignment
- 5 Transmission status, speed, PTO speed, engine speed memory, job management, wheel slip display, adjustable display, temperature, time
- 6 Vehicle status information
- 7 Driving speed display and cruise control

#### CEBIS – simply better:

- Only two controls: push/turn dial and ESC
- Quick access to submenus through DIRECT ACCESS
- Integrated performance monitor as standard for checking area output, fuel consumption, job data
- Two different screen layouts to choose from (road travel and field work)





**CEBIS** 



### Comfort down to the last detail.

#### For optimum working conditions.

All AXION 900 models have air conditioning as standard. The components of the air conditioning system are built into the double insulated cab floor. This positioning allows optimum air flow distribution in the cab and significantly reduces the noise level from the air conditioning system. A fully automatic climate control system is available in addition to manual control.

#### Ventilated and warm: the premium seat.

- Heating and active ventilation make the seat feel good whatever the weather
- Suspension automatically adjusts to the driver's weight

The cooler compartment under the passenger seat has room for two 1.5 l bottles and snacks.





#### 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.



On the right-hand side of the cab, a solid bar extends from the A to the B pillar. Terminals such as the S10, S7 or COMMUNICATOR can be mounted on this bar. Additional terminals can be attached to the bar individually using a clamp system. Connections to the power supply and ISOBUS connections are located below the bar, preventing unnecessary cable routing and extra hassle when changing devices.









Document box and removable storage box in left-hand



Connections to the power supply (25 A and cigarette lighter) and ISOBUS for additional terminals are located below the right-hand console.

Comfort

## Easy on both driver and machine.



#### Full four-way suspension.

With four suspension points, the cab is fully isolated from the chassis so impacts and vibration do not reach the driver. The combination of springs and dampers creates long suspension travel and operates very effectively thanks to precise adjustment. The entire suspension system is completely maintenance-free.

#### PROACTIV front axle suspension complete comfort automatically.

The suspension adjusts to tractor loading and automatically remains in the central position. Changes in load due to braking and turning manoeuvres are also compensated. Parallelogram axle suspension and 90 mm spring travel guarantee a smooth ride, and the robust construction means that dual tyres can be used.





#### Top-quality seats.

Three different seats are available – from the air-sprung seat to the premium seat with heating and ventilation. All the seats are from Grammer or Sears. In the seat with active suspension, the suspension is controlled by a sensor which measures the current position and acceleration.

#### Vibration damping.

Heavy implements mounted on the front and rear create a load on both tractor and driver. Both front and rear linkage are 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

For more information, please visit: axion900.claas.com

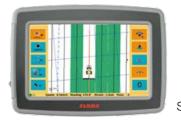
Comfort



## Even better control with ISOBUS and ICT.







COMMUNICATOR

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 AXION 900 with the equipment you need, straight from the factory or as a retrofit option:

- S10: high-resolution 10.4" touchscreen terminal with steering and ISOBUS functions: up to four cameras can
- S7: high-resolution 7" touchscreen terminal with steering
- COMMUNICATOR: 5.7" terminal with ISOBUS functions

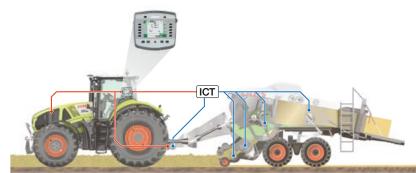
#### ICT (Implement Controls Tractor).

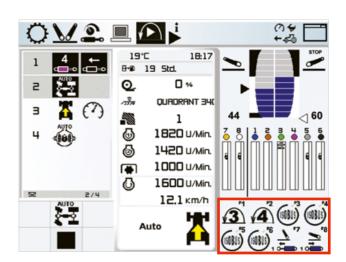
When the AXION 900 is used in combination with the QUADRANT 3400 square baler, two of its functions can be automatically controlled by the baler. Thanks to ISOBUS.

- ICT CRUISE CONTROL: Optimises the performance and work quality of the baler by controlling the tractor's forward speed. The forward speed is continuously adjusted to suit the conditions, enabling you to get the best out of your machine combination
- ICT AUTO STOP for the PTO: If an overload is detected in the QUADRANT 3400, the ICT AUTO STOP automatically switches off the PTO. This protects the entire drive train throughout long working days and reduces the driver's workload

#### **Function buttons**

The AXION 900 has eight F buttons to which different functions can be assigned in CEBIS.





ISOBUS connectors in the cab, at the front and at the rear





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



**ISOBUS** 

51



Always on the right track.
The GPS PILOT
automatic steering system.

#### 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 page 50) 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.

#### 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.



#### The correction signals.

#### RTK

- +/-2 to 3 cm
- Base station
- Range approx. 15 km
- Own reference station or reference signal is provided by the local dealer
- Highest possible repeatable accuracy

#### RTK NET

- +/-2 to 3 cm
- Correction signal via mobile phone network
- Dual-frequency signal
- Unrestricted working radius
- Highest possible repeatable accuracy
- Subject to licence

#### BASELINE HD

- +/-4 to 6 cm
- Mobile reference station
- Range 3 to 5 km
- Free of licence fees
- Internal correction signal
- Integrated rechargeable battery

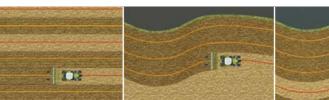
#### OMNISTAR XP / HP / G2

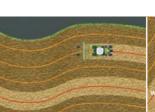
- +/-5 to 12 cm
- Satellite-based correction signal
- Dual-frequency signal
- Subject to licence

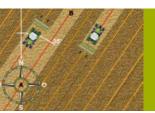
#### EGNOS / E-DIF

- + / 15 to 30 cm
- Free of licence fees
- Base accuracy

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







Steering systems



## CSM. Makes headlands easy.

#### CLAAS SEQUENCE MANAGEMENT.

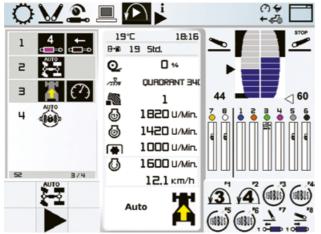
CSM headland management takes the load off you whenever you need to manoeuvre at the headland. By pressing a button, you can run any of the previously recorded functions.

#### CSM offers:

- Recording of up to four sequences per implement
- Sequence activation on CMOTION
- Sequence display on CEBIS
- Time or distance related recording
- Sequences can be changed and optimised retrospectively

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 hydraulics
- Cruise control and range selection
- Front and rear PTO
- Engine speed memory



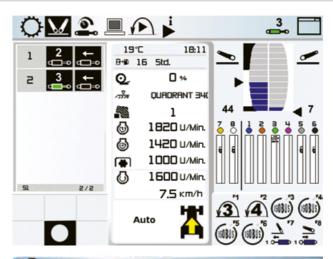


#### Easy to record and run.

Sequences can be recorded on a distance- or time-related basis. There is also an option of recording sequences when the machine is stationary. During recording, clear symbols allow the driver to follow the creation of the sequence step by step on CEBIS. A sequence that is running can be paused and restarted by simply pressing a button.

#### Non-stop optimisation.

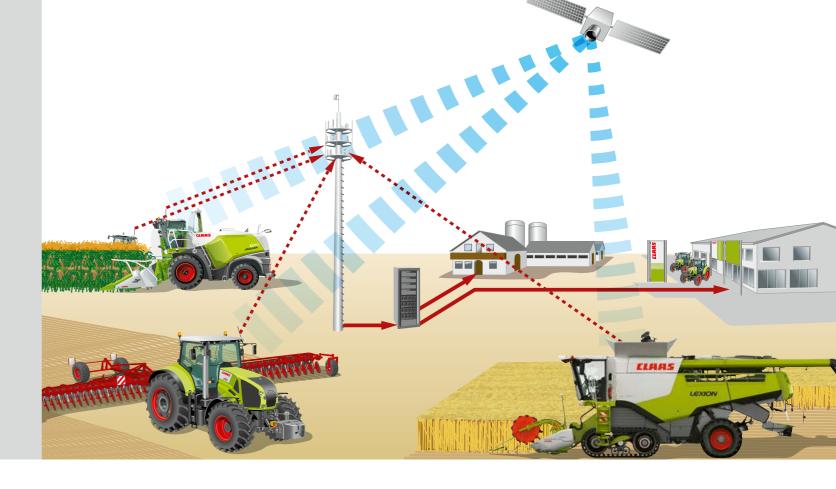
The sequences recorded can be changed and optimised subsequently. Steps can be added and deleted or changed and adapted in minute detail, allowing times, distances and flow volumes to be tailored to current conditions. A sequence that has been recorded for the first time can be refined down to the last detail as you work.





CSM

## Job management and TELEMATICS.



#### Implement management with CEBIS.

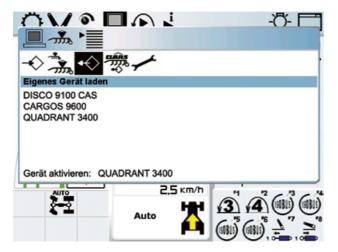
With CEBIS, details of up to 20 implements can be recorded. All the preset values are permanently assigned to the specific implement.

- Four CSM sequences
- Area calculation mode and activation
- Working width of attached implement

This saves on unnecessary adjustment tasks when changing implement or driver. You just attach the implement, load the device in CEBIS and start work.

#### Field management.

Up to 20 jobs can be set up and stored on 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.





#### Good reasons to use CLAAS TELEMATICS:

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

#### How CLAAS TELEMATICS works.

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 cellphone network. This enables you or an authorised service partner to access and evaluate the relevant information via the internet.

#### CLAAS TELEMATICS on the AXION 900.

- 1 Operating time analysis
- Working time analysis
- Reduce downtime
- Review machine settings
- Optimise fuel consumption
- 2 Asset protection
  - Position indicator in Google Earth®
  - Current activity
- 3 Data collection
  - Automatic data collection for documentation
  - Secure storage on central server
  - Standard interfaces for data export from TELEMATICS
- 4 Remote monitoring
- Maintenance planning
- Remote diagnostics with CDS

CEBIS maintenance counter

Job management and TELEMATICS



Ready in a flash.

#### 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 when the bonnet is closed
- All daily maintenance tasks can be carried out without tools

The long oil change intervals (engine 600 h, transmission and hydraulics 1,200 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.

The battery is housed in a storage compartment on the lefthand side of the tractor. An automatic main battery switch cuts the power supply 90 s after the engine is switched off.

#### 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 fuel pre-filter is conveniently located by the steps to



Easy access to the cab air filter on the cab roof

Maintenance

## Whatever it takes. CLAAS Service & Parts.







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 m<sup>2</sup>.



## Outstanding features.

#### CPS

- All 400 hp available at all times
- Fully integrated SCR exhaust aftertreatment
- The latest engine technology for high performance and low fuel consumption
- Self-supporting construction for maximum stability
- Special engine frame section provides manoeuvrability
- Long wheelbase and balanced weight distribution
- Compact design with integral front linkage fully road-compatible
- Continuously variable CMATIC transmission with high mechanical efficiency

#### Comfort

- 4-pillar cab
- CMOTION multifunction control lever
- 4-point cab suspension
- Driver's seats with active suspension and ventilation
- Front axle suspension with active height control
- Front and rear linkages with vibration damping

#### EASY

- Factory-fitted GPS PILOT
- CSM headland management
- Implement management
- TELEMATICS
- ISOBUS

#### **AXION**

		950	940	930	920
Engine					
Manufacturer		FPT	FPT	FPT	FPT
Number of cylinders/intake		6/TI	6/TI	6/TI	6/TI
Cubic capacity	cm <sup>3</sup>	8710	8710	8710	8710
Nominal engine speed	rpm	2150	2150	2150	2150
Output at nominal engine speed (97/68/EC) <sup>1</sup>	kW/hp	306/416	282/383	259/353	236/321
Output at nominal engine speed (ECE R 120) <sup>2</sup>	kW/hp	298/405	276/375	254/345	232/315
Max. output (ECE R 120) <sup>2</sup>	kW/hp	302/410	279/380	257/350	235/320
Constant output range	rpm	1800 - 2150	1800 - 2150	1800 - 2150	1800 - 2150
Engine speed at max. torque	rpm	1200 - 1600	1200 - 1600	1100 - 1600	1100 - 1600
Max. torque (ECE R 120) <sup>2</sup>	Nm	1650	1550	1450	1350
Air filter dust aspiration		•	•	•	•
Fuel tank capacity		700	700	700	700
Oil-change interval	h	600	600	600	600
CMATIC transmission					
Transmission type		CMATIC	CMATIC	CMATIC	CMATIC
Ground speed (min./max.) 40 km/h version	km/h	0.05/40	0.05/40	0.05/40	0.05/40
Ground speed (min./max.) 50 km/h version	km/h	0.05/50	0.05/50	0.05/50	0.05/50
REVERSHIFT clutchless reverser		•	•	•	•
Rear axle					
Flanged axle		_	_	•	•
Quick-release axle		•	•	0	0
Electrohydraulically activated differential locks		•	•	•	•
Automatic differential lock		•	•	•	•
Max. rear tyres		900/60 R 42	900/60 R 42	900/60 R 42	900/60 R 42
Oil-change interval	h	1200	1200	1200	1200
PTO					
External controls and stop button		•	•	•	•
1000		•	•	•	•
540 ECO / 1000		0	0	0	0
1000 / 1000 ECO		0	0	0	0
Changeable PTO stub		•	•	•	•
PTO shaft stub: 1%" with 6, 8 or 21 splines and 1%"					
with 20 splines					

#### 

#### **AXION**

		950	940	930	920
4-wheel drive front axle					
Max. steering angle	degrees	50	50	50	50
Castor angle	degrees	5	5	5	5
Angle of oscillation	degrees	8	8	8	8
Turning radius	m	6.8	6.8	6.8	6.8
Track	mm	2190	2190	2190	2190
with tyres		600/70 R 30	600/70 R 30	600/70 R 30	600/70 R 30
PROACTIV suspended front axle		0	0	0	0
PROACTIV suspended and braked front axle		0	0	0	0
Differential lock with multi-disc clutch		•	•	•	•
Designed for dual tyres		•	•	•	•
Pivoting mudguards		•	•	•	•
Hydraulics					
Output at nominal speed, standard (option)	I/min	150 (220)	150 (220)	150 (220)	150 (220)
Max. operating pressure	bar	200	200	200	200
Number of electrohydraulic spool valves (min./max.)		3–8	3–8	3–8	3–8
ELECTROPILOT 4-way control		0	0	0	0
Rear linkage					
Max. lifting capacity at ball ends	kg	11250	11250	10950	10950
Continuous lifting power at ball ends	kg	7690	7690	7520	7520
Lifting range	mm	1060	1060	1060	1060
Category		Cat. III/IV	Cat. III/IV	Cat. III/IV	Cat. III/IV
Vibration damping		•	•	•	•
Active wheel slip control		•	•	•	•
Front linkage					
Max. lifting power	t	6.5 or 5.0	6.5 or 5.0	6.5 or 5.0	6.5 or 5.0
Front PTO 1000 rpm		0	0	0	0
Vibration damping		•	•	•	•
External operation		•	•	•	•
Hydraulic connections		0	0	0	0
Trailer socket and ISOBUS		0	0	0	0
Cab					
4-point suspension		•	•	•	•
Multifunction armrest		•	•	•	•
Automatic climate control		0	0	0	0
Passenger seat		•	•	•	•
Cooler compartment		•	•	•	•

#### Standard ○ Optional □ Available — Not available

information purposes and ease of understanding. It does not imply approval for regions in which emissions are regulated by Tier.

<sup>&</sup>lt;sup>1</sup> Performance data fit criteria for admissibility. Performance as per 97/68/EC is identical to 2000/25/EC. <sup>2</sup> Meets ISO TR 14396

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

#### **AXION**

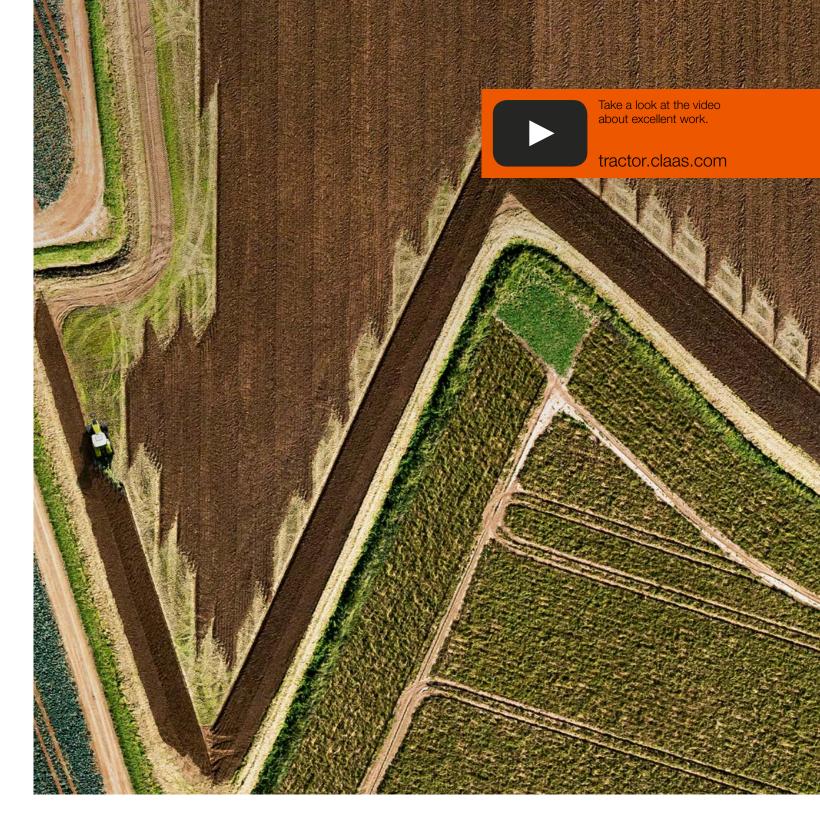
		950	940	930	920
Dimensions and weights					
(standard tyres, with oil and fuel, without driver)					
Rear wheels		710/85 R 38	710/85 R 38	710/85 R 38	710/85 R 38
Front wheels		620/75 R 30	620/75 R 30	620/75 R 30	620/75 R 30
Length (with front linkage folded and attachment device) (e)	mm	5744	5744	5744	5744
Centre of rear axle to top of cab (a)	mm	2427	2427	2427	2427
Overall height (b)	mm	3452	3452	3452	3452
Wheelbase (c)	mm	3150	3150	3150	3150
Rear axle to cat. IV lower link (d)	mm	1438	1438	1438	1438
Ground clearance, front axle (f)	mm	647	647	647	647
Ground clearance, rear axle (excl. drawbar) (g)	mm	611	611	611	611
Weight without ballast	kg	13060	13060	12840	12840
Max. front ballast with front linkage	kg	1500	1500	1500	1500
Weight distribution with front linkage, without ballast (rear/front)	%	56/44	56/44	55/45	55/45
Max. permissible total weight (40/50 km/h versions)	kg	18000	18000	18000	18000

		950	940	930	920	
Tyres						
(standard axle or suspended front axle)						
Rear tyres	Front tyres					
650/65 R 42 <sup>1</sup>	540/65 R 30 <sup>1</sup>					
650/85 R 38	520/70 R 34					
650/85 R 38	600/70 R 30					
710/70 R 42	520/70 R 34					
710/70 R 42	600/70 R 30					
800/70 R 38	600/70 R 30					
800/70 R 38	710/60 R 30					
710/75 R 42	620/75 R 30					
710/75 R 42	650/75 R 30					
710/75 R 42	600/70 R 34					
710/75 R 42	650/65 R 34					
710/85 R 38	620/75 R 30					
710/85 R 38	650/75 R 30					
900/60 R 42	710/60 R 34					









Excellent work. Tractors from CLAAS.

CLAAS KGaA mbH Mühlenwinkel 1 33428 Harsewinkel Deutschland Tel. +49 5247 12-0 claas.com

Standard ○ Optional □ Available − Not available

<sup>&</sup>lt;sup>1</sup> Tyres with industrial tread