

Automatic steering and Precision Farming for harvesting machines and tractors

GPS PILOT | CEMIS 1200 | CEBIS connect

“Upgrading to the next generation? If only it was that easy."

The challenges farmers and contractors face have grown steadily in recent decades. The world's fields are expected to produce ever greater harvests in even shorter time. And then there's the increasing burden of documentation to contend with and, of course, climate change. The number of people that a farmer has to feed is growing exponentially.

We have been working with you for over 100 years to develop machines and services that make your work easier and more efficient – so you can meet these growing challenges head on. Since 1913, our passion for agriculture has underpinned our tireless quest to make you the very best in your field.

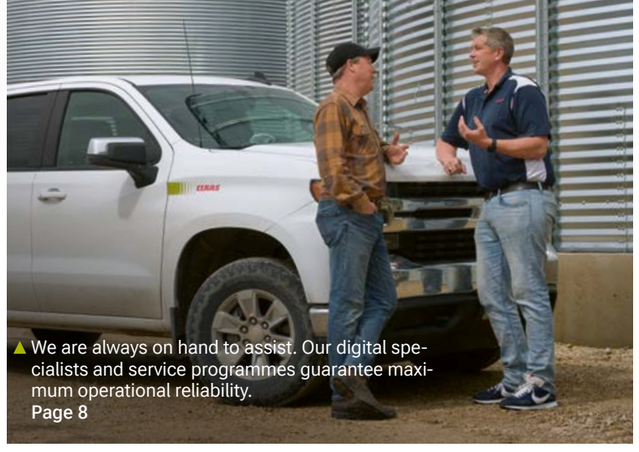
Powerful machines designed to specialise in certain tasks have long been popular. But the opportunities provided by digitalisation mean that CLAAS machines now work with more precision and efficiency than ever before. By exchanging data with one another, they create an intelligent network whose impact far exceeds the sum of its individual parts. After all, if you want to work as a team, you have to communicate with each other.

Together the next step in farming. digital.claas.com

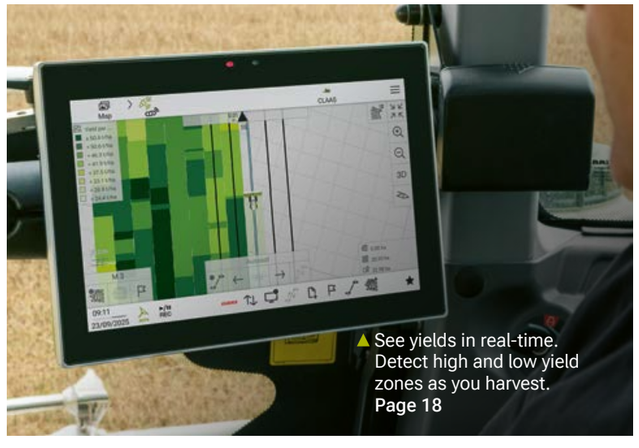
Discover more about our digital solutions.



▼ Precision farming for all seasons: the GPS PILOT steering system brings efficiency and significant added value to your farm.
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▲ We are always on hand to assist. Our digital specialists and service programmes guarantee maximum operational reliability.
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▲ See yields in real-time. Detect high and low yield zones as you harvest.
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Future-proof.

You can easily upgrade the GPS PILOT CEMIS 1200 / CEBIS connect and tailor it to your needs via CLAAS licence management. Regular updates provide you with new functions.

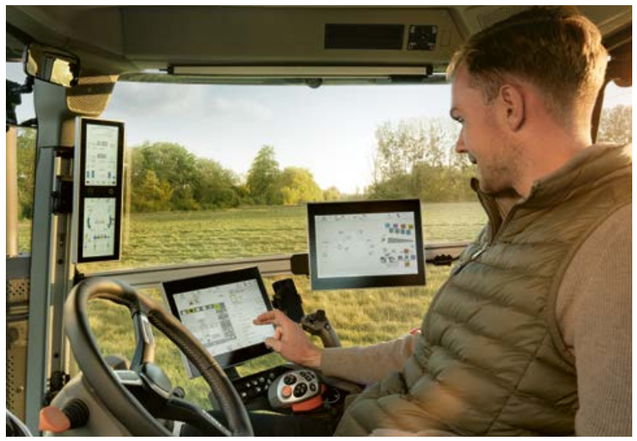
Operator-friendly.

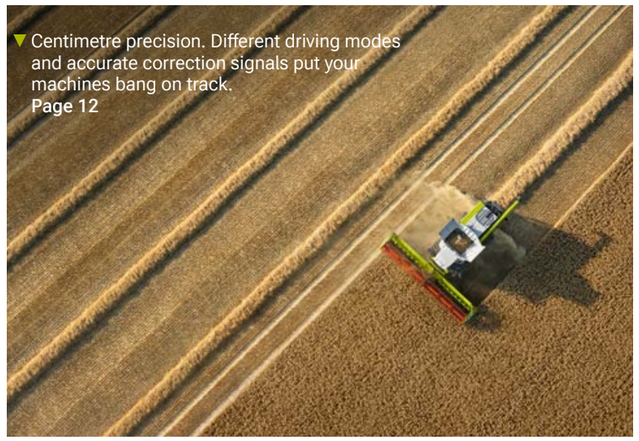
Intuitive control, freely configurable work area and customisable Quick Access offer maximum flexibility and rapid access to all relevant functions.

Precise.

All precision farming applications – from yield mapping to site-specific crop management and Section Control – can be controlled from the terminal. Automatic steering with various correction signals and drive modes ensures precision and efficiency.

▶ Comfort in the cab. Intuitive operation and fully integrated GPS PILOT components that can be tailored to your needs.
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▼ Centimetre precision. Different driving modes and accurate correction signals put your machines bang on track.
Page 12

▼ GPS PILOT CEMIS 1200 for harvesting machines. Optimised operations across the entire machinery fleet ensure efficient teamwork in the field.
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▼ GPS PILOT CEMIS 1200 / CEBIS connect for tractors. Seamless communication between office and machine: the CEMIS terminal calculates suitable tracks to suit the field geometry and optimises the application of seed and fertiliser.
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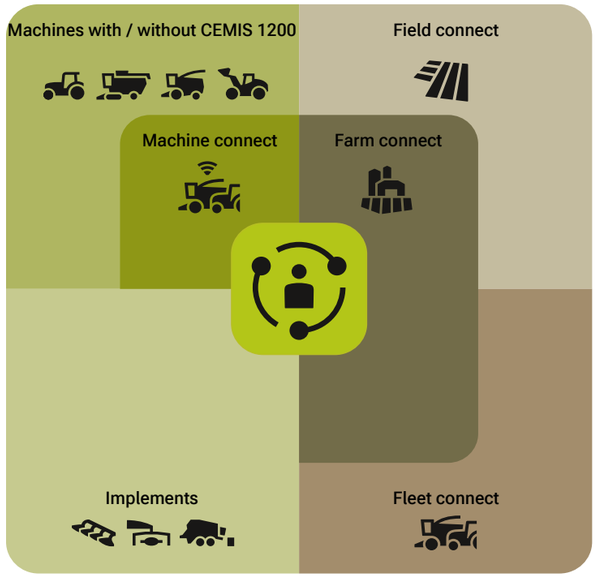
Precision Farming from sowing to harvesting.

Automated and connected processes are now an everyday part of farming life. At CLAAS we continuously strive to develop cutting-edge digital products and solutions – to give you the best possible working conditions.

CEMIS 1200 and CEBIS connect reliably support you in all areas of work – from tillage and drilling to crop care and harvesting. Your tractors, combine harvesters and forage harvesters are optimally integrated and work perfectly together.

Your machines are digitally connected with CLAAS connect – making your work productive, automated and sustainable. Online data exchange simplifies data sharing and improves documentation to ensure greater transparency and efficiency.

Connect your machines and your farm with CLAAS connect.



CEMIS 1200 and CEBIS connect enable your machine and office to communicate with one another – continuously optimising your fieldwork.

Peak performance from drilling to harvesting: scan the QR code to watch a video showing just what the GPS PILOT CEMIS 1200 can do.

We're always there for you!

Low maintenance costs and customisable service, parts and warranty packages give you total peace of mind. We are there for you – seven days a week at harvest time – so you can put your worries aside and get on with your day-to-day work.

You can count on receiving expert advice from your CLAAS dealer. Our digital specialists are also on hand at any time – even to help you configure interfaces with other systems.

Full support.
DIGITAL CARE allows you to make optimum use of digital CLAAS apps. Our digital specialists are there to help you choose, adapt and set up the most suitable solutions for your farm. On request, they'll come out to you, train your team and answer all your questions about digital apps.

Your DIGITAL CARE services

DIGITAL CARE Start Up Provided for the first year when you purchase any connected machine.	DIGITAL CARE Plus	DIGITAL CARE Professional
Introduction, set up and support	**Training and support**	**Training and support**
CEBIS, GPS PILOT CEMIS 1200, CEBIS connect – Introduction **CLAAS connect** – Set-up including your machines – Introduction and explanation of key functions – Initial import of field boundaries **Remote assistance for CLAAS connect** – Remote assistance and support	**Training for digital solutions** – Group training for CLAAS connect & GPS PILOT CEMIS 1200 / CEBIS connect **Support for digital solutions** – Remote assistance for CLAAS connect and GPS PILOT CEMIS 1200 / CEBIS connect – Importing reference tracks in CLAAS connect **Connectivity checks** – Proactive checking of licences and connectivity	**All DIGITAL CARE Plus services and in addition:** **Optimisation and Precision Farming** – Individual training for CLAAS connect and GPS PILOT CEMIS 1200 / CEBIS connect – Support for ISOBUS implements – Optimisation of digital systems during use
+ optional services	**+ optional services**	**+ optional services**

Additional services can be added by the dealer. For participating dealerships only.



▲ Rapid assistance. Remote Display View gives your service partner direct access to your machine's CEMIS 1200 and CEBIS connect so they can provide targeted remote assistance.



CLAAS connect.
The whole world of CLAAS in one app.
With the CLAAS connect app, you can easily access all CLAAS solutions and keep track of CEMIS 1200, CEBIS connect and the SAT 900 receiver.

Use the app, and you've virtually got your whole fleet in your pocket. You can activate licences and view operating manuals as well as all machine and yield data at any time.



▶ Our digital specialists are there to help you take your first steps. As you get more proficient, we will stand by your side to ensure that you get the best out of the system.

Automatic, practical and easy to use.

CEMIS 1200 and CEBIS connect are modern, intuitive terminals for automatic steering and precision farming applications. The SAT 900 GNSS receiver mounted on the roof guarantees high precision and steering performance.

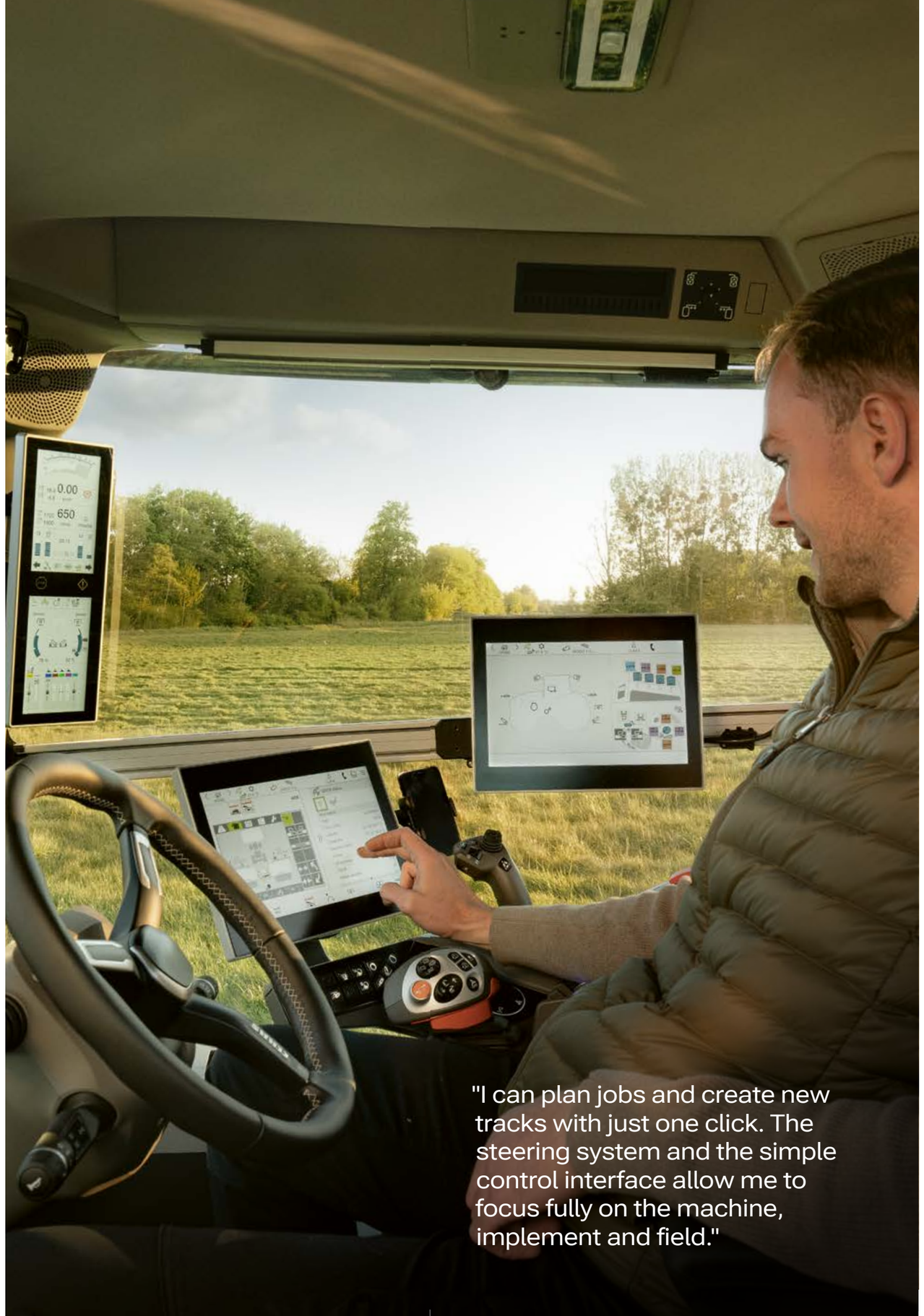
Together, these two components of the GPS PILOT – seamlessly integrated into CLAAS machines – are a powerful combination.

Easy to use.
Both CEMIS 1200 and CEBIS connect are intuitive, customisable and optimally integrated into CLAAS machines.

Licences and activations.
You can customise CLAAS GPS PILOT CEMIS 1200 via the licence management system – it's easy to add terminals and SAT 900 receivers in the CLAAS connect app and keep track of all licences. CEBIS connect is already stored with the machine in CLAAS connect. You can test ISOBUS functions and the SATCOR 3 by Trimble RTX correction signal free of charge.

	Licence	Trial licence
SATCOR 15	5 years incl.	
GPS Task Management	unlimited	21 days
GPS Application	unlimited	21 days
GPS Section Control	unlimited	21 days






▲ Reassuringly intuitive: CEMIS 1200 and CEBIS connect facilitate automatic steering, precision farming applications and online task management.


▼ The SAT 900 GNSS receiver can be transferred from one machine to another.

CEMIS 1200.
The CEMIS 1200 is the mobile terminal for automatic steering, precision farming applications and online task management. Its high-brightness multi-touch display is clearly laid out and easy to use. You can assign key functions to the Quick Access tab and customise your work areas to suit your needs.

More productive with ISOBUS.
CEMIS 1200 and CEBIS connect offer seamless communication between machine and implement to optimise the application of fertilisers, pesticides and seed. By integrating ISOBUS functionality, we have enabled the use of automatic section control, geo-referenced application and standardised task management.

The GNSS receiver.
The SAT 900 GNSS receiver achieves a high level of accuracy and steering performance, enabling you to precisely position your tractors, combine and forage harvesters, and supports various correction signals. Like the CEMIS 1200, it can also be transferred from one machine to another.

The right track for each field.

CLAAS offers all the standard steering modes for precise fieldwork: A-B straight, A-B contour, A+ angle, adaptive A-B and exact circles. So you can select a suitable reference track no matter what shape your field and work in a structured, consistent and efficient way right from the start.

▲ AXION 950 with DISCO 9700 RC AUTO SWATHER. GPS PILOT CEMIS 1200 in circle mode.

Reduce working time, overlaps and operating costs.

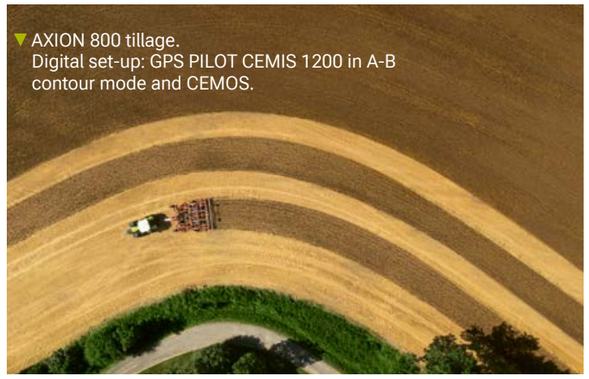
Work with centimetre precision.
You need a good correction signal for precise work. It's a given with SATCOR 15 by Trimble RTX – and it even comes as standard for 5 years. Other satellite-based and RTK correction signals are optionally available. You can choose the correction signal that best suits your requirements and activate it to work with precise positioning.

You can select the RTK NET data volume directly from the factory with the CLAAS SIM card. Your CLAAS dealer can perform service functions and has full control of diagnostics even remotely.

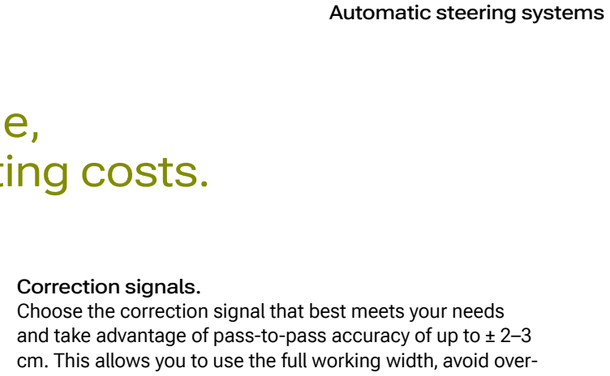
Correction signals.
Choose the correction signal that best meets your needs and take advantage of pass-to-pass accuracy of up to ± 2–3 cm. This allows you to use the full working width, avoid overlaps and focus fully on the machine settings.

Correction signals	Basic accuracy
RTK NET	± 2-3 cm
RTK FARM BASE	± 2-3 cm
SATCOR 3 FAST by Trimble RTX	± 3 cm
SATCOR 3 by Trimble RTX	± 3 cm
SATCOR 15 by Trimble RTX	± 15 cm
Bridging Service for RTK	Bridging in the event of loss of RTK correction signals

▼ AXION 800 tillage. Digital set-up: GPS PILOT CEMIS 1200 in A-B contour mode and CEMOS.



▼ The automatic steering system enables precise work at night too – reducing strain on the operator and boosting efficiency.

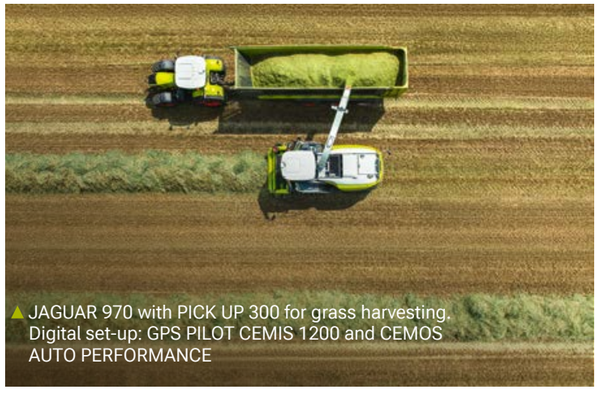


The flexible way to create and share tracks.
Create new tracks spontaneously or plan reference tracks directly on the terminal using field boundaries. Alternatively, transfer them from CLAAS connect. Reference tracks can easily be shared between machines – so the entire fleet steers the same course.



CEMOS machine optimisation system. Always perfectly set up.
The CEMIS 1200 steering system significantly reduces the workload of CLAAS operators. But that's not all we can do: CEMOS is our operator assistance system for tractors, forage harvesters and combine harvesters. CEMOS recommends settings and helps operators adjust the machine to the conditions. With combine harvesters, it even does this fully automatically.

cemos.claas.com



▲ JAGUAR 970 with PICK UP 300 for grass harvesting. Digital set-up: GPS PILOT CEMIS 1200 and CEMOS AUTO PERFORMANCE

More guidance on each field.

You can plan reference tracks directly on the machine terminal and share them with other machines as required. With all participating machines following the same track, processes are perfectly dovetailed and coordination in the field becomes much easier.

Inner and outer field boundaries can be used in combination, while markers flag important features in the field and improve safety.

Share reference tracks online.
You can share reference tracks directly between machines. A-B straights approved by the operator are automatically added to the current job. This helps to dovetail processes, and ensures seamless coordination and consistency in the field, for example when mowing, swathing, forage harvesting or transporting the grain harvest. Process chains run more smoothly, saving you a great deal of time day-to-day.

Switch reference tracks automatically.
When you leave the current track, the machine can suggest the next suitable reference track and switch automatically if you wish. This allows you to switch quickly and effortlessly to the right track at the headland or in awkwardly shaped fields without wasting time with manual intervention.

Plan headlands individually.
Decide where on your field boundary you want to create a headland and adjust the width individually. This allows you to adapt each headland precisely to the field contours, the machine and the application. This highly flexible approach to headland management results in tidy, structured processes at the field margin, enabling you to work more efficiently and reduce the use of consumables.

Use tramline management.
Tramline management prompts you to create a tramline in the right position. Tramlines are highlighted in colour on the screen, giving you a perfect overview of your work. You can also activate an acoustic signal.





▲ Mark key features such as field entrances, hidden wells, lines of trees, boulders and power pylons. Visual and acoustic warnings help you keep track of the risks and avoid accidents.

Plan once, share with everyone.
You can share created reference tracks with every machine in your organisation. This reduces coordination effort across the board.

Neat tracks, neat processes.



Perfect communication.

At CLAAS we believe that connectivity is key to improving efficiency and precision in farming. You can create tasks with reference tracks and application maps in CLAAS connect. The tasks are instantly shared with the machine online.

The CEMIS 1200 and CEBIS connect offer seamless communication between machine and office and optimise the application of fertilisers, pesticides and seed. ISOBUS functionalities enable the use of automatic section control, geo-referenced application and standardised task management.

Planning in the office.
Optimise your planning with CLAAS connect. You can pre-plan your tasks including reference tracks and application maps and send them online to the machine.

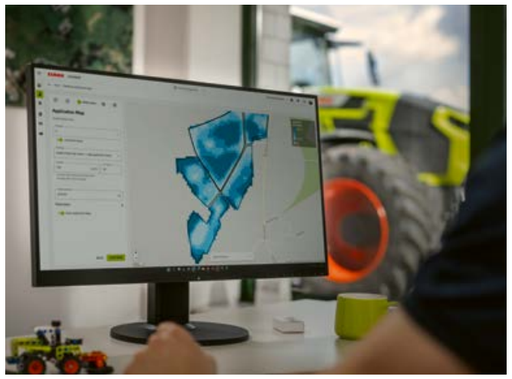
On the machine.
Receive your tasks online with CEMIS 1200 and CEBIS connect. Use preplanned jobs or create a new task directly in the terminal.

Evaluation in the office.
On completion of the work, the task is transferred online from the machine to CLAAS connect. All information including application rates and consumption data are available in the task, providing ample scope for evaluation and analysis. This comprehensive solution from CLAAS enables you to optimise your work processes and produce accurate documentation.

ISOBUS functions for GPS PILOT CEMIS 1200	
ISO-UT	Implement view in CEMIS 1200 and CEBIS connect for control of implements
AUX-N	Assignment of tractor function keys to implement functions
TC-BAS	Provision and exchange of task data in ISO-XML format
ISOBUS GPS Application – CEMIS 1200	Preparation of application maps
GPS Task Management – CEMIS 1200	Documentation of as-applied and yield maps

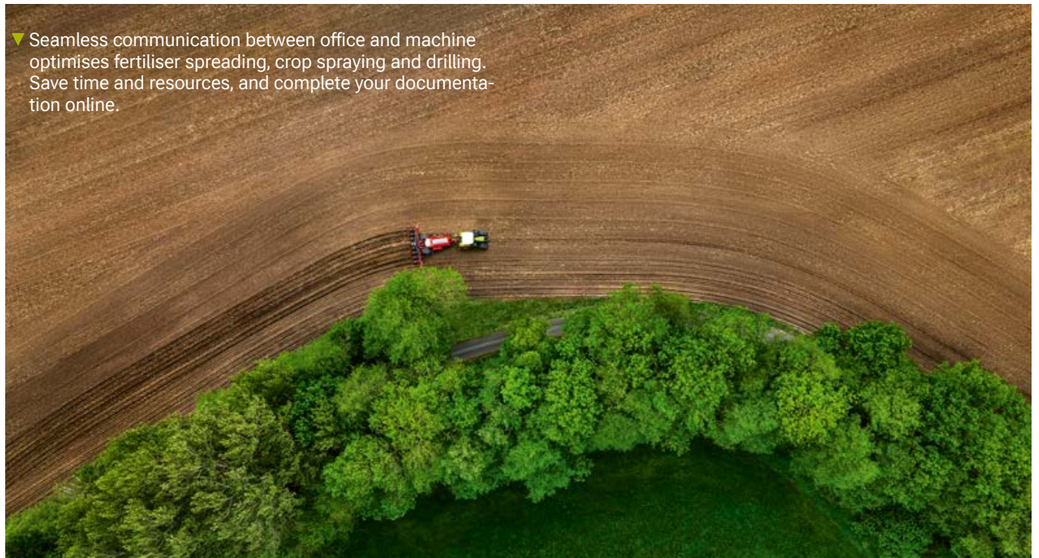
Protect the environment and conserve resources: use less fuel and save on consumables with the GPS PILOT CEMIS 1200 for tractors.

▲ Relax and focus fully on the machine settings – day or night, even when visibility is poor.





▼ Seamless communication between office and machine optimises fertiliser spreading, crop spraying and drilling. Save time and resources, and complete your documentation online.



Make better use of your lands' potential.

New digital solutions enable targeted, needs-based crop care. Apply fertiliser, sprays and seed exactly where they are needed and use your resources more efficiently. This helps boost your yields and protect the environment.

With live yield mapping you can detect high and low yield zones as you harvest and immediately see the potential of your land.

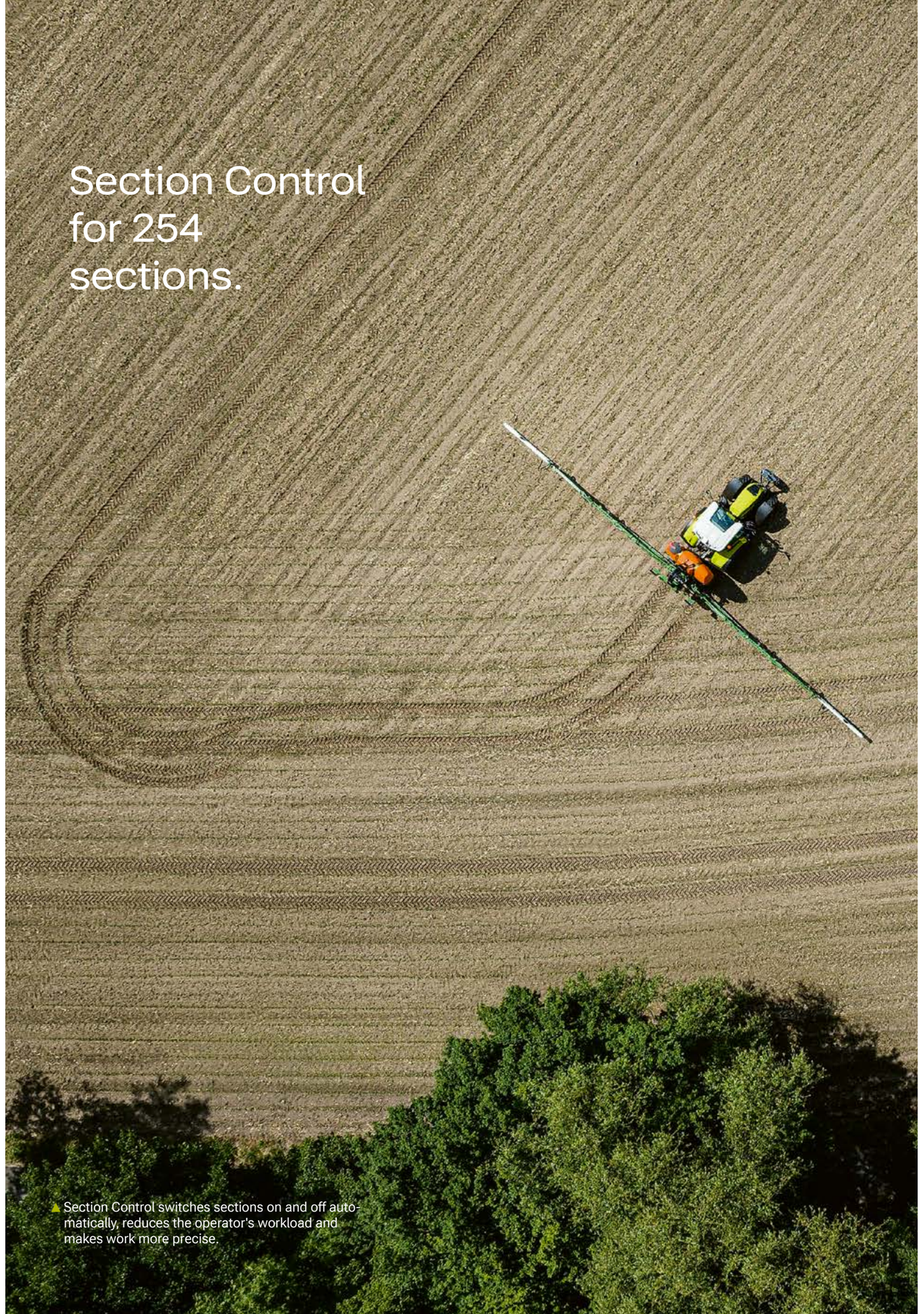
See yields in real-time.
The terminal displays all yield data as you work – including yield, moisture and dry matter. So you can instantly detect differences in the crop and make sound decisions.

You can switch effortlessly between map levels and view relevant process data at any time. Sensor-based delays, from the QUANTIMETER for example, are automatically corrected as you go.

Precise control of up to 254 sections.
Section Control supports up to 254 sections – the maximum number in compliance with the ISOBUS standard. So you can control application across the entire working width of all implements that are compatible with SECTION CONTROL. This improves your work results and cuts costs. At the same time, you can significantly reduce nutrient inputs to the environment, especially when working at the headland or in wedge-shaped corners.

Control up to six booms independently.
Use implements with up to six application points and control each point precisely with Section Control. Use VRA to adjust the application rate of up to six products precisely to the field, crop and conditions.

This enables you to work with tricky multi-product applications – e.g. maize drilling with separate application points for seed and fertiliser – with far greater precision and target the use of inputs.



▲ Section Control switches sections on and off automatically, reduces the operator's workload and makes work more precise.

Variable Rate Application (VRA).
With Variable Rate Application (VRA), CEMIS 1200 and CEBIS connect control the application rate for each section separately based on the application map and geoposition. So you apply the exact amount the area needs, target the use of inputs and work more efficiently in the field.



▲ Particularly useful for multi-boom applications: field data can also be imported in Shape format. Your Shape maps can be integrated directly into ISO XML tasks.

Easy and efficient documentation of yield data.

Perfect interplay: planning and analysis in the office means that your machines work efficiently as a team with inch-perfect precision.



With CEMIS 1200 and CEBIS connect you can easily share reference tracks with all other machines in your fleet. This ensures that all machines use the same reference tracks, which greatly improves cooperation and coordination in the field. This makes working with several machines simultaneously even more precise and efficient.



CLAAS connect uses existing harvest data to create a new yield map automatically.



Optimise your operating data with CLAAS connect.
With CLAAS connect you can check what your machines are doing at any time and optimise them by recording and analysing their operating data. Documentation helps you record your work by automatically generating log entries for each field. All data is prepared for booking in your FMIS.

connect.claas.com



▲ Always on track: CEMIS 1200 enables you to apply precision farming techniques all year round easily and cost-effectively. Efficient, connected and automated. With tractors, combine and forage harvesters.

Plan in the office.
You can use your field boundaries to plan your reference tracks in CLAAS connect.

Precision work on the machine.
With CEMIS 1200 and CEBIS connect you can create reference tracks on the machine or use reference tracks transferred to it. This allows you to make optimal use of your steering system for particularly precise work. Yield data is displayed live on the terminal. All machine data are documented along with current yield and constituent data
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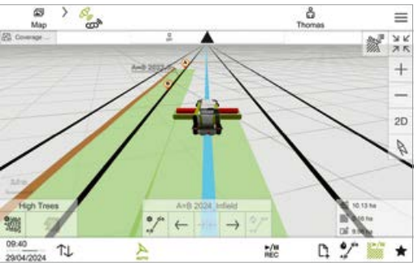
Analyse in the office.
All work and yield data, including consumption figures, are available in the task, providing ample scope for evaluation and analysis. You can transfer task data directly to CLAAS connect or email it to customers. This comprehensive solution enables you to optimise your work processes and produce accurate documentation.



▲ In CEMIS 1200 your yields are mapped live as you harvest. So you can instantly spot differences in the crop.



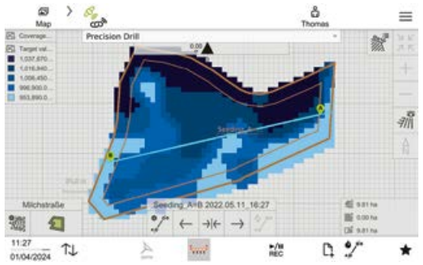
▲ The CEMIS 1200 has a 12" high-brightness multitouch screen. The working areas and views for automatic steering, variable rate application and documentation are freely configurable. Quick Access gives direct access to key functions and menus.



▲ Automatic steering



▲ Documentation



▲ Variable rate application



▼ The SAT 900 multi-GNSS receiver supports all correction signals.

► Receiver and terminal can easily be transferred between different machines in the fleet.



Licences for GPS PILOT 1200 and SAT 900 GNSS receiver

		Licence / runtime	Test licence / runtime	
Steering				
Manual steering assistance	Visual display of steering direction	unlimited		●
Activation of GPS PILOT / SAT 900 GNSS receiver	GNSS-based automatic steering system	unlimited	14 days	○
Reference track management				
Reference track management	Automatic creation of reference tracks based on field boundaries			●
Reference track switching	Automatic switching between selected reference tracks			●
Tramline management	Acoustic and visual signal for switching tramlines			●
Reference track exchange via ISO XML				●
A-B straight				●
A-B contour				●
Adaptive A-B contour				●
A+ angle				●
Circle mode				●
Correction signals				
Activation of RTK / RTK NET / SATCOR 3 FAST	For using RTK correction signals or SATCOR 3 FAST by Trimble RTX including RTK Bridging (runtime licence additionally required)	unlimited	14 days	○
RTK Bridging	Time-limited bridging in the event of loss of RTK correction signal			●
RTK Bridging Premium	Unlimited bridging in the event of loss of RTK correction signal	runtime 1 year	–	○
SATCOR 3 FAST by Trimble RTX [1]	Satellite-based correction signal Basic accuracy ± 3 cm Short initialisation period means work can start sooner	runtime 1, 2, 3, 5 years	5 days	○
SATCOR 3 by Trimble RTX [1]	Satellite-based correction signal Basic accuracy ± 3 cm	runtime 6 months, 1, 2, 3, 5 years	5 days	○
SATCOR 15 by Trimble RTX	Satellite-based correction signal Basic accuracy ± 15 cm	5 years as standard runtime 1, 3, 5 years	–	●
RTK correction signals [2]	RTK correction signal Basic accuracy ± 2-3 cm	runtime 1, 3, 5 years	–	○
ISOBUS				
ISOBUS UT	Display and operation of ISOBUS-enabled implements			●
AUX-N	Assignment of tractor function keys			●
TC-BAS	Task management in ISO-XML standard format			●
GPS Application	Preparation of application maps	unlimited	21 days	○
GPS task management (TC-GEO)	Documentation of as-applied maps and yield maps	unlimited	21 days	○
GPS Section Control (TC-SC)	Automatic section control for up to 254 sections and 6 booms	unlimited	21 days	○

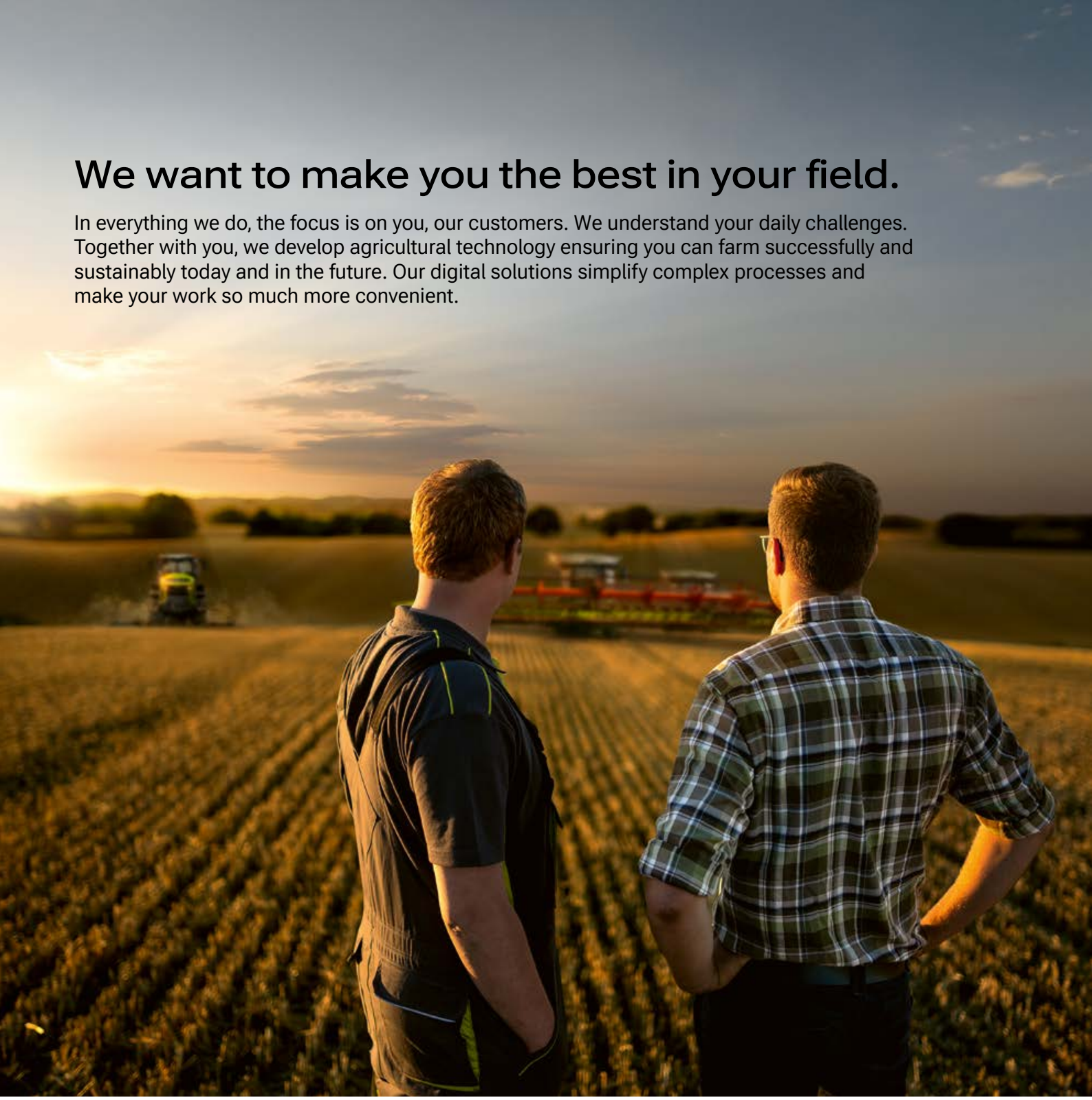
[1] Your SAT 900 receiver requires RTK / RTK NET / SATCOR 3 FAST activation.
[2] Make sure you have an RTK data volume limit for the SIM card. Note: not all correction signals are available worldwide. Please contact your dealer to check availability.

● Standard ○ Option □ Available – Not available

CLAAS continually develops its products to meet customer requirements. This means that all products are subject to change without notice. All descriptions and specifications in this brochure should be considered approximate and may include optional equipment that is not part of the standard specifications. This brochure is designed for worldwide use. Please refer to your nearest CLAAS dealer and their price list for local specification details. Some protective panels may have been removed to present the function more clearly in photographs. To avoid any risks, you should never remove these protective panels yourself. In this context, please refer to the relevant instructions in the operator's manual.
All technical specifications relating to engines are based on the European emission regulation standards: Stage. Any reference to the Tier standards in this document is intended solely for information purposes and ease of understanding. It does not imply approval for regions in which emissions are regulated by Tier.

We want to make you the best in your field.

In everything we do, the focus is on you, our customers. We understand your daily challenges. Together with you, we develop agricultural technology ensuring you can farm successfully and sustainably today and in the future. Our digital solutions simplify complex processes and make your work so much more convenient.



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