



CLAAS XERION with a new transmission generation and increased hydraulic power

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The Stage V generation of the XERION introduced in 2019 will receive a comprehensive upgrade for the new model year. In particular, the focus is on the introduction of the new Eccom 5.5 continuously variable transmission and a new, optionally available working hydraulic system with an impressive flow rate of up to 422 l/min.

Infinitely variable efficiency: New transmission, proven features

CLAAS has been using Eccom transmission technology for the continuously variable, power-split CMATIC drive in the XERION ZF since 2003. In addition

to their high level of efficiency, the transmissons are characterized by enormous resilience, high reliability under all operating conditions and a long service life. Thanks to the low input speed, the XERION can work in numerous areas of application with a low rpm speed concept and therefore extremely economically. The modern Stage V Mercedes-Benz six-cylinder engines deliver high torque even at low engine speeds, so that the maximum torque of 2,200 (XERION 4200) to 2,600 Nm (XERION 5000) is readily available at 1,300 rpm. Most work can therefore be carried out in an efficient and quiet speed range of 1,150 to 1,300 rpm.

A major innovation in the XERION for model year 2023 is the change from the previous ZF Eccom 5.0 and Eccom 4.5 continuously variable transmissions to the new Eccom 5.5. Like the previous models, the new transmission offers four automatic range changes forward, with the mechanical drive area being further optimized. A maximum forward speed of 40 or 50 kph can be achieved at a fuel-saving 1,246 or 1,558 rpm. When reversing, a maximum of 30 kph is possible with three automatic driving ranges. The drives of the front and rear axles are rigidly coupled with each other, so that no longitudinal differential is required.

Unlimited flow: Working hydraulics with up to 422 l/min oil flow rate

The switch to the new Eccom 5.5 enables even more powerful working hydraulics for the six possible double-acting rear spool valves. Thanks to an new pump transfer gearbox and the optional tandem pump, an oil flow of up to 422 l/min can be made available to external consumers even at low engine speeds. This means that there is also sufficient oil volume available for attachments with a particularly high oil requirement, such as wide air seeders. Up to two spool valves can be supplied with up to 140 l/min with the optional or standard load-sensing working hydraulics. In addition, two spool valves in standard equipment and three spool valves when equipped with the optional tandem pump can be prioritized in CEBIS, for example to give oil priority to important permanent consumers such as blowers or metering devices of pneumatic drills and planters.

A separate and optimized 90 kW power hydraulic system with 250 l/min at 260 bar is available for attachments such as liquid manure tanks and for front-mounted implements. The XERION thus offers the highest hydraulic power of any tractor in the market.

In order to increase operator comfort even further, the hydraulics menu in

CEBIS has been further developed and made even clearer. This makes it clear at first glance which feed pump supplies the available control units with oil and what maximum flow rates the control circuits allow. The prioritization of control units and the assignment of control units to function keys on the CMOTION joystick can also be done quickly and intuitively.

A hydraulic dual-circuit brake can also be supplied for selected markets. From as early as 2023, this will meet the Mother Regulation requirements that will apply from 2025 with regard to hydraulic brake systems.

Simply versatile: Intelligent ballasting and flexible implement attachment Also available from model year 2023 is a new base weight plate for the bodywork space behind the cab. Using the intelligent ballast concept with additional 400 kg weight plates and ballastable front weight, up to 7,000 kg of additional ballast can be loaded. Depending on the application, the XERION can be optimally balanced for a 50:50 weight distribution under tension and maximum multi-pass effect.

Also new is a Scharmüller mounting frame especially for sales regions such as North America, South America and Australia. This "Quick Hitch" enables a quick change from Cat 3 to Cat 4/4N and fits the rear linkage of XERION and AXION high-horsepower tractors.

Both the new basic weight plate and the Scharmüller mounting frame can be used for older XERION models up to and including 2014.

Smart steering, documentation and application: CEMIS 1200 with SAT 900 and new GPS PILOT

The XERION TRAC and TRAC VC will be equipped with the new CEMIS 1200 terminal with SAT 900 receiver and GPS PILOT of the latest generation for automated steering, fleet management, application control and documentation from model year 2023. The CEMIS 1200 has a 12-inch screen, either a 2D or 3D display with a split screen in addition to online task management and documentation with data export, e.g. via TELEMATICS or USB stick.

For automated steering, the SAT 900 receiver allows the use of all correction signals (SATCOR by Trimble RTX worldwide; EGNOS for Europe; RTK NET and RTK ready, SBAS for America and Japan) and enables the use of GPS, GLONASS, Galileo and BEIDOU. A 5-year license for the SATCOR 15 correction

signal by Trimble RTX with an accuracy of +/- 15 cm is included as standard. For more precise work, SATCOR 3 by Trimble RTX with +/- 3 cm accuracy is optionally available as an alternative to RTK correction signals. In addition, SATCOR 3 FAST by Trimble RTX is available in North America and Europe, which has an initialization time of less than two minutes with the same accuracy.

The documentation takes place via online file transfer via the CLAAS TELEMATICS portal or direct interfaces to the partners 365FarmNet OMNIA, Dacom, and xFarm.

Further functionalities are optionally available:

- TC-SC for Section Control with compatible ISOBUS attachments such as planters, seeders, fertilizer spreaders, sprayers or hoes.
 Up to 80 sections can be controlled.
- TC-GEO for data collection, data transmission and data mapping as documentation and basis for field planning.
- Variable Rate Application (VRA) for GPS-based application rate control when sowing, fertilizing or in crop protection. Application maps are transferred to the Task Manager as ISO-XML jobs.

All innovations at a glance:

- New Eccom 5.5 continuously variable transmission.
- Optional working hydraulics with a flow rate of 422 l/min.
- Prioritized controllers with 140 l/min flow rate.
- 90 kW power hydraulics with 250 l/min at 260 bar for hydraulically operated superstructures and front attachments.
- With optional working hydraulics and performance hydraulics the XERION offers the highest hydraulic power on the market.
- Optimization of the hydraulics menu in CEBIS.
- New 1,000 kg basis weight plate for the structure space behind the cab.
- New Scharmüller attachment frame for the rear linkage enables quick attachment of Cat 3 and Cat 4/4N attachments.
- New CEMIS 1200 with CLAAS GPS PILOT for XERION TRAC and XERION TRAC VC.
- Hydraulic dual-circuit brake system for relevant sales regions.

About CLAAS

CLAAS (www.claas-group.com) is a family business founded in 1913 and is one of the world's leading manufacturers of agricultural machinery. The company, with corporate headquarters in Harsewinkel in Germany's Westphalia region, is the world market leader in forage harvesters. In addition, CLAAS is the European market leader in another core segment, combine harvesters. Around the world, CLAAS also holds top spots with its agricultural machinery in the tractor, baler and grassland harvesting equipment segments. The CLAAS product portfolio also includes state-of-the-art farming information technology. CLAAS employs more than 11,900 staff worldwide and posted sales of 4.8 billion euros in the 2021 financial year.

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