

The New AXION 800 CMATIC

AXION 800 now also infinitely variable

Harsewinkel / Hanover, November 2013. The new AXION 800, which ranges in power output from 205 to 264 hp, celebrated its premiere at the SIMA trade show in February. The first production units with HEXASHIFT transmission are now being delivered to customers. At Agritechnica 2013, CLAAS will be presenting the AXION 800 CMATIC with infinitely variable transmission, so giving the company the widest range of infinitely variable technology for tractors currently on the market – from 140 to 530 hp.

Engine outputs of the AXION 800 CMATIC:

Model	Rated output kW/hp* (at 2150 rpm)	Max. output kW/hp* (at 1800 rpm)	Max. torque Nm*
850	184/250	194/264	1132
830	165/225	173/235	1016
810	151/205	158/215	941

*Values according to ECE R 120

The new AXION 800 CMATIC comprises of three models - the 810, 830 and 850, and features the new infinitely variable Terramatic transmission from ZF. Its typical ZF kinematics, with four mechanical gears, are responsible for the high-performance mechanical power transfer of the new Terramatic transmission. The four gears are changed automatically via multi-plate clutches, so ensuring excellent driving comfort as well as smooth acceleration from 0.05 km/h to either 40 or 50 km/h. The CMATIC transmission is available with a choice of two top speeds, 40 km/h or 50 km/h and the AXION 800 reaches 50 km/h at a fuel-saving 1600 rpm.



New: Engine retarder

Another new feature is the optional engine retarder. By pulling back the CMOTION multifunction lever, the driver can shift down a gear thanks to the intelligent gear management system, thus increasing the engine speed. The engine retarder is activated automatically when required, so no further intervention from the driver is necessary. With this feature, engine braking for on-road driving is up to 2.5 times as effective, which reduces the rate of wear and tear on the foot brake.

The infinitely variable Terramatic transmission has shown outstanding efficiency in the 200-plus horsepower sector, making it a perfect fit with the CLAAS POWER SYSTEMS (CPS) concept. The term CPS at CLAAS is synonymous with drive trains that combine newly developed components and technologies in optimum fashion.

Uniform operating concept

When it comes to operating CMATIC, CLAAS uses the convenient and easily manageable CEBIS concept (CLAAS Electronic on-Board Information System) with a CEBIS terminal, intelligent headland and implement management plus all connection options for ISOBUS devices. The main operating functions for both the tractor and any equipment are very simply controlled using function keys in the armrest or the CMOTION multifunction lever, which is the key element for operating any CMATIC tractor.

The driver simply presses a button whilst driving to select the drive mode and then actually drives by using either the pedal or the CMOTION multifunction lever. The CMATIC transmission allows three adjustable speed ranges in either direction of travel, including a cruise control function which the driver can select while driving, depending on the specific working situation.

The spacious cab concept with 4-posts, 4-point suspension, swing dampers on both the front and rear linkages and front axle suspension, has been retained. Thanks to a single-piece windscreen with no cross-struts and a curved rear window, the operator has a clear view over any equipment mounted on the front or rear of the tractor.

All AXION 800 CMATIC models are powered by state-of-the-art 6.7 litre displacement six-cylinder FPT engines that meet exhaust stage IV (Tier 4). This is achieved with a two-stage system consisting of a diesel oxidation catalytic converter (DOC/Oxicat), combined with an SCR catalytic converter. This exhaust treatment system requires neither an external exhaust gas recirculation system nor a diesel particulate filter (DPF). There is no additional boost in the new AXION 800 CMATIC or in the AXION 800 HEXASHIFT, which means that the full engine output is available at all times.

CLAAS offers three variants of the new 205 to 264 hp AXION 800 CMATIC:

1. The AXION 800 CIS with a HEXASHIFT powershift transmission, CLAAS Information System (CIS) and mechanical control units
2. The AXION 800 CEBIS with a HEXASHIFT powershift transmission, CLAAS Electronic on-Board Information System (CEBIS), headland management and electronic control units
3. The AXION 800 CMATIC with a infinitely variable ZF Terramatic transmission, CEBIS, headland management and electronic control units.

Series production of the new AXION 800 CMATIC will start up in mid-2014.

