

New telescopic loader in the 5.0 t capacity class

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A common feature of telescopic loaders working in agriculture is the need to cope with frequently changing driving and working conditions. Therefore the optimal coordination of the transmission and engine therefore plays an important role.

With the introduction of the latest SCORPION 7050, CLAAS is not only introducing an additional model that fills the gap in the upper power segment between the current SCORPION 7044 and 7055 models, but it also features a new electronic transmission-engine communication system, which will be adopted throughout the entire SCORPION model range.

Model	9055	7055	7050	7044	7035	7030	6030
Lifting power	5.5 t	5.5 t	4.8 t	4.3 t	3.5 t	3.0 t	3.0 t
Lift height	8.75 m	7.0 m	7.0 m	7.0 m	7.0 m	7.0 m	6.15 m
Engine output (at 2300 rpm as per ECE R 120)	115 kW/156 hp	115 kW/156 hp	90 kW/122 hp	90 kW/122 hp	90 kW/122 hp	90 kW/122 hp	90 kW/122 hp

Optimally coordinated loading and driving performance

In summer 2013, CLAAS presented a completely new telescopic loader model range with increased loading and hydraulic performance in addition to improved driving dynamics and comfort. The six SCORPION models have lift heights of between 6.15 m and 8.75 m combined with lift capacities of between 3.0 and 5.5 t.

The new SCORPION 7050, which has a lift capacity of 4.8 t and a lift height of 7.0 m, is the successor model to the SCORPION 7045, which is especially popular with farm contractors and owners of large farms. As with the previous model, our customers particularly appreciate its high loading capacity, the well-coordinated, flexible ground drive and its fuel-efficient operation.

The new model range of Deutz diesel engines, which have a power output of either 122 hp or 156 hp, are used as drive assemblies. As the first telescopic loader provider, CLAAS is offering the possibility to automatically

lower the diesel engine speed by approx. 15% as a standard feature under the name SMART ROADING. The drive concept of the new SCORPION model range has been developed in accordance with the tried-and-tested principle of the CLAAS POWER SYSTEM (CPS). An important aspect is the intelligent hydrostatic VARIPOWER drive, which constantly and automatically coordinates speed and thrust, continuously up to a maximum ground speed of 40 km/h.

New transmission-engine communication

From the 2015 financial year, CLAAS plans to enhance the VARIPOWER drive with the incorporation of a CAN-bus-based transmission-engine communication system which will be used across the whole model range. This ensures that the diesel engine will always automatically operate at optimal capacity. This results in reduced fuel consumption and less noise development but with the same performance data – whether during loading work or when driving on the road. Due to the improved efficiency achieved in this way, it is now possible to cover driving performances with a 122-hp diesel engine for which a larger engine would have been required in the past.

Engine cooling

For engine cooling, CLAAS has further developed its tried-and-tested air ducting concept. This means that the air flows through the engine compartment against the direction of travel and leaves the engine compartment in the upper area of the engine pan, together with the exhaust gases. When reversing the ventilation system, clean air is mainly sucked in from the top, rear section of the engine pan. This allows high air volumes to enter the counter-current without risk of contamination.

SMART HANDLING

At CLAAS, the term SMART HANDLING stands for operational safety with telescopic loaders and various automatic comfort functions, as well as different operating modes for the overload protection system. Four operating modes are available: Bucket mode, stack mode with vertical lift and manual mode. In all operating modes, SMART HANDLING causes the loader's drop rate to adjust to the weight and angle of the load, which is a standard feature on all models.

A new automatic function is the bucket return position facility, which makes the work even easier. At the touch of a button, the attachment can be brought to a specific position within the tipping angle. This can always be restarted when working. The bucket return position and SMART HANDLING therefore offer the

highest level of working comfort and performance.

Chassis and loading system redesigned

For lifting heavier loads while ensuring a high level of stability, all SCORPION telescopic loaders have a new chassis with an extremely low pivot point of the telescopic arm in the chassis.

The entire loading system has also been redesigned. The lifting, tilting and telescopic cylinders are now fitted with end-of-return damping and the boom now has a load stabiliser with automatic vibration damping, which is activated automatically when the ground speed reaches 7 km/h or above.

Source: CLAAS