



Six new SCORPION models

More output with the CLAAS telehandlers

Harsewinkel / Hanover, November 2013. Following the introduction of the SCORPION telehandler in 2005, CLAAS now presents a completely new SCORPION series which, particularly in the upper performance sector, adds another prong to the fork in terms of output, comfort and efficiency. CLAAS presents six new models with lifting heights between 6 m and 8.75 m and lifting capacity between 3 and 5.5 t.

Developed for agricultural use

CLAAS has been dealing with telehandler technology for use in agriculture for 20 years and has the extensive know-how to match. This expertise has been systematically incorporated into the development work for the SCORPION telehandler at the CLAAS partner Kramer, based in Pfullendorf, Germany. And with considerable success: Compared with 2006, CLAAS has seen a seven-fold increase in the number of units sold. Since May 2008, CLAAS telehandlers have been manufactured for the global market in the newly constructed factory in Pfullendorf.



More output and comfort

In today's agricultural sector, the telehandler is the key machine for materials handling – whether in the upper performance sector with a contractor, at biogas plants or in conventional use on livestock farms for feeding and bedding down. In many countries, the market is increasingly demanding greater lift capacity in the upper segment, beyond the 5.0 tonne limit, and more driving dynamics at the same time, as well as comfort in the middle and lower segments. CLAAS meets these demands with its three new 9055, 7055 and 7044 models in the large SCORPION series and three new models in the small series – the SCORPION 7035, 7030 and 6030. While the maximum lifting capacity used to be 4.4 t, the two new top 9055 and 7055 models can lift up to 5.5 t - at a maximum lift height of 8.75 m or 7.0 m. In addition, these models have even higher breakaway forces and more hydraulic power.

New chassis - lower centre of gravity

A new frame concept was developed for both series which enables them to lift heavier loads. A significant feature is the very low pivot point of the telescopic arm in the frame. In the lowered position, the telescopic arm is completely flush with the frame and thereby ensures a high level of stability and an unobstructed view to the right of the machine. Furthermore, thanks to the new chassis the maximum tyre size is now much larger at 600/55-26.5.

Loading system redesigned

The entire loading system has also been redesigned. Thanks to the new building technique and the kinematics system, the new SCORPION models achieve a very high breakaway force of 72 kN and a residual lifting capacity of 2 tonnes. The lifting, tilting and telescopic cylinders are now fitted with end-of-travel damping, which prevent impacts in

the loader. Furthermore, the loader now has a load stabiliser with automatic function for vibration damping. In automatic mode, the load stabiliser is automatically activated when the ground speed reaches 7.0 km/h or above, and deactivated when it falls below 7.0 km/h.

Operating the loader

On the six new models, the right dashboard and the joystick have been redesigned, as has the rotary switch on the dashboard which selects the three steering types: Front-wheel steering, all-wheel steering and crab steering. Clearly visible and easily accessible for the driver, the steering type can be switched with a simple press of the button. The new models on the large frame achieve a steering radius of just 3.755 m and those on the small frame turn on a radius of 3.750 m.

The joystick, which is located in the right arm rest of the driver's seat on the three larger models and built into the right side console in the small series, is used to select a total of 13 functions, simply and conveniently. A new feature is the choice between three driving ranges: "Snail" 0-7 km/h, "Tortoise" 0-15 km/h and "Hare" 0-30/40 km/h. If the driver limits the maximum speed, he can drive with a slightly increased engine speed, making full use of the hydraulic power. At the same time, the sensitivity of the accelerator pedal changes. On the new telehandlers, the three driving ranges can be changed, while driving and under full load, by pressing a button. All models are available as 20 km/h, 30 km/h and 40 km/h versions.

SMART HANDLING

At CLAAS, the term SMART HANDLING stands for operational safety with telehandlers and various automatic functions plus different operating modes for the overload protection system. The following operating modes are distinguished: 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. The higher and heavier the carried load, the lower the maximum drop rate.

When the telescopic arm is fully retracted, the overload protection is always deactivated to allow bucket filling and pushing operations to be carried out at full power. In certain situations, the driver can actively bypass the overload protection system for up to 60 seconds via a two-handed operation.

A new automatic function is the bucket return positioner, which makes the work even easier. One press of a button moves the equipment to a particular position which can be easily stored whilst carrying out the work. This means that during quick loading processes, the equipment can be precisely aligned at any time and as often as required.

Working hydraulics - new pressure release

The new telehandlers are equipped with load-sensing working hydraulics with increased performance. The SCORPION models 9055 and 7055 now have a conveying capacity of 187 l/min and the SCORPION 7044 conveys 140 l/min. The three smaller models offer a choice between a 100 l/min gear pump or 140 l/min load sensing working hydraulics. A new feature is the pressure release for the third control circuit on the swan neck of the telescopic arm. By pressing a button, this allows the connections to be depressurised with the engine running, so enabling attachments to be changed more easily and, primarily, more quickly.

New drive concept

The increased loading capacity and hydraulic power of the new telehandler required an equally powerful drive concept, which CLAAS developed, as with all other machines, according to the CLAAS POWER SYSTEMS (CPS) principle. This concept uses new-generation Deutz engines, which are characterised by an increased torque with economical fuel consumption and meet the standard stage IIIb (tier 4i) exhaust emission requirements. The two largest models, the 9055 and 7055, are fitted with 4.1 litre 4-cylinder engines with an output of 115 KW/156 hp, and model 7044 as well as the small series (SCORPION 7035, 7030 and 6030) are fitted with 3.6 litre 4-cylinder engines with an output of 90 KW/122 hp (at 2300 rpm, in accordance with ECE R 120). The 4.1 litre engines contribute to emission control with a combination of a self-cleaning diesel particulate filter (DPF) and maintenance-free diesel oxidation catalyst (DOC). With the 3.6 litre engine, the exhaust gas after-treatment consists only of a maintenance-free DOC system.

The air ducting concept for the engines is unusual: The cooling air is sucked in from the upper section of the engine bonnet. It flows through the cooler, is channelled past the engine block and exits the engine compartment at the top, in the rear section of the engine bonnet, together with the exhaust gases. This air ducting concept prevents dust and dirt from being stirred up and sucked in. Clean air is sucked in from the top, rear section of the machine even for reversing the ventilation system.

Transmission with more thrust and SMART ROADING function

An important aspect of the CPS concept of the new telehandler is the intelligent hydrostatic VARIPOWER drive, which constantly and automatically coordinates speed and thrust, continuously up to a maximum speed of 40 km/h. For even more driving dynamics and thrust, CLAAS is also offering the two new top-of-the-range models with the larger VARIPOWER PLUS transmission and SMART ROADING function. On the SCORPION 9055, 7055 and 7044 models, when the top speed is reached in the all-wheel steering (up to max. 30 km/h) and front-wheel steering (up to max. 40 km/h) modes, the speed can be reduced to 1800 rpm and on the SCORPION 7044 model to 2000 rpm. This significantly reduces diesel consumption during transport work and during in-plant handling work. The reduced engine speed also lowers the noise level during work. The SMART ROADING function is controlled automatically. The driver needs only to set the speed using the accelerator pedal. The engine speed is reduced automatically once the top speed is reached. In order to achieve maximum traction during pushing operations, even under difficult conditions, the 100 % limited slip differential in the front axle can be actuated by pressing a button on the joystick.

The cab – bigger, more comfortable, more ergonomic

All new models are equipped with a cab which has significantly more space (5% more volume, 9% more interior width), improved 360° all-round visibility thanks to a continuous windscreen (8.5% more glass surface) and many other comfort-related features. In addition to the new controls which have already been described, there is, for example, the additional refrigerated 23 l-capacity storage compartment and the optional seat with dynamic damping. The main operating modes of the machine are displayed in the right-hand A-frame member of the new models. There are now two large storage compartments at the rear of the machine on the low-lying ballast weights. Together, they have a capacity of 44 litres and are lockable. For night work, all switches in the cab are back-lit and the machines can be fitted with up to 9 work lights, LED if preferred. The FOPS grill is now located on the inside.

The three SCORPION 9055, 7055 and 7044 large series models are available since October. The smaller SCORPION 7035, 7030 and 6030 models will be supplied from February 2014.

Model	9055	7055	7044	7035	7030	6030
Lifting power	5.5 t	5.5 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	6.0 m