

New 1725NT High Performance Planter

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Awarded a gold medal at the 2015 SIMA show, John Deere's 1725NT high performance planter concept provides new levels of accuracy at planting speeds of up to 16 km/h (10mph) and beyond.

This innovative technology delivers seed to the bottom of the furrow in a rearward trajectory that truly matches the ground speed of the planter at any desired seed population. This delivers precise seed placement in the furrow with no bounce and no roll, whether planting maize or soya beans at high seeding rates. A cartridge of brush bristles gently cradles the seed on all sides, with full control, to deliver each seed to the bottom of the furrow, even in rough planting conditions. The 1725NT's row units handle the vast majority of seed shapes and sizes, achieving 99 per cent seed singulation.

Featuring a road transport width of only 3m, John Deere's eight-row high performance planter concept offers a granular fertiliser option and has been designed to work in both conventional tillage and no-till conditions. Mounted on a tractor, this unique electric-drive planter can be powered by an external generator attached to the tractor PTO (or alternatively by a John Deere 6RE tractor), and is fully integrated into John Deere's FarmSight range of precision farming solutions.

New PowrSpray Solution System for High Specification Sprayers

The PowrSpray solution system for John Deere's high specification R900i Series trailed sprayers, which are now available in three tank sizes of 4400, 5200 and 6200 litres, is an innovative development.

PowrSpray features two hydraulically-driven centrifugal pumps, the first fills the sprayer at up to 1200 litre/min, while the second, 1000 litre/minute spraying pump, has Direct Rate Control for fast changes of application rate and highest spraying accuracy.

The self-priming, low pressure filling-pump fills the sprayer rapidly even with the tractor engine at idle, reducing fuel use and noise during the filling process. It is also used to prime the higher pressure spraying pump.

The Direct Rate Control of the spraying pump is able to adjust between minimum and maximum output in less than 3 seconds – increasing rate control accuracy to a level conventional systems cannot match. This is especially important during the entry and exit of the headlands, where changing forward speeds and automatic section switching place heavy demands on rate control systems. In addition, Direct Rate Control

significantly improves the accuracy achieved in variable rate applications, where large changes in target rate may be required.

Combined with “smart” hydraulic control of the solution system, Direct Rate Control allows spraying to be completed independent of tractor engine rpm. IVT or DirectDrive tractors with engine/transmission management can be operated in 'ECO' mode, with a low engine rpm significantly reducing the fuel consumption during spray applications.

PowrSpray is packaged as standard with Auto Filling, Auto Agitation Intensity control (tank agitation intensity decreases as solution tank level lowers), Power Agitation (maximum intensity agitation for difficult to mix products) and the unique Auto Dilute rinsing system. R900i PowrSpray machines can also be optionally equipped with John Deere's automatic Section Control and BoomTrac auto boom levelling systems.

Source: John Deere GmbH & Co. KG; ASM Public Relations Ltd