

## **New John Deere combines for Europe**

Specifically designed for European crops and conditions, John Deere's new W, T and S-Series combine range for the 2012 harvest season features models from 260 to 625hp (maximum rating at ECE R120), providing new levels of grain harvesting productivity and operator comfort.

The top of the range S690 features the most powerful engine available in a combine today, and the largest grain tank, at 14,100 litres or 10 tonnes capacity, which can be emptied in just 105 seconds. In addition, W and T-Series models feature the largest active separation areas in the industry, at up to 3.36m<sup>2</sup>, and the largest grain tank available on a straw-walker machine, at 11,000 litres.

Key features of the 11-model range available in the UK and Ireland include an integrated 66cm (26in) wide rubber track design for S-Series models only, suitable for road speeds up to 30kph, with full hydraulic suspension and an overall transport width of 3.42m; newly designed transmissions and Premium cab; a new cleaning shoe with an active returns system plus a new high performance Variable Stream Rotor on the expanded S-Series range of three models; a wider range of cutting platforms up to 10.7m (35ft), including the versatile PremiumFlow header; an enhanced residue management system; and a wider range of flotation tyre options.

The newly consolidated John Deere range for 2012 will consist of the W540, W550, W650 and W660 conventional five and six straw-walker combines; the restyled five- and six-walker T550, T560, T660 and T670 models, featuring the company's established tangential tine separation technology; and the S670, S680 and S690 combines, which now provide even greater harvesting capacity in all crops and conditions.

All the combines are powered by Stage IIIB compliant 6.8-, 9.0- or 13.5-litre John Deere PowerTech PSX engines to meet emissions regulations. These high-pressure common rail (HPCR) engines are equipped with two in-series turbochargers for higher boost pressures, a four-valve cylinder head for enhanced airflow, electronic engine control and an exhaust gas recirculation (EGR) system.

John Deere's diesel-only engine solution requires no urea, by combining a diesel oxidation catalyst (DOC) and a diesel particulate filter (DPF) to reduce harmful emissions while maintaining high levels of fuel efficiency.

These engines are designed to make it easier to harvest up to the limit of the combine's capacity, especially when unloading while harvesting.

There is a choice of two transmissions on S-Series models. The proven ProDrive transmission, standard on the S680 and S690, features smooth, automatic shifting between two speed ranges, and has an electrically activated diff lock. It offers speed selection for normal harvesting conditions or for faster field work and road transport, and allows individual speed adjustment via the hydrostatic control lever. The newly designed three-speed Push Button Shift Transmission (PBST) is standard on the smaller S670 model, and allows the operator to select the required gear by simply pressing one of three buttons on the armrest console. As with ProDrive, this transmission applies the parking brake automatically once the hydro lever is pulled into the neutral position.

PBST is also standard on the T-Series combines, with ProDrive available as an option on the top three models in this range, which also features improved serviceability, with easier access to the sides of the combine and the main drives. All four W-Series combines are equipped with a basic three-speed transmission as standard, with PBST optionally available.

The all-new Premium cab on the S & T-Series combines provides 30 per cent more space, lower noise levels and an almost uninterrupted view of the harvesting operation. The four-way adjustable air suspension seat is more comfortable and includes lumbar adjustment for greater back support, while the larger passenger seat can be easily converted into a field office with space for a laptop computer, if required.

The cab features the same basic, easy to use operational layout as John Deere's new 8R Series tractors, with effortless control of the harvesting operation provided by the CommandTouch armrest console, GreenStar 3 CommandCenter display, digital corner post display and tiltable steering column. The optional GreenStar 2630 touch-screen display supports the full John Deere i-solutions package, including HarvestSmart automatic feedrate control, Harvest Monitor yield monitoring and AutoTrac automatic steering.

An optional video camera can be installed to monitor the rear of the combine, the grain tank and the unloading auger for all-round visibility and control from the single GreenStar 3 display. Additional cab features include an efficient air conditioning system, sunshades, a refrigerator and a premium radio package.

A new button on the master control lever enables activation of AutoTrac for increased field efficiency, while the corner post display includes a new power meter. This displays the percentage of power being used, which allows the operator to maximise the machine's overall harvesting capacity when required.

The new Variable Stream Rotor on S-Series combines provides higher separator capacity with a smoother, more uniform crop flow, better straw quality and lower fuel consumption. It combines the proven single-tine separation system with a new, stronger rotor and new top covers with adjustable vanes, all specifically designed for maximum performance especially in high-moisture, high-yielding crops and green harvest conditions.

The new S-Series combine's cleaning shoe has a large one-piece chaffer and a 19 per cent larger sieve, which makes it much easier to set the combine for high performance harvesting, and the sieve settings can be adjusted electronically from the cab. The active returns system is also very easy to adjust, and by handling returns that would normally go back to the separator, and thus lower separator performance, it increases the total output of the combine. This system uses less aggressive concave settings than those in the separator, and handles sensitive crops more gently, to maintain high grain quality.

The S-Series combines' residue management system features a new fine-cut straw chopper with 44 winged knives, to provide even spreading at widths of up to 9m, and can be set and adjusted on the move from the cab display. An optional PowerCast spreader is available to match the widest 10.7m cutting platform.

With the Premium version, the operator can either drop straw and spread chaff, or chop straw and spread all the material during harvesting, simply by switching from chop to drop on the CommandCenter display. This straw chopper has 100 grooved knives in four rows, working against 57 stationary knives to achieve the finest possible cut.

Straw and chaff can also be separated at the rear of the combine by dropping the straw in a windrow, while chaff is routed through the chopper and distributed over the full header width by the adjustable electronic vane tailboard.

The optional John Deere HillMaster self-levelling system is available on all models, and compensates for slopes of up to 15 per cent by levelling the entire combine body automatically on the move. Combined with the SlopeMaster sidehill kit, this provides full harvesting performance on slopes of up to 22 per cent. With HillMaster, John Deere offers the largest full body self-levelling straw walker combine in the industry.

John Deere's web-based JDLink telematics solution will also be supplied free, as standard, with all new W, T and S-Series combine models for the first year of ownership. This system offers three specification levels, allowing it to be tailored to individual business needs. JDLink provides data on machine location, fuel consumption and harvest performance, as well as machine hour and location tracking, geofencing to protect a machine from misuse, and maintenance planning. This enables fleet

owners and managers to determine, for example, if operators need more training.

*ENDS (Setting Directions, Lisbon, June 2011)*