## TO LOOK INTO THE FUTURE, TWO EYES ARE NOT ENOUGH.

NEW SERIES 7 Deutz-Fahr Agrotron TTV





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Deutz-Fahr presents Series 7; the new family of high-power Agrotron TTVs with cutting edge style, efficiency, productivity and comfort. The new Series 7 Agrotron TTVs are designed to achieve high performance and maximise production efficiency output. Deutz-Fahr has fine tuned the most advanced technology to produce this new series, which boasts excellent performance, low fuel consumption and outstanding operator comfort. Giugiaro Design has put its distinctive stamp on the new Series 7, characterising the series with an exclusive bonnet, futuristic mudguard shape incorporated with easily visible LED lighting, and a cab layout that is the only one of its kind on the market.



## TO ACHIEVE THE BEST RESULTS YOU MUST PLAY TO YOUR OWN STRENGTHS

Deutz's innovative machines are equipped with SCR technology and are extremely powerful, efficient and environmentally friendly. They are also perfectly combined with the proven TTV variable transmissions that characterise this range.



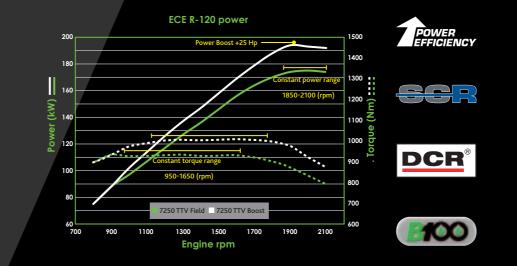


### **EFFICIENT** EVEN IN ENVIRONMENTAL TERMS.

The beating heart of this innovative series is the Deutz TCD 6.1 L06 4V, 6 cylinder engine, with maximum power levels (ECE R-120 with Power Boost) ranging from 245HP (180 kW) in the TTV 7230 to 263HP (194 kW) in the engine that runs the TTV 7250.

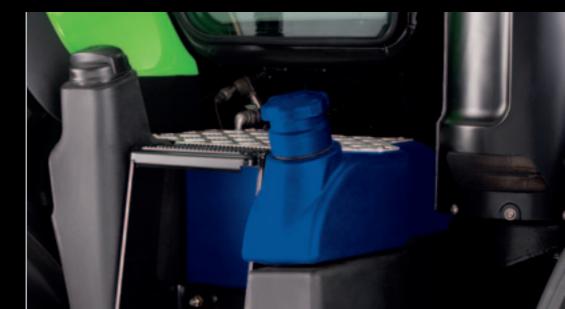
The engines have four valves per cylinder, with a centrally-positioned injector, and feature a wastegate turbocharger with electronic control and intercooler. The DCR (Deutz Common Rail) high-pressure system features an integrated electronic management system that operates up to 2000 bar with the emission gas treated by an SCR catalytic converter. These features allow the engine to reach peak performance and excellent fuel consumption levels, as well minimising pollutant emissions.





This means that the engines are able to operate with biodiesel, either mixed with ordinary fuel or in a 100% pure form. Deutz-Fahr's care of the environment is also underlined by its use of environmentally-friendly materials in the production cycle of these new tractors. The commitment to agriculture in Deutz's engines is well highlighted by the maximum power values of 1900 rpm and maximum torque of 1600 rpm. This torque level remains almost constant at between 950 and 1650 rpm - the entire operating range for many operations. There's no need to worry about refueling either; long working days are no longer a problem due to the spacious, 435-litre fuel tanks, combined with 50-litre AdBlue reservoirs.

These new tractors boast high power but with a fuel consumption that can be reduced by up to 10% in relation to previous engines. This saving greatly offsets the consumption of AdBlue (a high-purity urea-based solution at 32.5% concentration in demineralised water, used for Selective Catalytic Reduction (SCR)). This provides an excellent overall reduction in running costs and helps to safeguard the environment at the same time. In practice, with SCR, exhaust gases undergo post-treatment with a highpurity, urea-based spray that breaks down harmful nitrogen oxide (NOx) into atmospheric nitrogen and water vapour; two elements that are harmless to the environment. The AdBlue<sup>®</sup> reservoir has been integrated into the fuel tank area without reducing the capacity or increasing the outer dimensions of the tractor. The engines used for Series 7 are B100 compliant.





# TO ACHIEVE TOP PERFORMANCE YOU DON'T HAVE TO COMPROMISE ON STYLE.

Let yourself be transported by beauty, comfort, technology and incomparable design without compromise.



The exclusive multifunction lever allows the operator to easily control the main functions of Series 7 using one hand.

The multifunction armrest, integrated into the driver seat, includes all of the main controls for managing the implements. Levers and buttons are grouped in a practical way and arranged according to the frequency of their use. All of the controls are clearly distinguished and coloured to make the tractor easy for the operator to use.

A general lighting control panel also groups together all of the controls for managing the lights used while working and those used on the road.



### **SIMPLICITY** IN CONTROL.

The new Maxi Vision Cab offers a very high level of technology and comfort. Computerised analysis of airflows, the use of high-quality materials and the spaciousness of the cab create an inviting and comfortable working environment. Controls have been designed ergonomically, all of the controls have been laid out in a logical and practical way and all of the onboard information has been clearly indicated, making the tractor easy to drive and putting the operator at ease right from the start.



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Finally, the electronically-controlled, automatic climate control system and the anti-vibration function ensure that the cab is comfortable.

The suspension of the standard front axle, the mechanical or pneumatic suspension of the cab, as well as the brand new semi-active suspension are just a few of the features included.

The driving seats are also highly innovative. Cutting-edge seats with pneumatic suspension and an automatic level control system are available as standard. For more demanding requirements, Series 7 can be equipped with new active suspension seats. Lastly, a spacious passenger seat, equipped with comfortable padding, is also available.



### A TECHNOLOGICAL LUXURY WORK STATION.

The operating status of the tractor is constantly controlled by three different multimedia devices.

• The Work Display, located on the front, right post of the cab, allows the operator to monitor all of the tractor's operations.

• The Infocenter, located within the instrument panel, shows the status of the various systems.



• iMonitor-2 - an innovative (ISO-bus-compatible) multimedia interface allows the operator to fully configure all of the operating parameters. The high technological content of Series 7 allows full command of the tractor and easy management of farming operations.

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### AN INNOVATIVE CONTROL SYSTEM

Designed to manage and configure the numerous on-board functions, the iMonitor-2 allows you to communicate with the machine by simply touching the screen or by using the practical control panel on the side console. The 12" screen is fitted on the side armrest, which is fully integrated into the driving seat. This allows the operator to control all of the tractor's functions in a way that is always practical.





The following functions are integrated: "main menu" controlling all machine functions; (lift, PTO, spool valves, engine and transmission, ASM and cab suspension); performance monitor (fuel consumption, productivity and area-covered information); ISO-bus monitor allowing the use of ISO-bus compatible implements; mp3 player and bluetooth hands-free speaker phone Comfort and technology are at your fingertips.

For even greater productivity, the iMonitor-2 can be enhanced with an Agrosky satellite control. The innovative GPS system is fully integrated into the tractor which, on its most advanced configuration setting, gives the operator the ability to activate automatic steering by using the electrohydraulic valves that control the steering to an accuracy level of within 2 cm.

## **PRODUCTIVITY** IN YOUR HANDS.

The perfect transmission? Transmission that combines ideal speed with the highest performance, not forgetting comfort and innovation.



### INNOVATIVE transmission.

The TTV transmission of Series 7 combines the efficiency of mechanical components with the comfort and smoothness of a hydrostatic system. This efficient and reliable system is capable of varying speed continuously, optimising engine power without unnecessary loading or fuel wastage, for easier and more productive work These operating principles allow the TTV transmission to quickly provide the required driving speed, ensuring a smooth drive and advantages in terms of on-the-move comfort and safety, particularly when driving on roads. Designed for a maximum speed of 60 km/h, the new Deutz-Fahr Series 7 tractors can reach 40 - 50 km/h (depending on regulations) at 1357 - 1695 rpm.



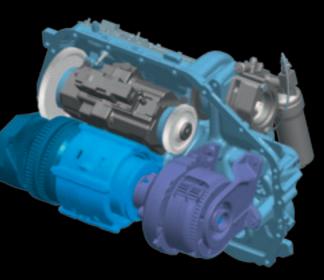
In the field, productivity is still at the peak in terms of performance and efficiency due to the high degree of mechanical drive and automatic engagement and disengagement of the four-wheel drive and differential locks via ASM.

Lastly, the superior comfort of the TTVs is enhanced by the transmission control system. To drive the tractor the operator no longer needs clutch, gears, accelerator and brakes. It is often possible to use only the multifunction lever to make small adjustments to the working speeds.

# SPEED

## IS CONSTANT.

TTVs are equipped with variable transmission, based on "split-power" (in other words the breakdown (split) of power supplied from the crankshaft into two operating circuits (the highest proportion of power is mechanically transferred via planetary gearing and an oil-bath disc clutch while the remaining proportion is transferred hydrostatically using a Load Sensing pump and fixed displacement motor. The hydrostatic flow varies so that the tractor speed is able to increase (or decrease) in a continuous, smooth way



without the classic "jolts" noticeable when changing gear using traditional transmissions. The two elements of the continously variable transmission are connected to a geared control unit. The assembly is completed with an electrohydraulic shuttle and controlled by an advanced electronic control unit (ECU) that continuously "talks to" the engine control unit to seek maximum efficiency for each operating condition.



### IF YOU'RE LOOKING FOR AN ALTERNATIVE CONTROL, NOW YOU HAVE THREE OF THEM.

We always have to choose the best strategy. This is why the control unit of the Series 7 includes three different operating modes.

#### MANUAL

Depressing the accelerator pedal increases the engine rpm while operating the multifunctional lever varies the ground speed. In this instance, the TTVs are essentially comparable to a tractor with a mechanical gearbox but, due to their "infinite" ratios, have the great advantage of superb drive smoothness that is typical of CVT transmissions.

Keeping the multifunction lever pushed forward or backward (for reverse or to decelerate) varies the speed continuously. On the other hand, short pulses on the lever allows you to vary the speed in intervals of 0.1 km/h from 0 to 15 km/h and intervals of 1 km/h for higher speeds.

### AUTOMATIC

IS the optimum choice for pulling operations in the field and for transportation operations. When the foot pedal is pressed, the tractor reaches the preset ground speed. The electronic control unit (ECU) then keeps the speed constant, adjusting the engine rpm according to the requested load.

### PTO

This mode automatically activates when the PTO is engaged, keeping the rpm constant regardless of the tractor's ground speed. In all cases, the operator can constantly vary the ground speed using the accelerator pedal. In this way, TTVs overcome the main limitation of traditional, mechanical transmissions that do not allow you to adjust the driving torque to a different speed from the engine unless you change gear. This method is therefore ideal for equipment that must operate at a constant PTO rpm, such as balers.





### THE STRATEGY OF EFFICIENCY IS THAT OF PRODUCTIVITY.

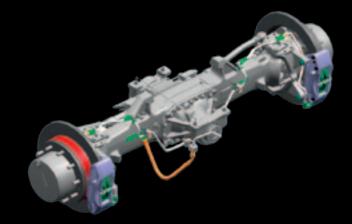
In parallel with the operating modes illustrated, the operator can also choose from three basic operating strategies: Eco, Power and Automatic-Mode. The first strategy allows a further increase in efficiency, to achieve greater fuel-saving while the second strategy maximises the productivity of the tractor, allowing quicker operating times. The Automatic Mode puts the tractor into an intermediate position in relation to the other two strategies. In this strategy, the control unit adjusts the engine and transmission at the same time until constantly operating at maximum economy, increasing the engine rpm to provide the extra power needed to keep the required ground speed with the increase in load.

For maximum safety, Series 7 can be fitted with an innovative, integrated braking system that involves the disc brakes fitted externally on the front hubs.

This system comes as standard in the 60 km/h versions (where this limit is permitted).

The "ParkBrake" parking brake can be directly activated from the armrest console and acts on the rear brake discs to free any loading of the rear pinion shaft. This involves minimal absorption of power.

For continuous adjustment of the track widths, bolt-on bar axles can be fitted. This allows the operator to work with 650/65 R42 twin rear tyres and also fit the new rear ballast wheel weights with a 140 kg central plate and three further 255 kg discs on each wheel, allowing a maximum total of 1810 kg of rear ballast.



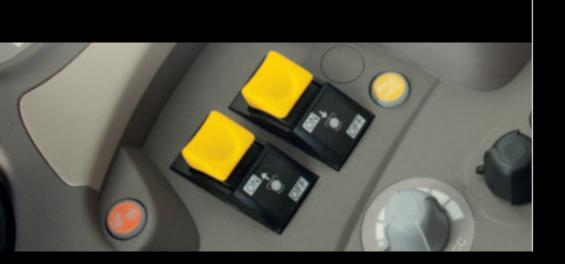


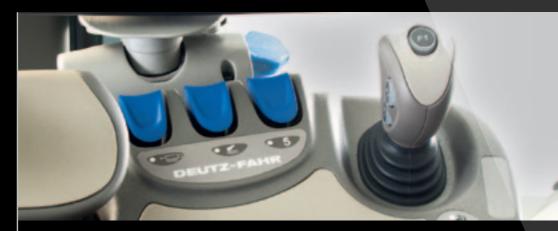
## THE MECHANICS OF INTELLIGENCE.

The high capacity hydraulic system and intelligent management of the equipment allows the operator to raise productivity in the field to the maximum level.

### **PTO:** A COMPLETE FACILITY.

Being able to choose from a few alternatives in terms of PTO helps to increase the versatility of the tractor, keeping it constantly operating at maximum efficiency, even when high power levels are not required. The Series 7 is equipped with three speeds (540E/1000/1000E) that can all be electrohydraulically engaged and with proportional valve engagement control, this ensures gradual and progressive start-up of the connected equipment every time. Remote control of the PTO from both rear mudguards comes as standard. Together with the front lift, 1000 rpm PTO is available. The ECO version of this is available upon request.





### **EFFICIENT** HYDRAULICS.

The standard combination includes an independent 44 l/min steering pump and a 120 l/min Load-Sensing pump (or optional 160 l/min pump). Four double acting remote control valves are available as standard. These valves are proportionally-controlled and can be increased to seven on request. When specifying seven valves, two valves are dedicated for operations using the optional front hitch. All the remote control valves can be locked, also used in single acting, when lifting and have a detented "float" position. The timing and flow of all valves can be adjusted. All the control levers are distinguished by colour and can be programmed for combination with various hydraulic attachments. The Power-Beyond facility allows you to directly connect the oil flow from the pump to attached equipment - a useful option when the machinery is equipped with an independent control unit that requires a high oil flow capacity. The Load Sensing pump continuously adjusts the hydraulic power requirement. When no hydraulic power is required, the pump goes into a "Standby" mode, minimising power dissipation (and fuel consumption) and guaranteeing the hydraulic components a long operating life. The new Series 7 is equipped with "push-pull" hydraulic couplers to connect the pressurised hydraulic pipes. A dedicated container collects any excess oil that can leak during the coupling phase and prevent it from spilling onto the floor.





The maximum rear lifting capacity is 10000 kg. The EHR electronic management (fitted as standard) manages the control of the draft loadings and linkage position. Intermix of draft and position control allows the operator to fine tune settings for all conditions and also incorporates, the float mode, as well as reducing wheel slip. A rapid soil engagement setting, damping of oscillations (ride control) when transporting equipment, preset lock position, implement height limit and adjustment of the lowering speed are all integrated into the EHR. The maximum front hitch lifting capacity (optional) is 4500 kg.

TECHNICAL DATA		SERIES 7				
		7230 TTV	7250 TTV			
ENGINE						
Model		DEUTZ - TCD 6.1 L06 4V Tier 4i	DEUTZ - TCD 6.1 L06 4V Tier 4i			
Injection/ Pressure		Deutz Common Rail/2000 bar	Deutz Common Rail/2000 bar			
Cylinders/ Displacement	nº/cc	6/6057	6/6057			
Approved fuel (i)		Diesel, B100	Diesel, B100			
Maximum power with boost (ECE R-120)	kW/PS	180/245	194/263			
Homologated power (2000/25/EC)	kW/PS	178/242	190/258			
Maximum power (ECE R-120)	kW/PS	162/220	175/238			
Rated speed power (ECE R-120)	kW/PS	150/204	174/236			
Rated engine rpm	rpm	2100	2100			
Maximum torque (standard mode)	Nm	870	934			
Maximum torque (boost mode)	Nm	937	1009			
Fuel tank capacity	l	435	435			
AdBlue reservoir capacity	l	50	50			
TRANSMISSION						
Туре		TTV continuously variable transmission				
Maximum speed		40 km/h - 50 km/h - 60 km/h				
Driving strategies		Auto/Manual/PTO (with Eco/ Power management)				
PowerZero (active stop) function		std				
Front axle suspension		std				
ASM		std				
РТО						
Rear PTO speed	rpm	540E/1000/1000E				
PTO control on mudguards		std				
Front PTO speed	rpm	1000 (1000E)				
HYDRAULIC LIFT						
Maximum lifting capacity (front/ rear)	kg	4500/10000				
Lift control on rear mudguards		std				
Radar		opt				

TECHNICAL DATA		SERIES 7			
		7230 TTV	7250 TTV		
HYDRAULIC SYSTEM:					
Load-Sensing hydraulic circuit with variable capacity pump		std			
Hydraulic pump capacity (std/ opt)	l/min	120/160			
Hydraulic oil reservoir capacity (separate tank)	l	50			
Spool valves	n°	4 (7 opt)	4 (7 opt)		
BRAKES AND STEERING					
Boost brake		std			
Power steering pump capacity	l/min	44			
Parking brake	type	EPB (Electronic Parking Brake)			
External disc brakes on the front axle		std with 60 km/h transmission			
Pneumatic/ hydraulic braking of the trailer		std			
TYRES					
Standard front/ rear tyres		600/70 R30 - 650/65 R42			
Ballast for rear wheels (optional)	kg	2 x (140+255+255)			
Dual rear wheels		2x650/65 R42			
CAB					
Maxi Vision cab		std			
Maxi Vision multifunction armrest		std			
ISO-Bus interface and ISO-bus switch		opt			
iMonitor-2 (display 12")		opt			
Coloured work display		std			
Padded passenger seat		std			
Automatic A/C		opt			
DIMENSIONS AND WEIGHTS					
Wheelbase	mm	2837			
Length	mm	4933			
Width	mm	2550			
Weight	kg	8200			
Total permissible weight	kg	13500			

Technical data and pictures are guideline only. Committed to delivering a product more and more in line with your needs, DEUTZ-FAHR reserves the right to update the specifications of its machines at any time without notice.

For more information, contact your DEUTZ-FAHR dealer:

The use of SDF original lubricants and coolants is recommended



DEUTZ-FAHR is a **SAME DEUTZ-FAHR** www.deutz-fahr.com/7series

