

POWER

ADVANCED

The New 6 Series TTV  
6150.4-6160.4-6160-6180-6190 Agrotion

Agrotion

6180 TTV

DEUTZ-FAHR



A close-up view of the operator's seat in a Deutz-Fahr 6 Series TTV tractor. The central focus is the iMONITOR display, which shows various agricultural data points such as temperature (25 °C and 24 °C), fuel level, and engine speed (27). The display also features the GROSCH logo and software version information. To the left of the display is a control panel with several buttons, including a prominent 'STOP' button. Below the display, there are several blue and yellow buttons, a gear selector lever, and a handbrake. The overall design is modern and functional, typical of contemporary agricultural machinery.

## NEW 6 SERIES TTV

**IN ORDER  
TO DEVELOP,  
AGRICULTURE NEEDS  
CONTINUOUS  
INNOVATION.**



# TREMENDOUS POWER UNDER YOUR CONTROL.

The new 6 Series TTV Agrotron is the result of the latest technology perfected by DEUTZ-FAHR to enhance performance and operator comfort, while keeping fuel consumption low. The innovative Deutz engines equipped with SCR technology are even more powerful, efficient and environmentally friendly than before. They are also a perfect match for the tried and tested TTV continuously variable transmissions used in this range. The distinctive styling of the new 6 Series TTV is by Giugiaro Design, and features the characteristic sloping hood, the futuristic lines of the fenders, and a cab interior that takes operator comfort to a whole new level.

## WE DRIVE INNOVATION.

The models of the new 6 Series TTV represent an important step forward in the evolution of medium-high power tractors with continuously variable transmissions: no longer just work horses, but efficient, productive, versatile machines that respect the environment.

From ploughing to road transport, from farmyard duties to field work with front and rear implement combinations, the innovative engines of the 6 Series TTV are ready to meet the challenges of modern farming: high performance with low environmental impact.

Deutz Tier 4i engines with 4 or 6 cylinders, 4 valves per cylinder, turbocharger with intercooler and waste-gate valve, integrated electronic control of DCR (Deutz Common Rail) fuel injection and SCR (Selective Catalytic Reduction)

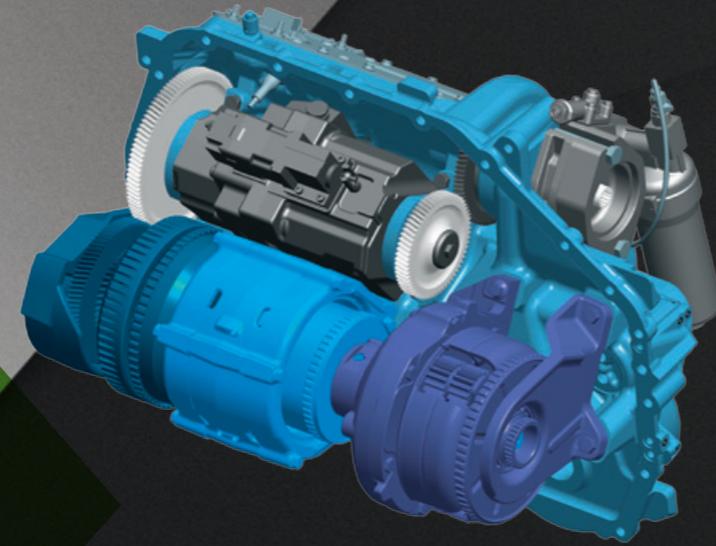


exhaust treatment make a formidable package that enables the engine to deliver its best performance, with excellent specific fuel consumption figures and minimal emissions.

The SCR catalyzer allows the engine to run at optimal efficiency without resorting to exhaust gas recirculation; compared with previous versions, this system can achieve reductions in fuel consumption of up to 10% for the same power output.

The new fuel injection system, with pumps lubricated by engine oil and newly designed combustion chambers, guarantees constant high performance even in the most arduous tasks, while the injection pressure of 1,600 bar ensures a rapid response and generous torque even at low revs.

# TO SUCCEED, YOU NEED A STRATEGY. OR THREE.



The highly advanced Deutz engines are a perfect match for the efficient TTV transmissions; a technological synergy, in which the efficiency built into every component of the power train optimises the all-round performance of the machine, creating added value for the user.

The TTV transmission of 6 Series 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 respond rapidly with the required speed, ensuring a smooth, effortless drive in all conditions, with significant benefits in terms of operator comfort and safety.

The electronic transmission control gives a choice of three different operating strategies for the TTV transmission.

## 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

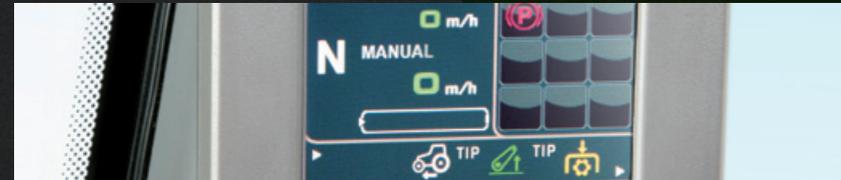
The best choice for operations in the field and for road transport. When the accelerator pedal is pressed, the tractor accelerates to the preset travel speed. The electronic control unit then keeps the speed constant, adjusting the engine rpm according to the changing load conditions.



## 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, the TTV overcomes the main limitation of conventional mechanical transmissions that do not allow you to adjust the driving torque to a different speed from the engine unless you make a gear change. This method is therefore ideal for equipment that must operate at a constant PTO rpm, such as round balers.

In parallel with these operating modes, 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.



#### Power Zero

With the engine running and Automatic or PTO mode selected, the Power Zero (active stop) function will also come into operation: the transmission holds the tractor stationary with the engine idling without any need to apply the parking brake, regardless of the gradient or load factors.

#### Power Brake

The new servo-assisted braking system (Power Brake) ensures that minimal effort is applied by the operator when depressing the brake pedal and this will produce an instant, powerful and controllable response, thanks to the constant pressure characteristic of the hydraulic circuit.

The Power Brake system also includes an auxiliary accumulator for emergency situations, which will guarantee up to 10 brake applications in complete safety, even without the engine running.

# ADAPTABILITY BORN FROM TECHNOLOGY AND INNOVATION.



The defining characteristic of the 6 Series TTV Agrotron is versatility. With four rear PTO speeds (540/540E; 1,000/1,000E) and the option of independent ground speed PTO, adaptability to every kind of implement is assured. The 6 Series TTV offers all 4 of the current standard speeds, comprising the normal speeds of 540 and 1,000 rpm, both of which are also available in ECO mode on all models as standard. All PTO options feature electro-hydraulic engagement/disengagement and automatic load sensing, to allow a smooth, gradual start-up of the attached implement. Standard equipment also includes the ground operated PTO controls on the rear fenders, while the optional front linkage comes with a 1,000 rpm front PTO, which is also available in ECO mode.

# TREMENDOUS POWER AT YOUR COMMAND.



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. The ergonomic design of the controls, the logical layout and the clearly presented information make driving the tractor that much easier.

The exclusive multifunction lever allows the operator to easily control the main functions of 6 Series TTV with just 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.

Finally, the electronically-controlled, automatic climate control system and the anti-vibration function ensure that the cab is comfortable. The standard equipment also includes seats of the latest generation with pneumatic suspension and automatic level control system. For more demanding users, the 6 Series TTV can be equipped with new active suspension seats.



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.

Designed to manage the numerous on-board functions, the iMonitor-2 allows you to communicate with the machine by simply touching the screen or by using the 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. 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.

## HYDRAULICS.

The standard equipment package includes a Load Sensing pump with a capacity of 120 l/min and four double-acting remote valves with electronic control. The number of remote valves can be increased to seven on request, and there is also the option of two double-acting valves on the front of the tractor. All the remote control valves can be locked, also used in single action, 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 new 6 Series TTV is equipped with EHR electronic lift control, which, in addition to draft, intermix and float control modes, also provides wheel slip control.



The maximum lifting capacity of the rear linkage is 6,000 kg, which can be increased to 9,200 kg with the optional auxiliary cylinders. The optional front hitch has a lifting capacity of 3,800 kg.

Rapid soil engagement, oscillation damping for mounted implements, position selectable transport lock, lift height limiter and rate of drop control functions are all included as standard.

The rear lift operating parameters are set using the controls located on the side console, with the values displayed on the digital display or on the iMonitor.

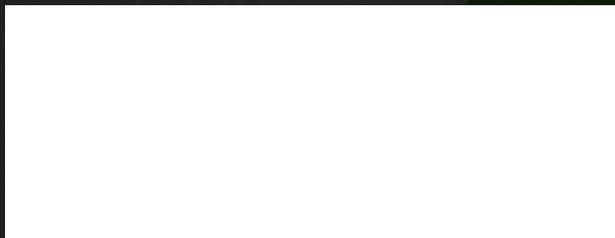
The maximum level of wheel slip can be set on a dedicated control knob. This sophisticated system makes it possible to monitor in real time all the necessary information relative to the operation and productivity of the tractor.



TECHNICAL DATA		6 SERIES				
		6150.4 TTV	6160.4 TTV	6160 TTV	6180 TTV	6190 TTV
<b>ENGINE</b>						
Engine		Deutz				
Model		TCD 4.1 L04 4V		TCD 6.1 L06 4V		
Emissions level	Tier	4i				
Injection type		DCR/1,600 bar				
Cylinders	n°	4		6		
Displacement	cm³	4,038		6,057		
Approved fuel (i)		Diesel,B100				
Turbocharger		std				
Power at rated engine speed (ECE R-120)	kW/hp	101/137	114/155		121/165	
Power at rated engine speed with boost (ECE R-120)	kW/hp	104/141	120/163		128/174 138/187	
Rated engine speed	rpm	2,100				
Maximum power (ECE R-120)	kW/hp	110/149	116/158		123/167 138/187	
Maximum power with boost (ECE R-120)	kW/hp	113/153	122/166		129/176 142/193	
Constant power rpm	rpm	1,600-2,100				
Maximum torque	Nm	624	658	692	740 820	
Maximum torque with boost @	rpm	1,600				
Fuel tank capacity	l	230		300		
AdBlue tank capacity	l	28		35		
<b>TRANSMISSION</b>						
Type		TTV continuously variable transmission				
Top speed	km/h	50 @ 1,790			50 @ 1,730	
Front axle suspension		opt				
ASM		std				
<b>PTO</b>						
Rear PTO speeds	rpm	540/540E/1,000/1,000E				
PTO control on fenders		std				
engine speed @ 540 PTO	rpm	1,946				
engine speed @ 540 ECO PTO	rpm	1,645				
engine speed @ 1,000 PTO	rpm	1,946				
engine speed @ 1,000 ECO PTO	rpm	1,645				
Front PTO speeds (std.)	rpm	1,000				
Front PTO speeds (opt.)	rpm	1,000E				

TECHNICAL DATA		6 SERIES				
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<b>HYDRAULIC SYSTEM</b>						
Load-Sensing hydraulic circuit with variable capacity pump		std				
Hydraulic pump capacity (std/opt)	l/min	120				
Hydraulic pump capacity (std/opt)	l/min	160				
Hydraulic pressure	bar	200				
Remote valves (std)		4				
Remote valves (opt)		6/7				
Controls on fenders		std				
<b>HYDRAULIC LIFT</b>						
3-point linkage category		II/III				
Maximum lifting capacity (rear)	kg	9,200				
Controls on fenders		std				
Maximum lifting capacity (front)	kg	4,000				
Servo assisted brake		std				
Electrical parking brake		std				
Front brakes		opt				
Air braking		opt				
<b>CAB</b>						
Maxi Vision cab		std				
Maxi Vision multifunction armrest		opt				
ISO-Bus interface and ISO-bus switch 9ISO 11786)		opt				
iMonitor 2 (12" display)		std				
Coloured work display		std				
Padded passenger seat		opt				
<b>DIMENSIONS AND WEIGHTS</b>						
Maximum permissible weight - total	kg	10,500			11,500	
Maximum permissible weight - front	kg	4,700		4,900	5,200	
Maximum permissible weight - rear	kg	8,000		8,400	9,000	
Steering radius	m	4.650	5.125		5.350	
Wheelbase	mm	2,419	2,648	2,768		
<b>TYRES</b>						
Rear tyres		16,9R24	20,8R38		650/65 R42	
Front tyres		18,4R38	16,9R28		16,9 R30	

For more information, contact your DEUTZ-FAHR dealer:



The use of SDF original lubricants and coolants is recommended.



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