

# AGROTRON X



EVOLVING AGRICULTURE.

Printed in Germany

# GREAT CONCEPT: THE AGROTRON X.

One of the largest, best designed tractor cabs for relaxed, fatigue-free work. Air-conditioning as standard, together with ergonomic, intuitive controls with unparalleled features.

High-performance hydraulic system with a lift capacity of up to 10.500 kg. EHR with integrated diagnostic system as standard. Separate hydraulic circuit for the steering. Up to four electrical remote valves and convenient operation with cross-gate lever, PowerComS or joystick control.

Two PTO speeds (540E and 1,000) as standard. Fuel-efficiency in every application with the economic ECO power take-off (540E). In combination with the drive train management (ASM) included as standard, the four-wheel drive and differential locks are controlled automatically.

Powershift transmission with 4 powershift stages and creeper speed group as standard. Powershuttle and APS. Modern, practical transmission technology with outstanding graduation and excellent shifting.

Adjustable front mudguards as standard. High manoeuvrability with small turning circles are guaranteed even with maximum tyres on the front axle of 38" which are unique to this class of tractor.

Driving safety and comfort is considerably enhanced by the integrated suspension design with perfect coordination of hydro-pneumatic suspension on the front axle and pneumatic suspension on the cab.

Tilting roof hatch with sun screen and integrated working headlamps. Ideal for front loading work.

Sloping, streamlined cowling for excellent view of the front-mounted implements and cultivation area. Safe working and manoeuvring, even in confined spaces.

State-of-the-art DEUTZ Common-Rail (DCR) turbo diesel engines with electronic motor control (EMC) as standard for guaranteed low fuel consumption, strong torque and high reserves of power. The engines are fully bio-diesel compatible (B100).

With an integrated front powerlift with a lifting force of up to 5,000 kg and the electro-hydraulically activated front PTO with a speed of 1,000 rpm, the Agrottron X is a genuine system tractor for combined operations. Even heavy front grubbers or front mowing equipment with wide working widths can be attached without any problems.



Exclusive to DEUTZ-FAHR: 24 month warranty for all Agrottrons of 132 HP or above.

Approval for 100% bio-diesel: Saves costs and protects the environment.

With over 50,000 units and a multitude of versions and equipment options, the Agrottron series is one of the most produced tractors in Europe. Its performance and reliability has been service-proven in well over 80 million operating hours in agricultural enterprises all over the world.

As the leader in terms of cab concept and ease of operation, the Agrottron X sets new standards for operating convenience in the large tractor class. The extensive range of standard equipment features practical details and technical equipment that some competitors do not offer for love nor money. Operation

is so easy and efficient that every driver quickly gets used to it intuitively and without lengthy instruction and can therefore immediately get down to productive work. Advantages which are particularly valued by contractors, for whom every minute is often critical. The driver can program the functions of the Agrottron X

to personal requirements and use automatic functions to make his work easier and more economical, leaving him free to concentrate on his work and not the operation of the tractor. The Agrottron X: Great class.

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# LARGE RANGE OF APPLICATIONS.

## ADVANTAGES

- ▶ Unique panoramic view of 320°
- ▶ Sloping, streamlined engine cowling for excellent view of front mounted implements
- ▶ Powerful, high-propulsion, economical and reliable DEUTZ Common-Rail engines (TIER III) with large cubic capacity and electronic engine control EMC
- ▶ Easy to clean cooler system
- ▶ Simple-operation 4-stage powershift transmission with six groups, plus creeper speed group and APS
- ▶ High-performance hydraulic system with load-sensing variable displacement pump
- ▶ High degree of safety during road travel with mounted implements due to electronic vibration damping
- ▶ Extremely high lifting force of 10.5 tonnes
- ▶ Exemplary coordination of front suspension, pneumatic cab suspension and low-frequency, pneumatic suspension driverseat for more travelling comfort

## STRONG TORQUE AND EFFICIENT FUEL CONSUMPTION: THE AGROTRON X WITH THE NEW DEUTZ DCR ENGINES.



### Universal applications

Large-scale agricultural enterprises and contractors have special demands on their tractors – on the one hand they have to manage tough field work, on the other they have to be just as suitable for transporting jobs. Optimum weight distribution and a top speed of 50 km/h are just as important. The tractors not only have to do their job reliably and economically and master the wide range of frequently changing tasks, such as combined work with front and rear-mounted implements,

they must also set standards with regard to driving and operating comfort. This is a great advantage in enterprises with a number of different drivers. A robust drive train, well-chosen gear ratios and a powerful, finely adjustable hydraulic system are also basic requirements.

### Powerful engines

The Agtron X is equipped with modern, economical DEUTZ Common-Rail turbo diesel engines with distinctive constant power and torque ranges. Overpower of up to

31 hp compensates for load peaks during work. With the electronic injection control, included as a standard feature, both working and manoeuvring engine speeds can be programmed and activated when required. In addition both travelling speed and also PTO speeds can be programmed with the Tempomat function.

### Practical transmission design

The 4-speed powershift transmission with six groups, Powershuttle and APS (Automatic Powershift) ensures the right working

speeds in all ranges. Extra driver convenience is afforded by the APS with automatic shifting of the powershift stages. The practical transmission ratios make use of the engine's constant power characteristics and saves unnecessary gear shifting.

### Powershuttle

The 4-speed powershift transmission with Powershuttle ensures smooth "clutchless" start-off and direction changes, resulting in more driver comfort and less stress.

### Comfort for long working days

Large fields often mean long working days. The generous panoramic cab ensures an allround view and offers all the comfort features you could ask for to make life easier – orthopaedic, low-vibration driver's seat with pneumatic suspension, pneumatic cab suspension and the ergonomic arrangement of all operating elements – all these are standard equipment. Together with the PowerComS operating lever and the practical automatic functions there is nothing to be desired.

### Front linkage

An important feature of this tractor category – the front linkage; integrated into the front axle support has a lifting force of 5 tonnes and a directly driven 1,000 rpm PTO, permitting simple mounting and effective use of PTO-driven front implements.

# HIGH LEVEL OF CAB COMFORT.

## ADVANTAGES

- ▶ Large-area cab glazing; 6.5 m<sup>2</sup> for a panoramic view of 320°
- ▶ Optimum location of air intake and exhaust pipes on the front cab struts
- ▶ Up to 11 integrated working headlights at the front and rear for safe illumination of working areas
- ▶ The glass roof hatch permits an unobstructed view when working with front loaders
- ▶ Pressurised cab with twin air filters for dust and contaminants
- ▶ Workplace with perfect ergonomic design enhancing safety due to confusion-free operating components
- ▶ Arrangement of all operating elements in functional groups
- ▶ Powershuttle lever within easy reach to the left of the steering wheel



Easy to read at night as well: The Info-Center in the Agrottron X.



At last, cool drinks and enough space for lots of bits and pieces.



The tilting roof has a blind to enable it to be darkened.



Easy to operate and offering high performance: The air conditioning system.



Safe and well illuminated: Entry to the spacious cab.

## Relaxed working

Relaxed and productive work requires space for movement and a clear arrangement of all operating elements. Operation of the Agrottron X is certainly not confusing. All levers and switches are shape and colour coded, situated on an operating console close to the driver's right hand, all logically and clearly arranged and combined in functional groups according to frequency of use. This results in an op-

timally designed workplace for safe and confusion-free operation, thereby enhancing driver productivity.

## Safe entry

Entering and exiting the spacious Agrottron X cab is simple and comfortable. Galvanised, anti-slip steps, two full-length handrails on each side, wide door opening angle with easy-reach door handles ensure safe mounting and dismounting.

## Well illuminated

The cab and entrance area are illuminated automatically when the door is opened so that the driver can enter and exit safely in the dark. The effective Agrottron X lighting enhances safety and confidence, increasing productivity with improved illumination for night work. Go with the option of up to 15 main and working headlights at the front and rear and an area of up to 500 m<sup>2</sup> can be illuminated around the tractor.

## Quiet for both the driver and the environment

With its interior noise level, down to a low of 72.8 dB (A) the Agrottron X is one of the quietest tractors of its class. This is achieved with basic design features such as engines with low noise emission and consistent exclusion of noise-emitting and noise-transferring components from the cab. An additional insulating wall between the engine compartment and the cab im-

proves considerably the noise insulation of the single-cell, full-body cab.

## Clearly arranged indicators

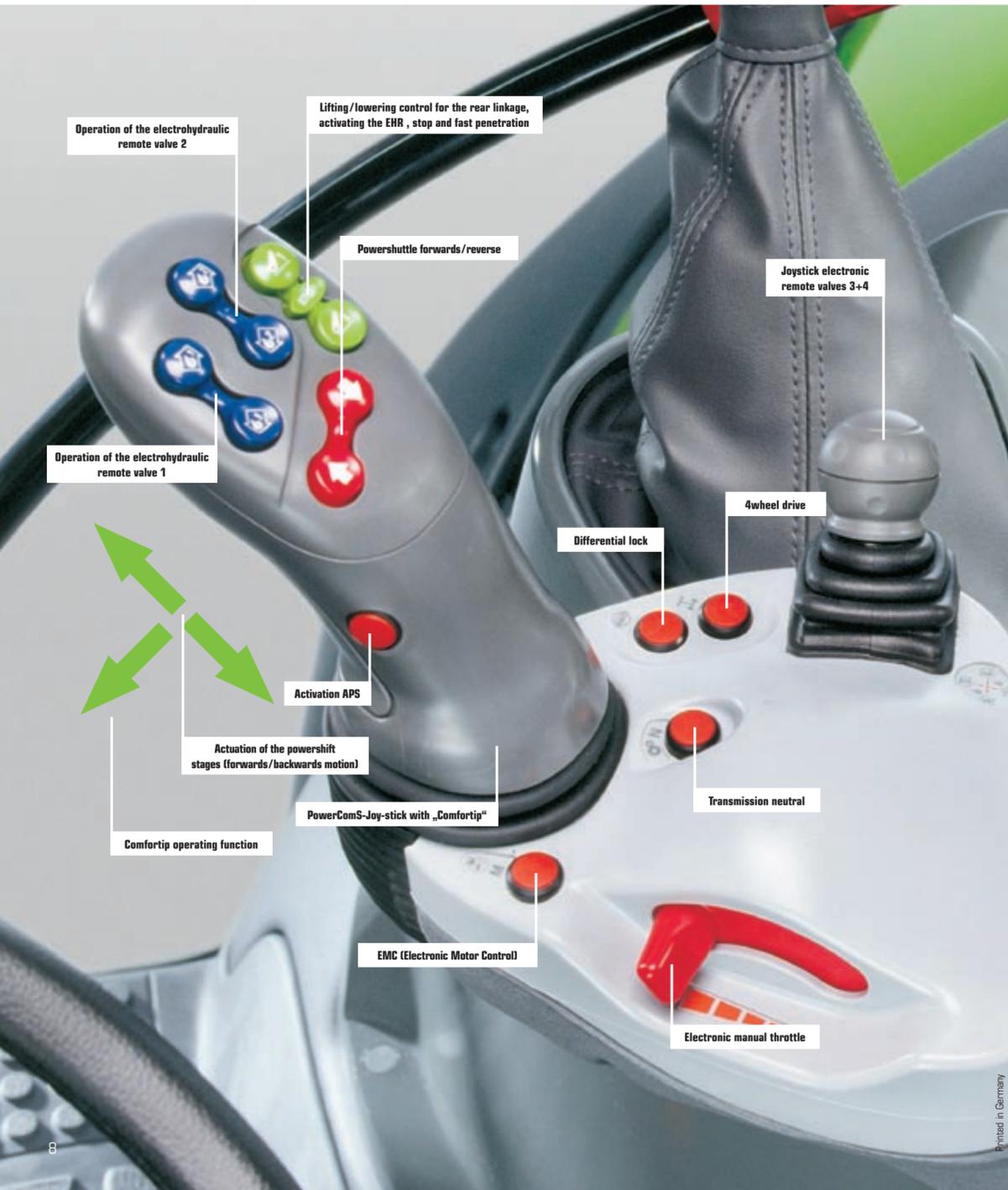
With the Infocenter the driver has all tractor operating data in view at all times enabling him to react immediately. Function displays such as the PTO speed and travelling speeds are digital; in addition maintenance and error messages are given in both digital and plain text form. An

acoustic signal is also given. The engine speed and temperature as well as fuel levels are shown on analogue displays. The non-reflecting, illuminated and antistatic glass guarantees dazzle-free readability of all instruments. All necessary information on the transmission is shown in a display in the driver's field of vision on the right-hand A-strut for maximum visibility.

# GREAT RELIEF.

## ADVANTAGES

- ▶ Fast and simple execution of operating sequences – no scattered operating elements
- ▶ Simple recognition of the correct switches due to colour coding
- ▶ Simple, fast single handed operation
- ▶ Safety functions prevent incorrect operation
- ▶ Fast, practical parameter settings



Operation of the electrohydraulic remote valve 2

Lifting/lowering control for the rear linkage, activating the EHR, stop and fast penetration

Powershuttle forwards/reverse

Joystick electronic remote valves 3+4

Operation of the electrohydraulic remote valve 1

4wheel drive

Differential lock

Activation APS

Actuation of the powershift stages (forwards/backwards motion)

PowerComS-Joy-stick with „Comfortip“

Comfortip operating function

EMC (Electronic Motor Control)

Electronic manual throttle

Transmission neutral

### Remote valves

The Agrottron X is equipped as standard with four double-action remote valves, each with four functions. Each valve has a separate volume control. As a result each consumer receives the exact oil volume it requires. The buttons are colour-coded and specifically assigned to the hydraulic connections; eliminating confusion.

On the PowerComS operating lever the electronic remote valves 1+2 are operated with the blue buttons. The setting

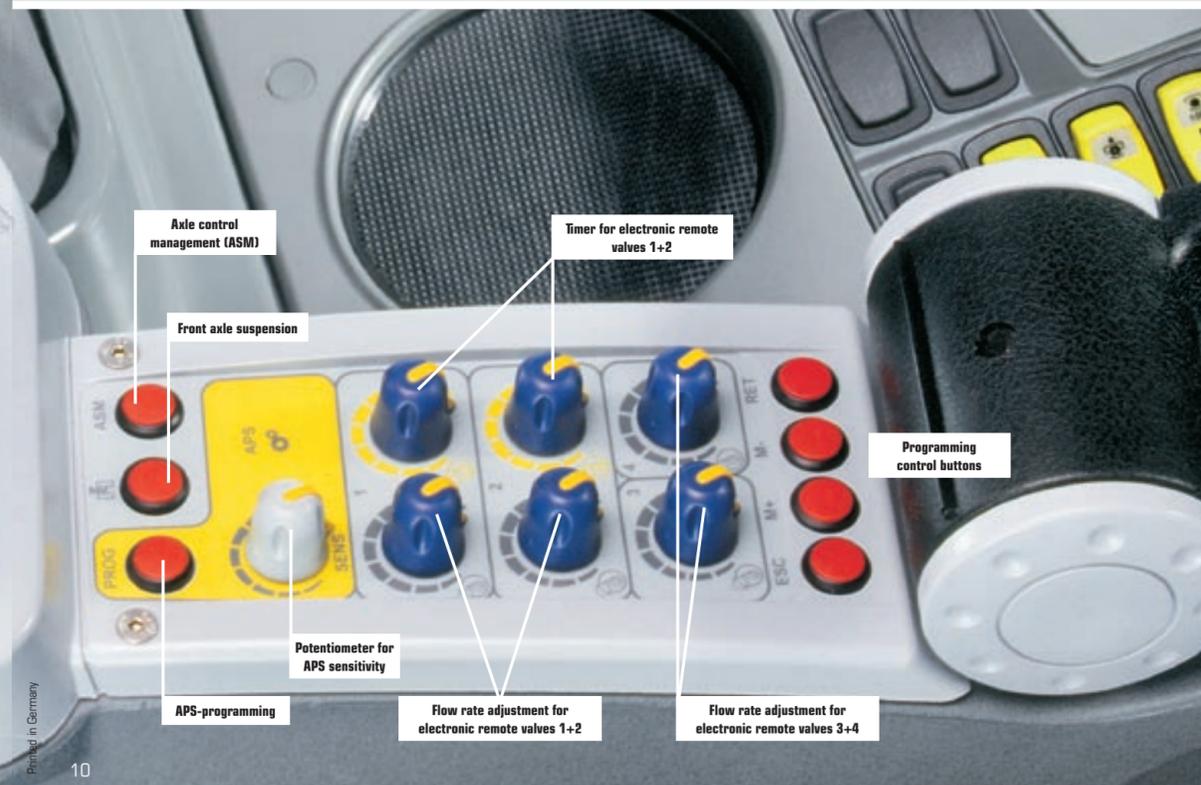
of the flow-through time and rate can be conveniently adjusted with the knobs on the armrest.

With an easy-reach joystick the driver is able to simply and safely operate remote valves 3+4. Actuation can be performed individually or simultaneously.

### Electronic powerlift control

All Agrottron X tractors are equipped with an electronic powerlift control (EHR). Its functions and sensors are continuously

monitored by an integrated diagnosis system. The operating unit of the EHR is located in the right-hand console and automatically monitors the following functions: Draft and position control, mix control, free floating, slip control, transport locking, external control switches, lifting height limitation, lowering speed control.



Axle control management (ASM)

Timer for electronic remote valves 1+2

Front axle suspension

Programming control buttons

Potentiometer for APS sensitivity

Flow rate adjustment for electronic remote valves 1+2

Flow rate adjustment for electronic remote valves 3+4

APS-programming



- 1 Knob for adjusting the wheel slip percentage
- 2 Knob for adjusting the implement lowering speed and fine adjustment of oscillation absorption
- 3 Knob for adjusting the maximum lifting height
- 4 Linkage stop indicator
- 5 Depth/position adjusting potentiometer
- 6 Linkage lifting/lowering indicator leds
- 7 Operational mode control knob: Position, draft or mix control

# GREAT FUNCTIONALITY.

## ADVANTAGES

- ▶ Simple and logical driver programming of the individual functions and parameters, plus customisation to specific applications
- ▶ Individual operation by the driver
- ▶ Maximum operative safety – no irritating grasping at controls
- ▶ Increase in productivity
- ▶ Prevention of operating errors
- ▶ Manual intervention possible at all times

Today it is very unusual to be able to operate a modern large tractor without lengthy explanations and training. For this reason DEUTZ-FAHR development engineers have paid special attention to the functionality and simplicity of operation. Every driver should be able to use the tractor in practice reliably and productively without extra training and after only a short period of familiarisation.

### Everything in one

The new, ergonomically designed PowerComS operating lever combines all important functions of the tractor – actuation of the powershift stages, operation of the rear powerlift, the hydraulic remote valves and also the shuttle transmission. This means that all operating and control

operations can be performed without the driver having to take his hand from the PowerComS. The advantages are obvious – timesavings, safety and a high reaction speed during work, these become intuitive after a short operating time. The irritation of grasping for controls for different operations is a thing of the past – you are now able to concentrate fully on your work.

### The multi-function armrest

All important operating features for actuating the electronic remote valve time and volume controls, drive train management (ASM), the electronic injection control (EMC) and the manual throttle are all integrated into the right-hand armrest. The switches and controls are arranged

according to their priority and can be easily recognised due to their individual shape and colour. The length of the armrest can be adjusted individually for each driver to improve operating comfort. The operating elements are subtly backlit during night work.



**COMFORTIP: NO SIMPLER OR QUICKER WAY OF OPERATING THE HEADLAND MANAGEMENT.**



Just a light press to the left and the next function is already shown.



All Comfortip functions in full view.



- |               |   |                                   |                     |
|---------------|---|-----------------------------------|---------------------|
| Forward speed | Recall the memorized engine working speed | Lift the plough                   | Engage reverse gear |
| Lower plough  | Recall the manoeuvring speed              | Turn the plough (Control valve 1) |                     |

### It can be simpler

Can standardised programmes really do justice to varying applications in practical agricultural environments? Or would it not be better if the driver could automate the functions that he requires for the job in hand? Ideally, a simple movement of the operating lever should recall these.

### Easy to program

With the PowerComS operating lever and the Comfortip function, individual headland management operating sequences

can be programmed by the driver and activated by simply pressing or moving the operating lever. The operating sequences are centrally and consecutively displayed in the Info-Center. The next programmed function is highlighted on the display, so that the driver knows at all times which function he can activate next. To prepare the system for programming operating sequences – this is possible when the tractor is stationary or moving – the PowerComS operating lever only has to be moved to the left when the locking button is pressed at

the same time. An acoustic signal is then sounded and the digital display on the instrument panel is activated to accept the command function. For programming it is sufficient to press the respective buttons on the PowerComS operating lever or on the multi-function armrest. The programmed functions are of course stored in the memory even when the engine is switched off. This is the ultimate in simplicity and practicality.

### Increase in productivity ensured

In this manner different operating sequences with up to 16 functions can be saved and recalled. The driver individualises his Agrotron X for each job and considerably increases productivity with the one-hand operation of the tractor functions. Operating sequences also enhance operating safety. Manual operating faults are not possible and the driver does not need to search for the switches on the multi-function armrest.

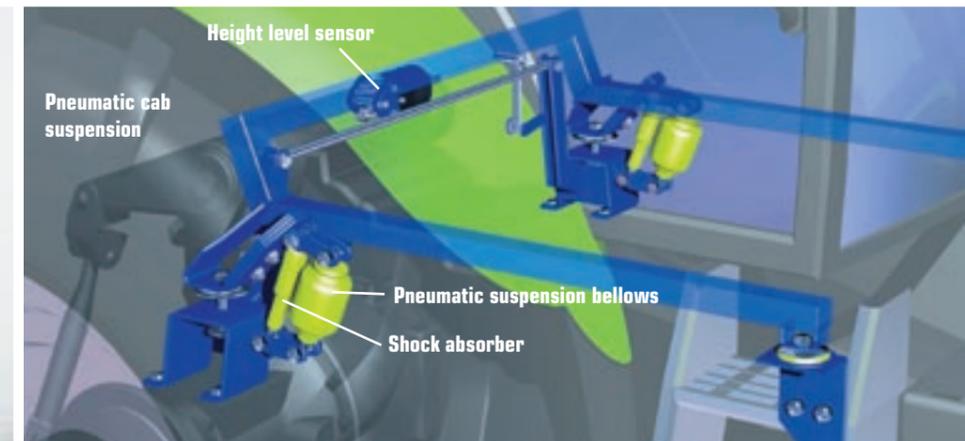
# GREAT DRIVING EXPERIENCE.

THE AGROTRON X OFFERS MAXIMUM DRIVING AND OPERATING COMFORT FOR TRANSPORTATION AND FIELD WORK THANKS TO ITS INTEGRATED SUSPENSION SYSTEM.

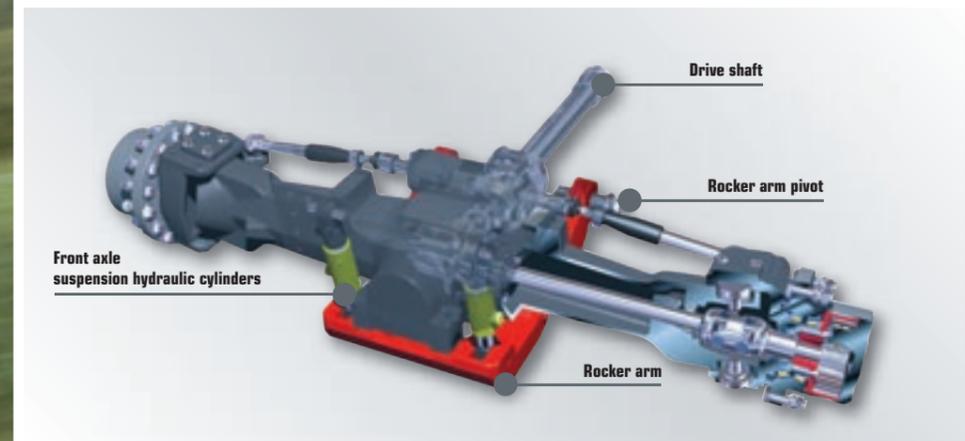


## ADVANTAGES

- ▶ Improvements in driving safety and enhancement of driving comfort
- ▶ Reduces unhealthy vibration for the driver
- ▶ Reduction of the torsion and rolling motion and therefore less strain on the cab and drive train
- ▶ Rapid, automatic suspension adaptation to all the road, field or load conditions
- ▶ Shift of the tractor's centre of gravity towards the front
- ▶ Closed, low-maintenance suspension system
- ▶ Non-wearing damping system



The finest travelling comfort-courtesy of pneumatic cab suspension.



Perfect comfort in the field and on the road: Hydro-pneumatic front axle suspension.

True driving comfort starts when all relevant aspects are already taken into account at the start of the design phase of a new tractor series. DEUTZ-FAHR engineers have succeeded in implementing an integrated suspension and driving comfort concept that is unequalled in this tractor class.

### For all cases

Robust front axles, strong front drive, a long wheelbase of 3.09m and a tight steering angle for maximum manoeuvrability and smooth steering are important prerequisites for a high standard of driving comfort. The Agtron is equip-

ped with a front wheel drive that can be simply engaged/disengaged with illuminated buttons. Differential locks have a locking value of 100 percent on both axles. The respective operating conditions are additionally displayed on the Info-center. All clutches and locks are wet and non-wearing and can be switched electrohydraulically and also activated and deactivated both under load and in the event of slip.

### Front axle suspension

In the 50 km/h version the Agtron is equipped with front axle suspension as a standard feature. The Agtron X, in the

40 km/h, version can also be equipped with the integrated front axle suspension upon request. Driving safety and comfort is considerably enhanced by the suspension. The oscillating front axle is supported in the rocker arm. Suspension is hydraulic and progressive, i.e. its effect is heightened with an increase in ballast.

### Pneumatic cab suspension

The standard pneumatic, load-compensated cab suspension is supplied by the tractor's compressed air system providing optimum driving comfort. Irrespective of the cab load, the spring travel is

±40 mm and reduces harmful vibration considerably even at low speeds. The pneumatic cab suspension provides the highest degree of comfort, comparable to that of a modern truck. With the perfect coordination of front axle and cab suspension and the driver's pneumatic seat, the Agtron provides unprecedented suspension and driving comfort.

### Steering

A steering system as it should be: precise, smooth and reliable due to the use of an independent steering pump. The use of large 38" front tyres or dual wheels is always possible. Excellent ma-

noeuvrability is assured with a steering angle of 52° and swivelling front mudguards, also with duals. The turning circle is only 6.7 m, depending on the tyres.

### Axle control management

Practical situations that are both typical and frequent: ploughing in soil of varying density, road travel with heavily loaded trailers or working on slippery terrain. The axle control management (ASM) automatically controls the front drive axle and both differential locks. The front and rear differential locks (100 percent locking value) and the 4wheel-drive can be activated and deactivated under load as

required, dependent on steering angle and speed. The wheel slip is also taken into account with the optional radar sensor. ASM ensures maximum traction, driving comfort and a high degree of operational safety even under the toughest conditions.

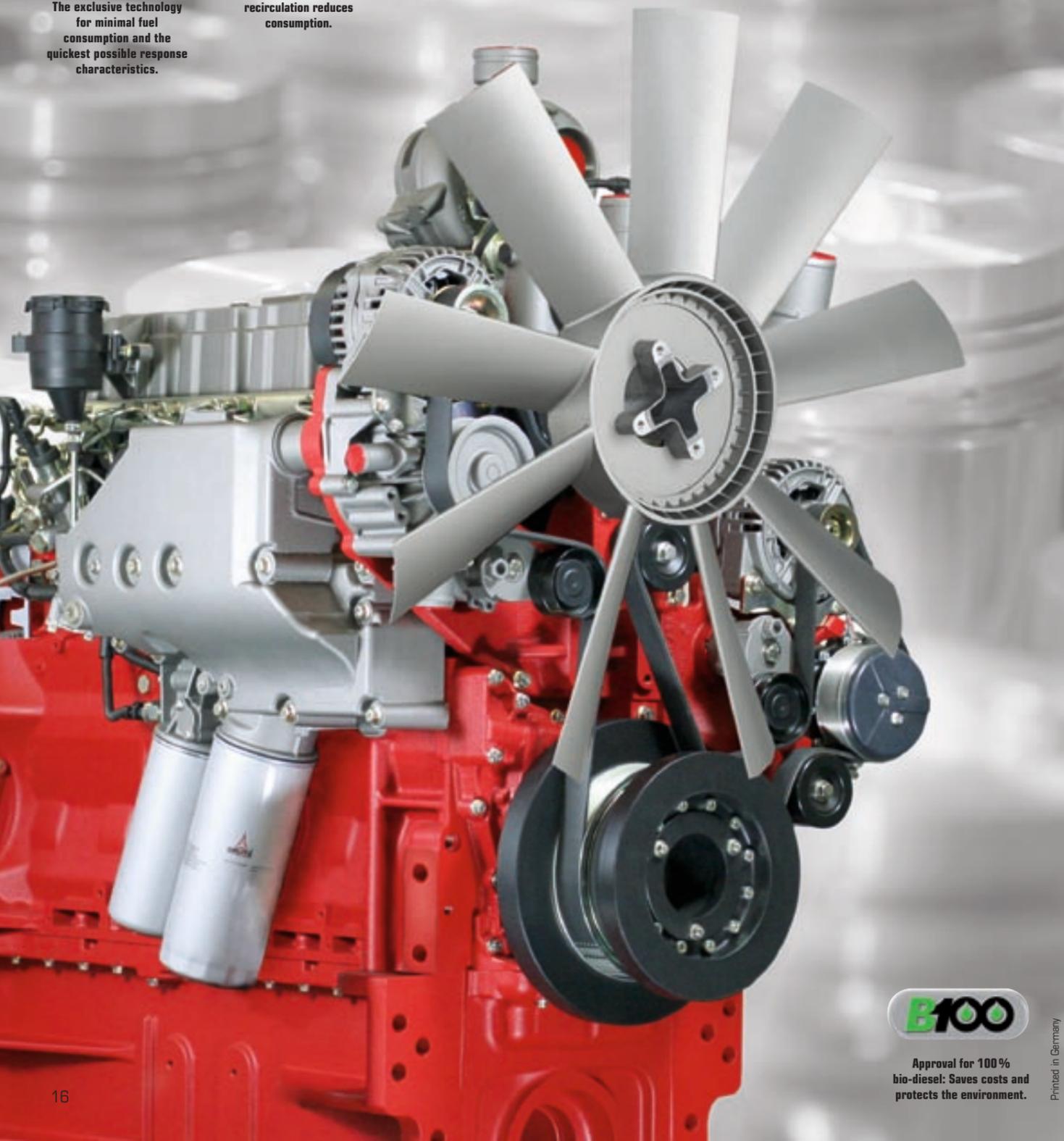
# LARGE RESERVES.

**DCR<sup>®</sup>**

DEUTZ Common-Rail:  
The exclusive technology  
for minimal fuel  
consumption and the  
quickest possible response  
characteristics.

**AGRex<sup>®</sup>**

External exhaust gas  
recirculation reduces  
consumption.



Approval for 100%  
bio-diesel: Saves costs and  
protects the environment.

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## ADVANTAGES

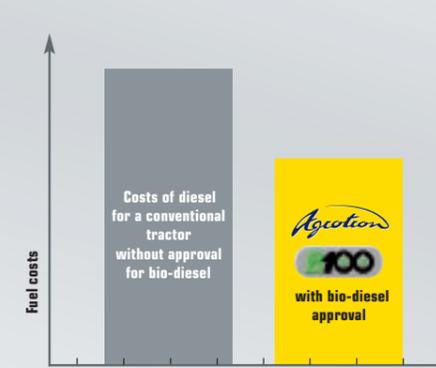
- ▶ Modern, high-propulsion and fuel-efficient DEUTZ 4-valve turbo diesel engines with electronic engine control (EMC) for low consumption and compliance with TIER III exhaust gas emissions regulations
- ▶ The innovative DPC system (DEUTZ Power Control) provides powerful and economical engine power for every application
- ▶ DEUTZ Common-Rail (DCR) high-pressure injection, up to 1,600 bar via two injection pumps
- ▶ The exhaust gas recirculation reduces exhaust emissions and fuel consumption simultaneously
- ▶ Air filter with ejector dust separation and long maintenance intervals

- ▶ DEUTZ-FAHR is the first manufacturer granting approval for bio-diesel fuel (B100) incl. guarantee for 24 months. Expensive after sales solutions or additional assurances are not necessary. Savings from the first moment on.



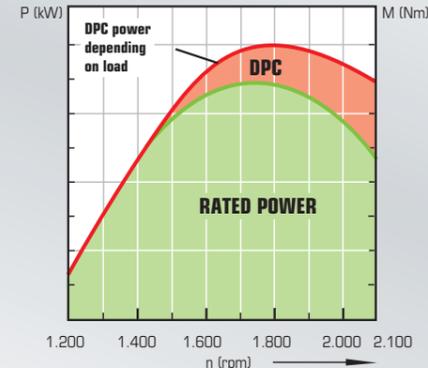
Optimum fuel combustion thanks to four valves and 6-hole injection nozzles.

## Fuel costs



Every litre of bio-diesel saves hard cash. At a fuel consumption rate of 30,000 l/year and an average price saving of 15 ct/l, the overall saving over five years would be 22,000 Euro.

## DEUTZ Power Control (DPC)



The innovative DPC technology delivers the highest and most economically efficient power at all times according to the load situation. Strong torque, quick response characteristics and sufficient traction are therefore guaranteed even under the most difficult operating conditions.

### Powerful, economic and environmentally friendly

Many can construct engines. But the real task is to build strong and efficient engines which comply with the effective emission standards and still set their own trend. The DEUTZ engine philosophy comes down to power, economy and environmentally friendliness.

### We develop for agriculture

DEUTZ-FAHR focuses on a whole bunch of technologies which contribute to power increase and diminishment of consumption and harmful emissions. This bio-diesel initiative is only one of several forward-looking projects.

The ever changing applications in agriculture require extraordinary know-how and longtime experience in engine construction. But there is one thing all those applications have in common: power has to be available when it's needed. And the

consumption has to be reduced at the same time.

What sounds paradoxical has been achieved by the DEUTZ-FAHR engineers with the innovative DPC (DEUTZ Power Control). By combining the electronic engine control (EMC) and the DEUTZ Common-Rail technology, a complex but very efficient engine control system has been developed.

### Powerful, strong, efficient

The 6 cylinder high-tech DEUTZ turbo diesel engines in the Agrotron X come with innovative DEUTZ Common-Rail-Technology (DCR) as standard. And thanks to the DPC the engines deliver constant power, high overpower and maximum torque. The driver can therefore relax while working with minimal gearshift changes because the engine offers sufficient reserves of power, good elasticity values and reduced fuel consumption at all times.

### Reducing emissions and the consumption = Protecting the environment

The Agrotron X are equipped with a external exhaust gas recirculation as a standard. This reduces consumption and exhaust emissions.

### Quiet for both the driver and the environment

Possible noise sources were already excluded at the engine design stage as noises that do not occur do not require insulation. Noise generation is already prevented at the source by a rigid, ribbed crankcase, soft combustion, exhaust turbocharger, liquid cooling and double-shell silencing below the engine cowling and a flexible intake and exhaust pipe mounting.

# GREAT EFFICIENCY.

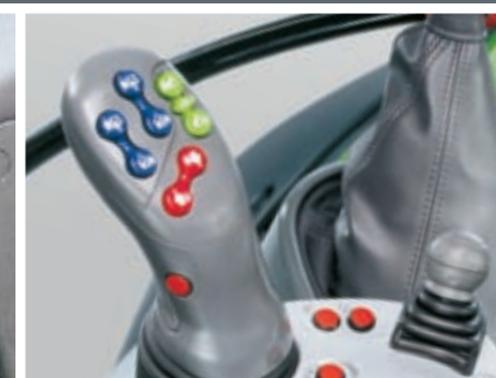
## ADVANTAGES

- ▶ ZF, 7300 series transmission: Simple and reliable transmission design
- ▶ Simple, positive shifting
- ▶ Pulling off, stopping and changing the direction of travel without actuating the clutch
- ▶ Hydrodamp torsion dampers protect all components and increase driving comfort (Agrotron X710)
- ▶ Turboclutch (Agrotron X720) for smooth pull-off
- ▶ Freely selectable F/R speeds
- ▶ Transmission stages perfectly matched to the engine power: One speed for typical types of work with four powershift stages for each and APS
- ▶ No power train interruption in the powershift range
- ▶ Standard rear PTO with two speeds
- ▶ Front PTO with 1,000 rpm as an option
- ▶ Automatic PTO engagement and disengagement when the rear powerlift is activated

**40 CLOSELY STAGED SPEEDS, 13 OF WHICH ARE IN THE MAIN WORKING RANGE, PLUS APS AND TURBO-CLUTCH: RELAXED WORKING GUARANTEED.**



6-speed main transmission and the four-powershift stages can be conveniently operated on the gearshift lever.



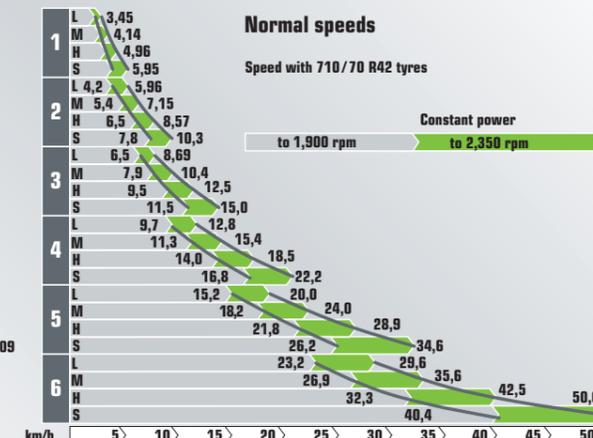
The powershift stages can also be shifted at a touch with the PowerComS operating lever.

### Creep speeds



### Normal speeds

Speed with 710/70 R42 tyres



Economical in each speed: Additional powershift stages are unnecessary due to the perfect coordination of engine and transmission. The driver can drive without constant shifting and still save fuel.

Transmissions for large tractors must be robust and reliable. In addition to close speed ratios, today's demands for standard features include a Powershift, Powershuttle and practical PTOs.

### Smooth pull off

With the non-wearing turboclutch (Agrotron X720) the Agrotron X pulls off smoothly and quickly, irrespective of the topography and the load situation. The effect – the clutch does not slip, engine vibration is damped and driving comfort is enhanced. During pull-off the pump wheel is driven at the engine speed. The turbine wheel is accelera-

ted slowly and smoothly – the Agrotron starts moving smoothly and quickly. When in use the pump wheel and the turbine wheel are non-positively locked and turn at the same speed.

### Close speed ratios

With 40 forwards and reverse gears (including the standard creeper speed group) the transmission is closely and practically graduated. The possible speed range – depending on the type and tyres – is from 450m/h to 50km/h. In the main working range alone from 4 to 15km/h the transmission has 13 speeds. The top speed can be simply

reduced to 40 km/h with the electronic engine control EMC. The advantages of this limitation by the engine speed are obvious – less consumption and a lower noise level.

### More than just a powershift: Automatic-Powershift (APS)

The four powershift speeds are automatically shifted due to the newly developed APS feature depending on the load condition of the tractor. The respective load of the engine and the engine speed are used as a control impulse. The driver can infinitely vary the sensitivity of the system with a rotary switch. The clutch

is actuated with either the foot pedal or with a button on the shifting lever. This means that 24 speeds can be shifted without using the clutch pedal.

### Reversing / shifting

With the shuttle transmission it is possible to pull off from a stationary position or change the direction of travel (reverse/forwards) without actuating the clutch. Operation is performed conveniently with the switches on the PowerComS operating lever. The direction of travel can be changed (F/R) at a speed of up to 12.5 km/h. without pressing the clutch; the tractor decelerates slowly

and switches to the other direction at a very low speed. The engaged speed and Powershift stage are retained when the direction is changed. The optional Powershuttle, steering column lever is especially advantageous when working on the headland. The driver's right hand is then free to operate other functions.

### Two PTO speeds

The rear PTO with two standard speeds (540 E and 1,000 rpm) permits a wide range of applications. The flange mounted PTO stub can be fitted with a number of different profiles. The PTO can be operated both from the cab and also with

pushbuttons on the rear mudguard. The electrohydraulic control ensures modulated, low-wear PTO start-up. When the rear powerlift is actuated the PTO automatically switches on and off. Operating errors are prevented and mounted implements protected against damage.

### Front PTO

The front PTO with a speed of 1,000 rpm is driven directly by the engine and electrohydraulically activated with modulation by pressing a button.

# GREAT POWER.

## ADVANTAGES

- ▶ Very high efficiency
- ▶ Very high lifting force of 10.5 tonnes
- ▶ Very high flow rate of 120 l/min
- ▶ Unrestricted use of biological oils due to separate oil circuits for transmission and hydraulics
- ▶ Oil is only conveyed when required by the consumers
- ▶ Direct connection of third-party equipment (PowerBeyond) as a standard feature
- ▶ Lower links with mechanical stabilisers and automatic lateral stabilisation when raised



All connections are clearly arranged and colour-coded.



The flow rate and time are set in the armrest.



The powerlift and PTO can also be operated from the mudguard.

### That much power goes without saying

A powerful load-sensing hydraulic system with a tremendous lifting power of 10.5 tonnes and a maximum oil flow of 120 l/min is already a standard feature and ensures superior hydraulic power for all applications. In order to do justice to the various demands on the oil quality, there are separate oil circuits for the hydraulic systems and the transmission.

They permit the use of specific oils, thereby extending the maintenance intervals and lowering operating costs. Contaminants or oil mixing with the transmission oil, as can occur when hydraulic mounted implements are changed, is not possible. The maximum available oil quantity is approximately 45 litres.

### Load sensing as standard

The system runs with an axial piston variable displacement pump that is controlled by the hydraulic consumers. When

the consumer draws off oil, the system pressure drops. The variable displacement pump instantly provides more oil so that the pressure required by the consumers is maintained. The consumer with the highest pressure requirements determines the current system pressure.

### Safe and protected against vibrations

During fast road travel, vibrations and oscillations occur in the hydraulic system, caused by the implement bouncing. These can have a considerable detrimental effect on driving safety and comfort. When vibration damping is activated (automatically from 8 km/h onwards), vibration and oscillations are detected by the electronic load sensing pins and compensated with selective and fast counteraction by the powerlift.

### High lifting force

Large-dimension lift cylinders permit a tremendous lifting force of up to 10.5 tonnes.

Fast, sure and safe implement coupling and uncoupling is also possible by actuating the powerlift buttons on the rear mudguard. The lower links have category III quick-action couplings with standard heavy-duty stabilisers, which also have a mechanical swing compensation feature.

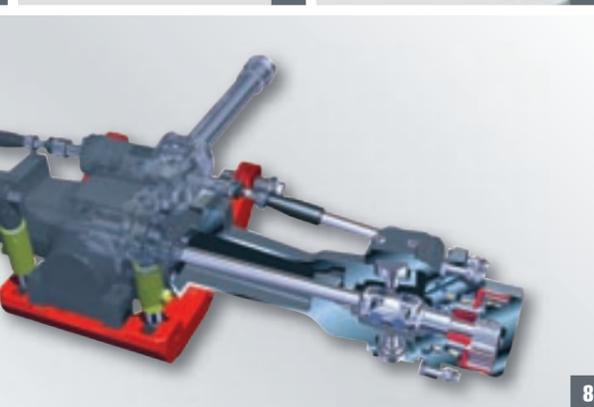
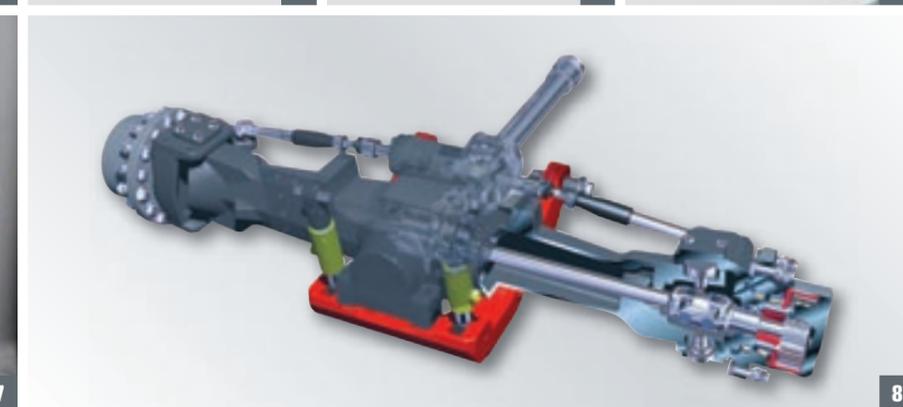
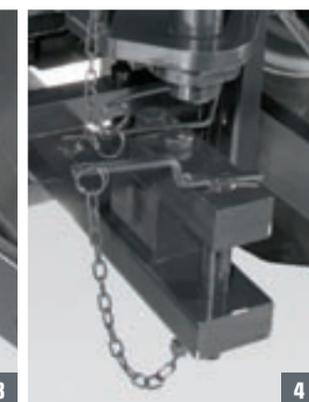
### External control

Three-point mounted implements that must work at specific depths or heights can be monitored by an external control.

### Power beyond

With the power beyond connection an uninterrupted flow of oil can be routed from the axial piston pump directly through the load sensing coupling to an implement. Implements that have a separate load-sensing capable control unit can be connected at this point. As a result equipment such as a potato harvester or self-loading forage wagon can be directly supplied with oil from the axial piston pump.

# WIDE CHOICE.



Although the standard equipment of the Agrottron X is very comprehensive, you can still customise it to suit special requirements and tractor application. DEUTZ-FAHR offers a coordinated range of additional and special equipment for you to consider. Contact your DEUTZ-FAHR dealer for details. They will be pleased to be of assistance.

**1 Front hydraulic linkage and PTO:** The Agrottron really unfolds its true versatility when equipped with mounted front implements. The integrated front powerlift has a lifting force of up to 5.0 tonnes and a PTO speed of 1,000 rpm.

**2 Provisions for the Agrosky** satellite-aided track guidance system. Precisely reproducible tracks with an accuracy of  $\pm 2$  cm thanks to the RTK signal.

**3 Ballhead hitch** with a diameter of 80 mm and a drawbar load of 3,000 kg.

**4 Swinging drawbar:** This drawbar can be used in either fixed or swinging posi-

tions. Its length can be simply adjusted as required. The maximum drawbar load is 3,000 kg.

**5 The welded-in ball-type** hitch has a carrying load of 4,000 kg.

**6 Piton Fix.** With a pin diameter of 45 mm and a maximum drawbar load of 3,000 kg.

**7 AFIS operating terminal.** Benefiting from the ISO-bus connection, the driver has all mounted implements under control with one terminal.

**8 Front axle with suspension:** The 40 kph version of the Agrottron X710 can be equipped with integrated hydraulic front axle suspension upon request. Driving safety and comfort are considerably enhanced by the suspension.

**9 Optimum weight distribution** with ballast attachments and front weights according to the requirements of every application.

**10 Automatic lateral stabilisation** (not illustrated)

**11 Radar sensor** (not illustrated)

# GREAT CARE.

## ADVANTAGES

- ▶ Long maintenance intervals
- ▶ Tool-free access to all important maintenance points
- ▶ Very low maintenance and operating costs
- ▶ Engine oil change every 500 hours
- ▶ Tappet clearance check every 1,500 hours



### Fast daily maintenance

Although the Agrottron X was designed for long working days – a minimum of maintenance work is still necessary. All important components and assemblies are easily accessible for simple maintenance work and checks – without tools.

### Long maintenance intervals

The regular engine maintenance intervals are long – in fact uniquely long. The engine oil only requires changing every 500 hours.

**1 The cooler system** can be simply folded out and/or pulled out to the side.

**2 Both cab air filters** are located at easily accessible positions in the B struts. The filters can be cleaned and replaced without tools. Active carbon filters are available upon request.

**3** Mounted in the cab on the right-hand rear mudguard, **all fuses and relays** are well protected against moisture and vibration.

**4 The battery** is easily accessible on the right-hand side of the tractor.

**5 The combustion air intake**, is in a low-dust area and the standard exhaust aspiration dust ejector ensure that the maintenance intervals of the engine air

filter are very long. The air filter with safety insert is easily accessible at hip height in a recess of the fuel tank.

**6 Oil filling orifice and dipstick** are very easily accessible on the left-hand side of the tractor.

**7 The hydraulic oil level** level is displayed in a large sight glass. The indicator is easily visible.

### Real-time diagnosis

DEUTZ-FAHR service centres can perform fast electronic system diagnostic checks on the tractor via a single plug connection.



# SURE AND SAFE WITH ORIGINAL DEUTZ-FAHR.



## **Original service is wise.**

Without doubt – many can repair much. But only your DEUTZ-FAHR specialist dealer knows your tractor inside and out. Only your dealer has regularly trained mechanics and experts on call. Only dealers have the special tools and diagnostic equipment required for competent diagnosis and inspection. All this gives you peace of mind – without doubt.

## **Original parts make good sense.**

As you placed your trust in the original tractor, we recommend you use original parts when required. Only these comply with the high quality and safety standards of DEUTZ-FAHR and ensure correct function and operation without problems – guaranteed.



**Have a word with your DEUTZ-FAHR dealer – he will be pleased to answer your questions:**

This printed material is designed for international use. The illustrations it contains show both special equipment and incomplete standard equipment. The availability of some illustrated models, standard and special equipment can vary from country to country. Only the dealer's price list stipulates whether such illustrated equipment is included as a standard feature or whether it is a special accessory. In addition the illustrated mounted implements and special accessories may not always comply with the respective statutory regulations. It is the responsibility of the customer – after consultation with the dealer – to verify this, taking the operating instructions into account. All information and illustrations in this brochure are subject to correction; errors excepted. Furthermore all information contained in this brochure is not binding and is subject to modifications of a technical and commercial nature or those resulting from statutory regulations. No claims whatsoever can be derived from these. SAME DEUTZ-FAHR DEUTSCHLAND GmbH reserves the right to make any changes to the design and technical construction and also the scope of standard equipment at any time and without prior notice. order no. 562-10-01



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