



# FENDT

## Fendt 500 Vario







# Fendt 500 Vario.

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# At a glance.

**Fendt 500 Vario - ONE IS SIMPLE: FendtONE**  
Conditions in agriculture are becoming increasingly challenging: from extreme weather events to stricter legal guidelines. With the Fendt 500 Vario with FendtONE, on the other hand, we offer you something that makes your work easier - both on the machine and during preparation and follow-up work in the field. In addition, the Fendt 500 Vario scores with its outstanding manoeuvrability and clarity. It is not for nothing that the Fendt 500 Vario is one of the most popular all-round tractors: strong in traction, precise in maintenance work, particularly economical in consumption and comfortable and safe in transport.

- Power segment 124 - 163 hp nominal power (according to ECE R120)
- FendtONE:
  - new driver workstation (onboard)
  - Planning and management functions with FendtONE offboard
- 3 front linkage variants up to relieving regulation
- VisioPlus cabin in 3 different versions
- Standard headland management Fendt TI
- Fendt Reaction steering system
- Choice of numerous Smart Farming features, e.g. Fendt TI Headland for professional headland work
- Software updateable: performance that grows with you

Engine		512 Vario	513 Vario	514 Vario	516 Vario
Rated power ECE R 120	kW/hp	91/124	98/133	110/150	120/163





## Fendt 500 Vario Spotlights.

Here you will find the special Fendt solutions, the so-called Fendt Spotlights, which make the difference and simply make your work better every day.



### 1. VisioPlus Cabin

- Spacious cabin with a field of vision of 77°.
- numerous storage compartments
- comfortable passenger seat

### 2. FendtONE driver's workstation

- new armrest with Fendt-known elements
- Flexible key assignment via the Individual OperationManager (IOM)
- Up to three displays an option: 10" dashboard, 12" terminal on armrest, 12" terminal retractable into cab liner
- Colour coding of the different function groups, also for function reassignment
- 3L joystick with reverse button







## 6. Fendt Reaction steering system

- Das Fendt Reaction-Steering-System ist ein intelligentes Lenksystem, das die Lenkungsarbeit des Traktors automatisch steuert. Es sorgt für eine präzise und sichere Lenkung, auch bei hohen Geschwindigkeiten und auf unebenem Gelände.
- Das System ist in drei Stufen unterteilt: Fendt Reaction 1, 2 und 3. Die Stufen lassen sich über das Fendt-Infotainment-System einstellen.

## 7. headland management Fendt TI

- Das Fendt TI-System (Tractor Intelligence) ist ein intelligentes System, das die Lenkungsarbeit des Traktors automatisch steuert. Es sorgt für eine präzise und sichere Lenkung, auch bei hohen Geschwindigkeiten und auf unebenem Gelände.
- Das System ist in drei Stufen unterteilt: Fendt TI 1, 2 und 3. Die Stufen lassen sich über das Fendt-Infotainment-System einstellen.
- Das System ist mit einer Kamera ausgestattet, die die Fahrbahn erkennt und die Lenkung entsprechend steuert.
- Das System ist mit einem GPS-System ausgestattet, das die Position des Traktors genau festlegt.

## 8. smart farming modules - individually selectable

- Das Fendt Smart Farming-System ist ein intelligentes System, das die Lenkungsarbeit des Traktors automatisch steuert. Es sorgt für eine präzise und sichere Lenkung, auch bei hohen Geschwindigkeiten und auf unebenem Gelände.
- Das System ist in drei Stufen unterteilt: Fendt Smart Farming 1, 2 und 3. Die Stufen lassen sich über das Fendt-Infotainment-System einstellen.
- Das System ist mit einer Kamera ausgestattet, die die Fahrbahn erkennt und die Lenkung entsprechend steuert.
- Das System ist mit einem GPS-System ausgestattet, das die Position des Traktors genau festlegt.
- Das System ist mit einem Laser-System ausgestattet, das die Höhe des Traktors genau festlegt.



## 9. infotainment package + 4.1 sound system

- Das Fendt Infotainment-System ist ein intelligentes System, das die Lenkungsarbeit des Traktors automatisch steuert. Es sorgt für eine präzise und sichere Lenkung, auch bei hohen Geschwindigkeiten und auf unebenem Gelände.
- Das System ist in drei Stufen unterteilt: Fendt Infotainment 1, 2 und 3. Die Stufen lassen sich über das Fendt-Infotainment-System einstellen.
- Das System ist mit einer Kamera ausgestattet, die die Fahrbahn erkennt und die Lenkung entsprechend steuert.
- Das System ist mit einem GPS-System ausgestattet, das die Position des Traktors genau festlegt.
- Das System ist mit einem Laser-System ausgestattet, das die Höhe des Traktors genau festlegt.

## 10. automatic steering axle lock

- Das Fendt Automatic Steering Axle Lock-System ist ein intelligentes System, das die Lenkungsarbeit des Traktors automatisch steuert. Es sorgt für eine präzise und sichere Lenkung, auch bei hohen Geschwindigkeiten und auf unebenem Gelände.
- Das System ist in drei Stufen unterteilt: Fendt Automatic Steering Axle Lock 1, 2 und 3. Die Stufen lassen sich über das Fendt-Infotainment-System einstellen.
- Das System ist mit einer Kamera ausgestattet, die die Fahrbahn erkennt und die Lenkung entsprechend steuert.
- Das System ist mit einem GPS-System ausgestattet, das die Position des Traktors genau festlegt.
- Das System ist mit einem Laser-System ausgestattet, das die Höhe des Traktors genau festlegt.







# Engine.

High torque,economicalandclean.  
The Fendt 500 Vario's dynamic and high-torque 4-cylinder engine impresses with its economical diesel and AdBlue consumption while meeting the current exhaust standard of stage V.





+

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- Wide constant power range
- Excess power characteristic
- Common rail - multiple injection with 1600 bar injection pressure
- Final speed at reduced engine speed (1700 rpm at 50 km/h or 1400 rpm at 40 km/h)
- High maximum torque of 699 Nm at 1500 rpm (516 Vario)
- High torque increase (up to 36%)



## Features

- Deutz (TCD 4.1 L4) - 4.04 litre capacity, 4 cylinders, 4 valve technology
- Exhaust gas aftertreatment with external exhaust gas recirculation (EGR), diesel oxidation catalyst (DOC), passive diesel particulate filter (DPF) and Selective Catalytic Reduction (SCR)
- Pneumatically controlled wastegate turbocharger without engine brake (for all types)
- Fuel prefilter with thermostatic valve
- Bonnet lock, can only be unlocked with vehicle key



- + Optimum performance characteristics
- + Complies with exhaust stage Tier 4 final/ Stage V
- + The compact design allows for a very good overview
- + Electronic motor control guarantees optimum utilisation of the motor





# Transmission.

Drive at the perfect speed at the economic optimum: With the Fendt Vario transmission, you can make use of power reserves that are not accessible with power-shift transmissions.





### Proven Vario gearbox ML 90

- Stepless, jerk-free starting and driving for maximum flexibility
- Stepless travel drive from 20 m/h to 50 km/h at reduced speed (1700 rpm)
- Completely wear-free change from forward to reverse by swivelling the hydraulic pump
- Simple control of the gearbox via joystick, electromechanical drive and adjusting shaft with cam track
- Automated operation through cruise control function and load limit control 2.0

- High-performance hydrostats with very high efficiency
- Permanent frictional connection
- Independent control of engine/power take-off speed and travel speed
- Separate circuits for transmission and hydraulic oil

### Advantages

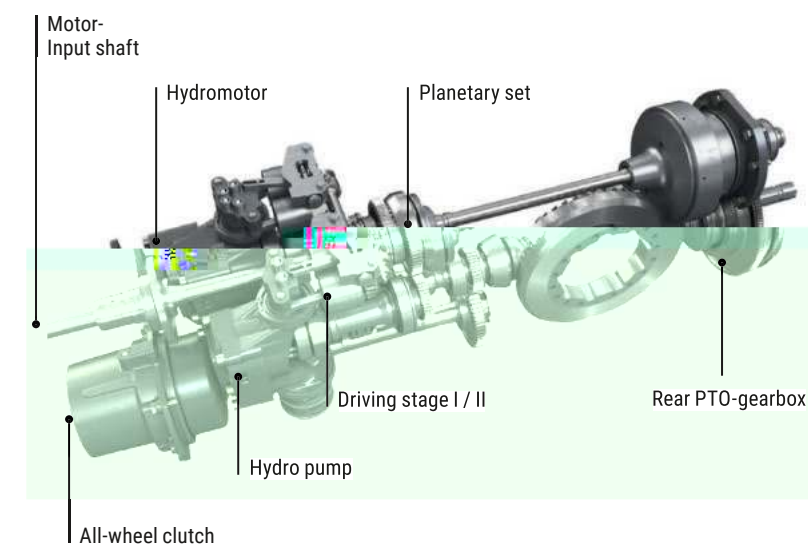
- High fuel efficiency due to automated tuning of transmission and engine (TMS) depending on load
- Low fuel consumption during transport work due to reduced engine speed at top speed
- Optimum engine utilisation due to stepless speed adjustment
- Gear oil change only every 2000 hours
- No special oil necessary
- Electronic control guarantees optimum setting or monitoring of the gearbox
- No dirt entry via hydraulic system thanks to separate oil circuits

### Three speed PTO

- Stub PTO with three speeds or flange PTO with two speeds
- Connection crankshaft and PTO stub only via one gear stage
- Electrohydraulic speed preselection in the dashboard or terminal
- External operation on both sides of the mudguard
- Automatic start-up control
- Overload protection to protect the motor
- Stationary operation possible
- Bevelled and chamfered profile, thus quick and easy fitting of cardan shafts
- Reaching the ZW nominal speed already at approx. 1940 rpm of the engine (or 540 E at approx. 1500 rpm), thus low fuel consumption



- + PTO implements can be operated at constant speed and at the same time variable driving speed
- + Time and fuel-saving implement combinations thanks to front and rear PTO shaft







# Hydraulics.

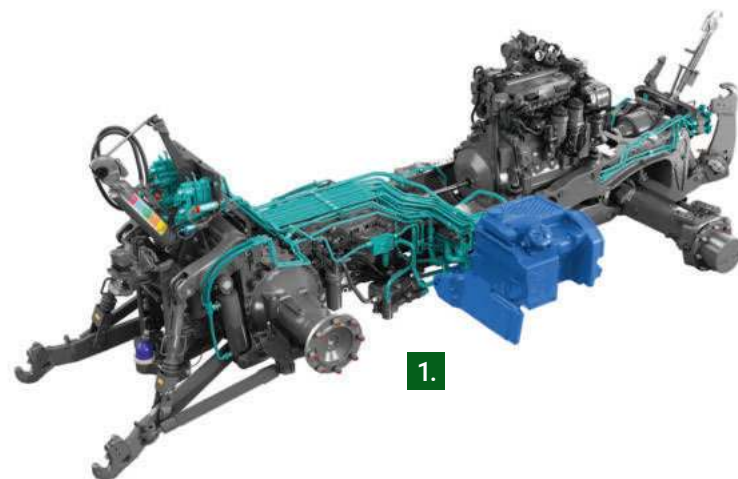
Equipped with modern load sensing hydraulics, up to seven electro-hydraulic valves and front and rear linkage with superior functionality. The Fendt 500 Vario leaves nothing to be desiredwhenit comesto hydraulics





### 1. Features

- Power/Power+: standard load-sensing pump with optional 75 or 110 l/min pump output
- Profi/Profi+: standard load-sensing pump with optional 110 or 158 l/min pump output
- High removable oil quantity of 55 litres
- Separate transmission and hydraulic oil balance
- Optimum ergonomic arrangement of the controls for the working hydraulics and power lift
- Numerous setting options via the terminal (free assignment of operating locations, time function, oil quantity setting,...)
- Hydraulic oil preheating



### 2. Working hydraulics - equipment features

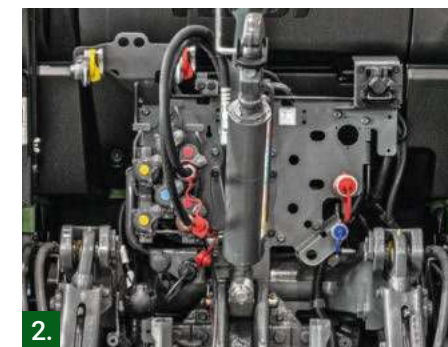
- For Power/Power+: max. 4 double acting valves in total (front 0/rear 4 or front 1/rear 3).
- For Profi/Profi+ applies: max. 7 double acting valves in total (max. 5 valves at the rear and max. 2 valves at the front)
- Flow rate adjustable from 0-100 l/min for each valve (+ and - separately)
- Power Beyond Connection
- Optional DUDK - lever couplings (UDK series)
- Removable hydraulic oil quantity: 55 litres
- External actuation available on both sides for a freely assignable additional control unit



- + Double-acting control units with float position
- + Numerous setting options
- + Simple and convenient operation via
- + Multi-function travel lever (proportional), and cross-shift lever or 3L joystick and linear modules

### 3. Automatic steering axle lock

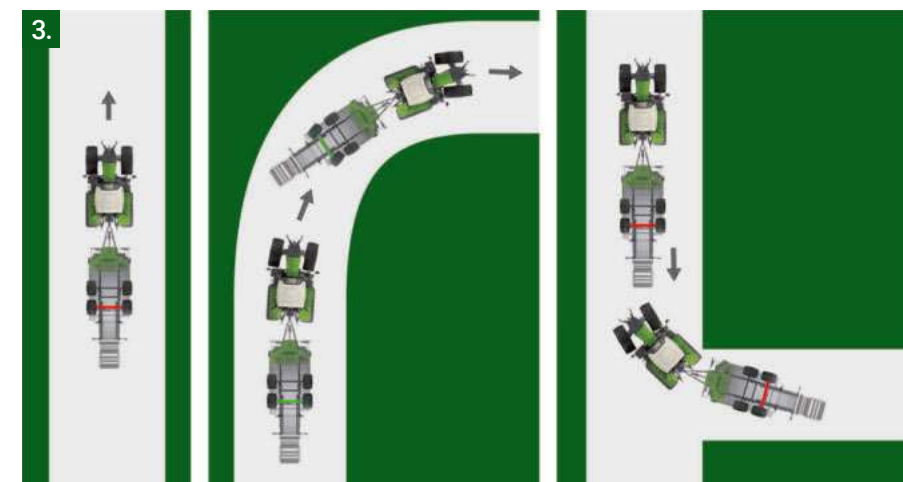
- Automatic locking and opening of the trailer steering axle above and below respectively definable speeds
- Steering axle is always locked when reversing
- Activation and setting of the speed range (lower limit: 0 - 3 km/h; upper limit 10 - 25 km/h) as well as assignment of the hydraulic valve in the terminal.
- Automatic override possible



Power/Power+



Profi/Profi+







## 2. Comfort front linkage with position control and relief control

- Active regulation of the relief pressure
- Relief effect adjustable thanks to pressure relief valve
- Simple and convenient setting of the relief effect in the terminal
- Position sensor on the front linkage to detect unevenness
- No mower relief springs necessary

### Advantages

- High lifting capacity for a wide range of applications
- compact design
- no restrictions on the working hydraulics due to having its own hydraulic valve
- Lower link quickly foldable and removable
- Passive vibration damping via nitrogen accumulator
- Wide choice of options for different areas of application
- Easier unit attachment due to external operation
- Easy operation and adjustment via proportional rocker, rotary wheel for depth regulation, memo function (for version with position control) and terminal
- Relief control e.g. for front mower (also with Power/Power+);
- Fuel saving, soil protection, directional stability
- Control also possible with the travel lever
- Protection of the cylinder rods by bellows against e.g. stone impacts



## 3. Rear linkage

- High lifting force: 7,890 daN
- EHR with proportional operation via rocker, rotary wheel for depth regulation, 2 memo positions
- Single-acting cylinders with locking function via mechanical locking device
- Single acting for Power/Power+
- Optional double-acting cylinders with Profi/Profi+
- Rear operation on the left and right mudguards
- Reinforced lifting struts and side support
- Active vibration damping for road travel with implements
- Load compensated lowering
- Tool-free change between cat. 2/3 by repositioning bolts

### Advantages

- High lifting capacity for all applications
- External operation on both sides for easy attachment and detachment of implements
- Vibration damping for best driving comfort even with heavy attachments
- Easy operation and adjustment via power lift control module and dashboard/terminal
- high operating comfort
- Load-compensated lowering for constant lowering speed even with variable implement weights (e.g. seed drill)
- Operation of the linkage also possible via the multi-function joystick



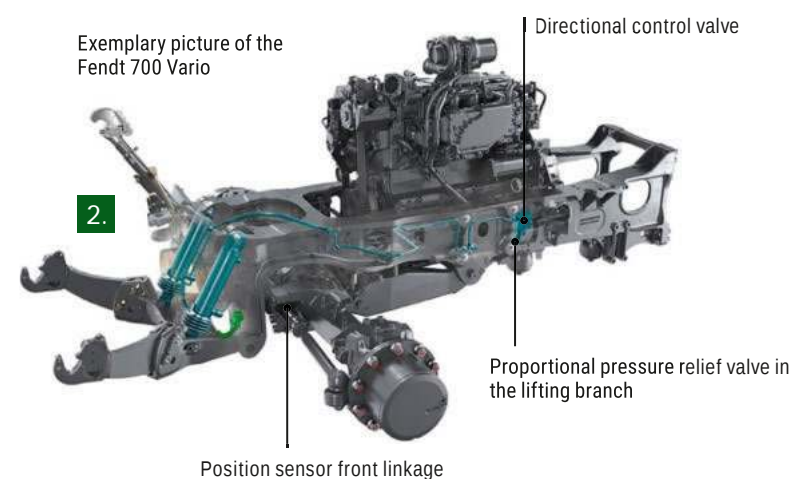
## 1. Front linkage

- High lifting force: 3,420 daN
- Separate hydraulic valve for FKH (separate from working hydraulics)

### Variants:

- Without front linkage
- Comfort ballast support
- Standard front linkage, single acting

- Comfort front linkage with double-acting cylinders and position control
- Comfort front linkage with double-acting cylinders, position control and relief control (also possible with Power/Power+)







# Structure.

The space-saving half-frame design of the Fendt 500 Vario creates space for suspension with longitudinal swing arm, which is characterised by particularly high driving comfort.





#### VarioActive superimposed steering

- in combination with Power+/Profi+ equipment
- at the headland, a complete wheel turn is realised with one turn of the steering wheel
- the superimposed steering uses the same steering valve as Fendt Guide
- Tractor drives with active superimposed steering only max. 25 km/h
- up to 8 km/h the superimposed steering has no restriction, from 8 to 18 km/h the superimposed steering is reduced linearly



#### Without VarioActive:

1x turn of the steering wheel = 26.6°

#### With VarioActive:

1x turn of the steering wheel = 43.3°

#### Superior ride comfort

Intelligent combination of 5 systems for maximum driving and working comfort: Chassis - suspension systems.

1. Level-controlled front axle suspension: for consistent ride comfort, independent of the load, due to level regulation

2. Cab suspension: mechanically or pneumatically suspended cab and spring-mounted driver's seat

3. Active vibration damping rear linkage: Compensation of rear implement vibrations prevents rocking: Front axle with even load - full steerability

4. Vibration-damped front linkage via nitrogen accumulator: prevented Rocking up, protects the implement and guarantees driving safety and comfort with heavy loads

5. Fendt Reaction steering with return center: sensitively controllable Fendt Reaction steering for safe directional stability







The Fendt VisioPlus cab is a true visual and spatial wonder. The new driver workplace FendtONE guarantees more functionality, personalization and comfort. You will feel at home here immediately.





## Overview - VisioPlus Cabin

- FendtONE operating philosophy
- VisioPlus cabin in 3 different variants
- Compact rear-view mirror with integrated wide-angle component in series production
- optional: large, electrically adjustable and heated rear-view mirror with separately adjustable and heated wide-angle mirror
- Air conditioning or automatic air conditioning
- Dashboard swivels with steering wheel
- Various storage and stowage options
- Optional immobiliser with coded key
- Various suspension systems
- Innovative cross illumination

## 1. Advantages VisioPlus cabin

- Cabin with ideal dimensions: 6.1 m<sup>2</sup> glass surface, 2,520 l volume, 77° field of vision
- Higher performance of the driver through optimal driving and operating comfort
- Low noise level and excellent all-round visibility for comfortable work
- A wide range of equipment options for all needs
- Pneumatic suspension systems
- Storage facilities for catering and a tidy workplace
- Safety kit with first aid kit, safety waistcoat and warning triangle
- Crossed worklights for best visibility in the dark without shadows



## 2. Cabin variants

Choice of three cabin variants:

- VisioPlus panoramic cabin: windscreen and right-hand side of cabin cannot be opened; completely pulled through
- Panoramic cabin VisioPlus + door right: continuous windscreen, door left and right
- Standard cabin VisioPlus: right door and windscreen open (right side continuous without B-pillar becomes door)



## 3. Cabin suspension

Choice between two variants:

- Mechanical: two conical bearings at the front, Panhard bar, two mechanical suspension elements at the rear
- pneumatic: two conical bearings at the front, Panhard rod, two pneumatic spring elements at the rear, integrated level control



- + Future-oriented infotainment system with many expansion options
- + perfectly balanced sound in the cabin
- + maximum ease of use
- + Complete integration into the vehicle

## 4. Infotainment - Overview

Electronic platform for entertainment and communication: Infotainment Package includes four integrative components:

- High End Handsfree
- Highest quality radio reception worldwide
- Connection of a wide range of external audio sources
- Fully integrated operation via terminal or rotary knob on the armrest

Sound system in various expansion stages:

Infotainment Package includes four integrative components:

- Infotainment package: 4 premium speakers
- Infotainment package + 4.1 sound system (from Profi): 4 premium speakers plus subwoofer integrated in sound bar





Multifunction control lever





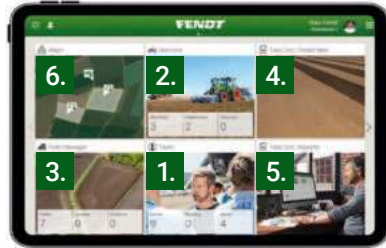


# Smart Farming.

Today, a tractor is much more than just iron and steel. Intelligent technology solutions ensure that the fleet can be used with the greatest possible efficiency.



## FendtONE offboard.



### 1. Comprehensive team management

- Overview of all employees and their roles in the operation (owner, driver, trainee, etc.)
- Varied authorization for different functions in FendtONE (read, write, no access)
- Establishing end dates for accounts

### 2. Efficient machine management

- Central overview of the machine fleet
- Telemetry information such as position, operating hours, error codes, AdBlue and diesel level
- Service information, warranty information, management of licenses

### 3. Precise field management

- Uniform field boundaries and waylines on all machines through rapid, seamless data exchange
- Optimization of AB lines in terms of number and length of waylines as well as the overlapped area

### 4. Simple task creation

- Create task with just a few clicks
- Wireless transfer to the machine
- Easy work coordination with employees: clear task assignment and reporting

### 5. Comprehensive task report

- Clear task report including relevant machine, field and agronomy data
- Time savings in documentation
- Task-related visualization of agronomy and machine data (forward speed, engine speed, application rate, deviation from target value, etc.) in Heat Maps

### 6. Intelligent location management

- Easily find locations that are relevant to operations (fields, field entrances, farmyards, stores) thanks to navigation based on Google Maps
- Simple location of machines
- View of the weather data to support action planning

### 1. More display surfaces

- Digital 10" dashboard: flexible display, important data such as on-board computer, button assignment, etc.
- 12" terminal on the armrest and cab roof: individual display of tractor operation, guidance, ISOBUS devices, infotainment, etc.

### 2. More operation options

- Multifunction joystick: more buttons can be freely assigned (also for ISOBUS function)
- 3L joystick: up to 27 functions across three operating levels (also for ISOBUS functions and operation of the front loader with a 3rd valve)
- Free assignment of buttons on the armrest
- No additional operating elements (terminals, joysticks) are necessary

### 3. Can be personalised

- Creation of user profiles to save settings for different drivers
- Assignment of admin rights
- Personalization of the display surfaces
- Free assignment of buttons and visual feedback to avoid operating errors

## FendtONE onboard.



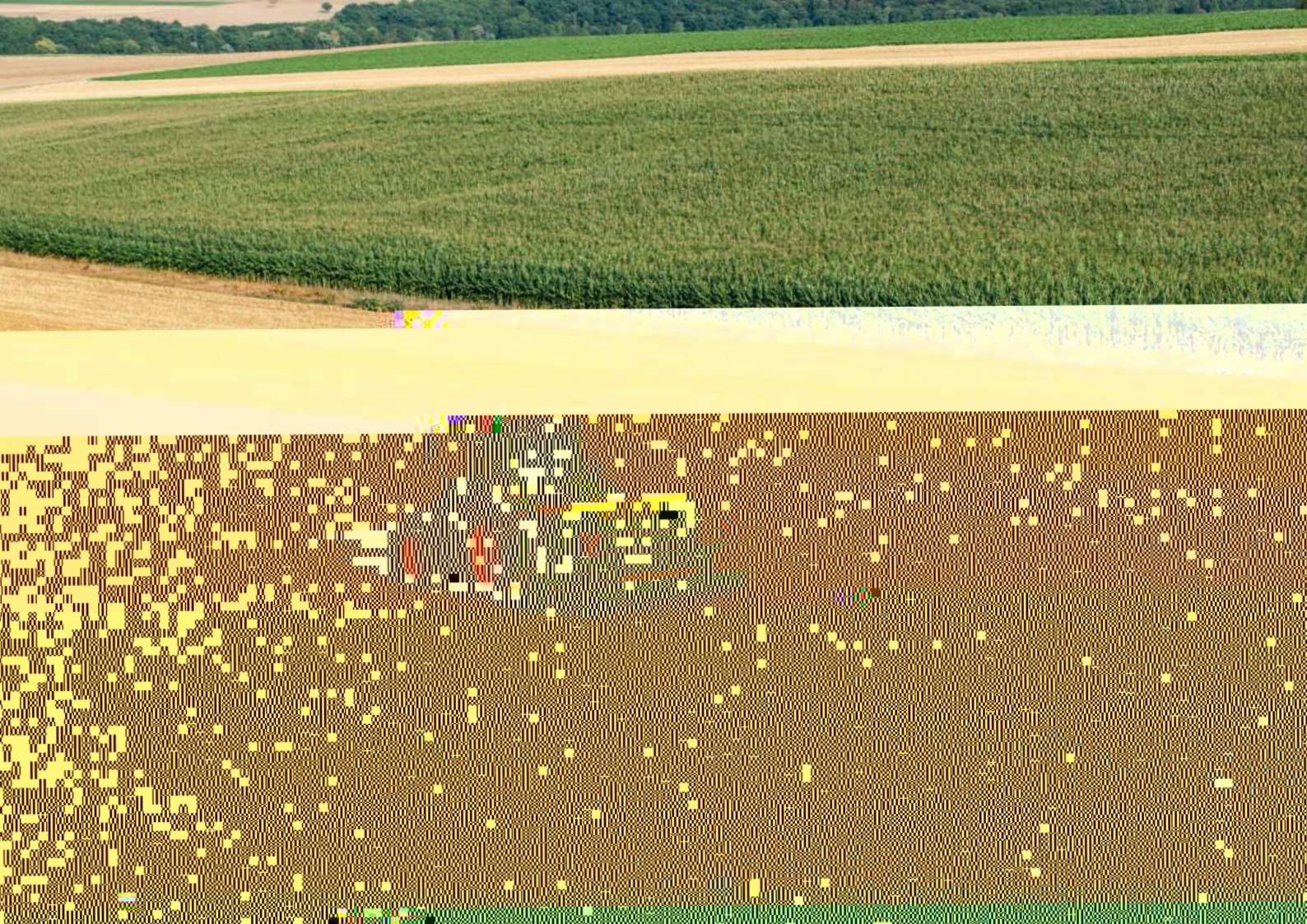
### 4. Simple operation

- All of the operating elements in one central location
- Intuitive operation (similar to smartphones and tablets)
- Flat menu structure to easily find individual functions
- Colour-coded labelling of the various function groups
- Proportional operation of the linkage
- Proportional operation of the hydraulic valves on the multi-function joystick
- Display of messages in clear text

### 5. Future-proof

- Large memory capacity
- More interfaces
- High connectivity





#### Guidance basic package

- includes the tractor preparation for guidance and the Fendt Guide application.

+ Relief for the driver: Full concentration on the implement, easy control of the area already worked on.

+ Savings potential: Higher area output through full utilisation of the working width, at the same time minimisation of

#### Option

- Choice of receivers (NovAtel or Trimble)
- Fendt Contour Assistant
- Fendt TI Headland (Fendt TI Auto + Fendt TI Turn Assistant)

#### 1. Receiver selection with Fendt Guide

- 2 different GNSS receivers are possible:
  - NovAtel Receiver
  - Trimble receiver
- Each business can individually select the receiver that best suits its requirements

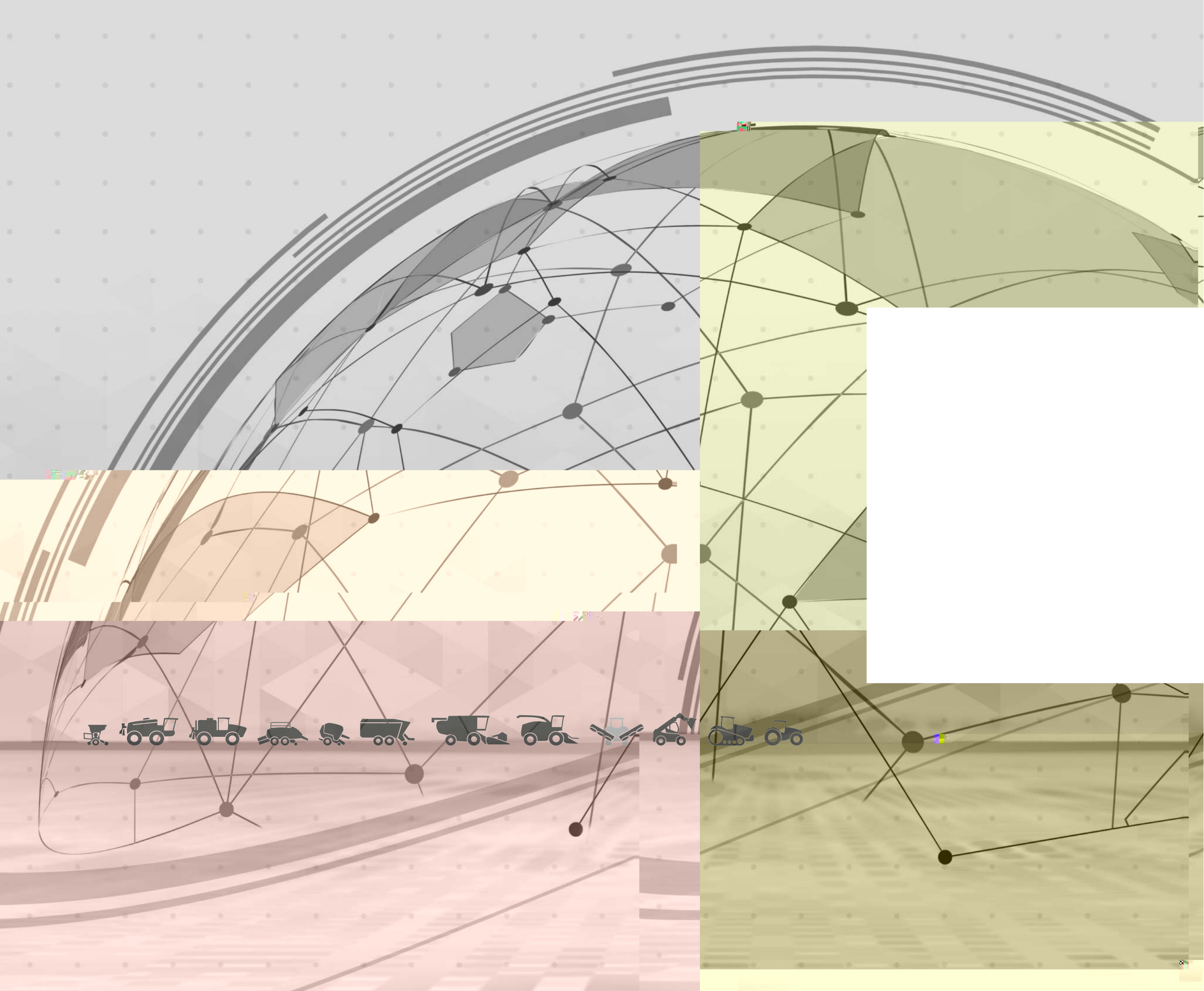




#### **Fendt Smart Connect**

- Fendt Smart Connect can be booked as an option to the basic telemetry package (free of charge).
- With Fendt Smart Connect, machine parameters can be visualised on the









Ensure the operation of tomorrow today.

Fendt Demonstration Service

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The best product under the best protective shield.

Extraordinary service partners and service:

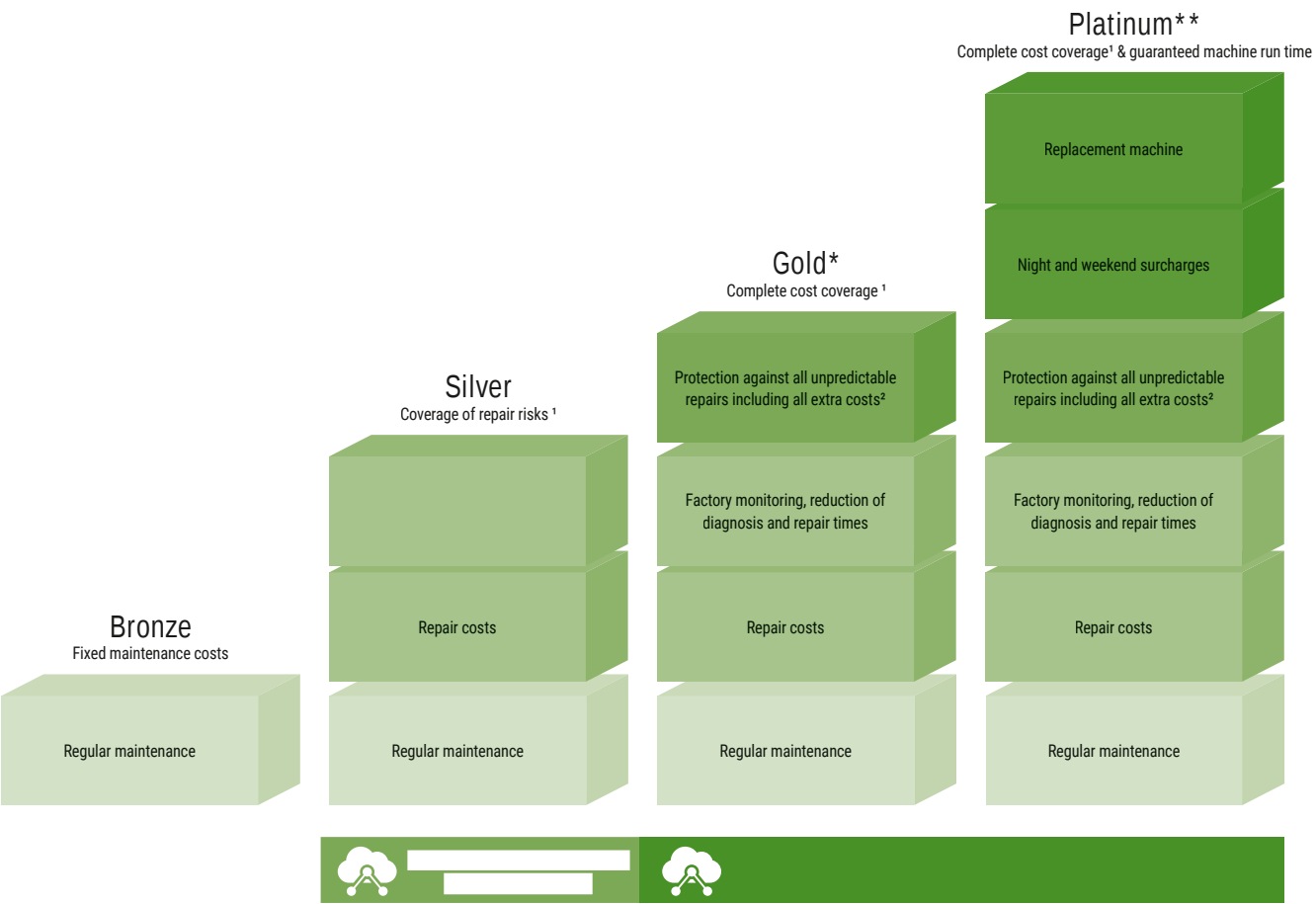
- a short distance between our trained service employees and you
- 24/7 Replacement parts availability during the season
- 12 month guarantee on Fendt original parts and installation

100% quality. 100 % Service:

Fendt Services

- Fendt Demonstration Service
- Fendt Expert Driver Training
- AGCO Finance - Financing and Leasing Offers
- Fendt Care - Maintenance and warranty extension
- Fendt Certified – Used machine programme





Fendt Care Rates

- Comprehensive range of services to ensure operational safety and the risk of repairs on new machines
- Full cost control with the best service
- Tailored solution for the fleet from maintenance contract to complete worry-free package including replacement machine

Smartphone-App “AGCO Parts Books to go”

- Find replacement parts quickly and order directly
- Download via the App Store or the Google Play Store
- Access data via the Fendt sales partner



Maximum coverage  
Warranty extension



8 Years / 8,000 OH	5 Years / 3,000 OH	5 Years / 5,000 OH	3 Years / 2,000 OH*	3 Years / 4,000 OH <sup>5</sup>	3 Years / 25,000 Bales*	5 Years / 50,000 Bales	8 Years / 4,000 Pump-H	5 Years / 8,000 OH	5 Years / 750 OH <sup>7</sup>
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OH = operating hours; H = hours; <sup>1</sup> except for wear and tear; <sup>2</sup> travel costs, recovery/towing, fault finding with additional diagnosis tools, use of performance test stand, oils and filters, if motor/drive is repaired; <sup>3</sup> only available for self-propelled machines, RG300 & Momentum; \*only ISOBUS-equipped devices; \*only PR, VR & XR; \*including Rolllector; \*only Momentum 16 & 24; \*Gold rate for telescopic handler also available without Connect; \*Gold rate only available in DE/FR/GB/IT/BG/CZ/EE/HR/HU/LT/LV/LV/MD/RO/RS/SE/SI/SK/UA/AT/LU/NL/CH/BE/BY/NO/PL/DK; \*\*Platinum only available in DE, EN, FR; \*\*\*optional with Fendt Connect





# Technical Details.

## Hitching devices\*

- Common height-adjustable trailer couplings in the carriage with 2 t drawbar load (carriage width 312 mm)
- Modular system for lower trailers with up to 3 t drawbar load
- Fall-through protection for height-adjustable trailer couplings
- Mudguard serves as PTO cover

\*country specific

