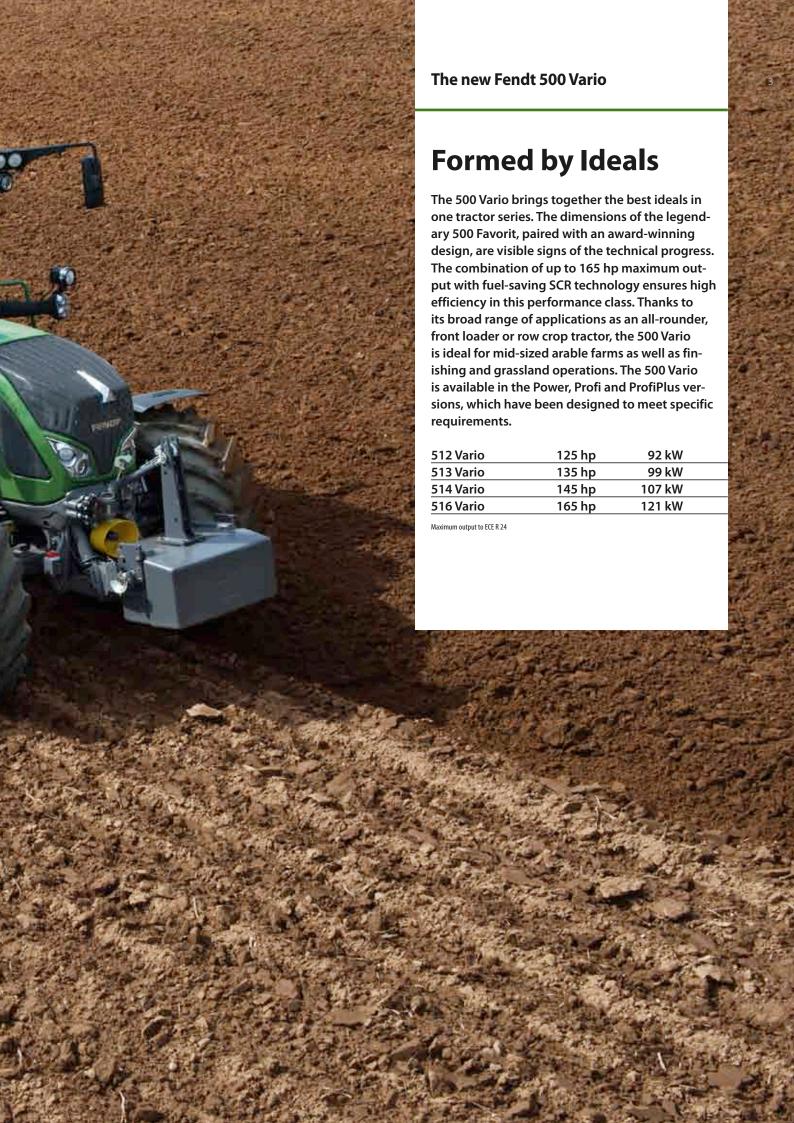
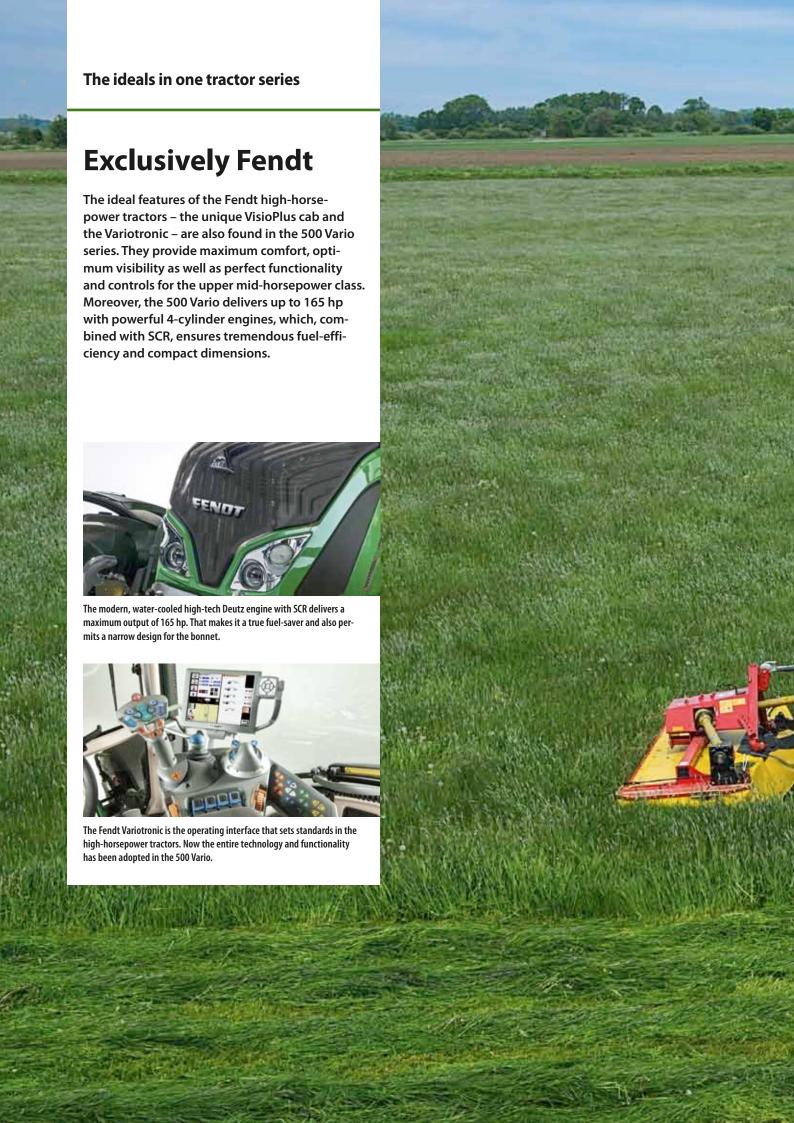
# FENDT

















# **Uncompromisingly** ideal

The best of the best Fendt machines are given the Fendt Efficient Technology label. They allow professional farmers to achieve MORE from LESS – more output using less resources such as fuel, inputs or time. The 500 Vario achieves this with equipment options such as the VarioGuide guidance system or the VarioDoc documentation system. The outstanding fuel economy of a Fendt goes without saying.

More information at: www.fendt.com/efficient-technology





# Fendt stands for premium

#### High-tech through innovative power

A Fendt Vario is high-tech through and through. Innovations, such as the unique Vario transmission for stepless, highly efficient work, the precise control via joystick and terminal or the perfected visibility, as found in the VisioPlus cab, ensure outstanding operating and working quality.

#### Premium workmanship Made in Germany

Fendt tractors are developed, designed and produced in the world's most modern tractor factory network at the sites in Bavaria. The use of durable, high-quality components guarantees maximum quality and the high reliability of the tractors is a matter of fact at Fendt.





#### Efficiency and economy as a maxim

The focus at Fendt is to promote customers' success with highly efficient and economic products. A decisive factor here is keeping fuel consumption as low as possible – this is absolutely convincing at Fendt.

#### Calculated to the end

The high quality, forward-looking technology and high efficiency found in Fendt tractors prove to be special benefits at the end of their service life. Because these characteristics are what give Fendt tractors an unbeatably high resale value. In the total cost calculation, Fendt therefore offers low operating costs per hour.

#### More comfort



- Unique VisioPlus cab
- · Varioterminal: All functions in one terminal
- Fewer hand movements every day, precise work
- VarioGuide automated steering in this power class
   at Fondt
- Suspension concept comprising front axle suspension along with cab and seat suspension

#### More performance



- 165 hp maximum power to ECE R 24
- · Save fuel with the latest SCR engine technology
- 50 km/h at just 1,700 rpm
- · Lively handling
- · Low weight-to-power ratio of 39 kg/hp

#### More profitability



- Optimised handling with lowest fuel consumption thanks to Tractor Management System TMS and automatic maximum output control
- Direct drive line from engine to PTO gearbox
- Fewer inputs through less overlapping with VarioGuide automated steering system

#### More versatility



- Optimum connections at front and rear for maximum versatility
- High-capacity load-sensing hydraulic system
- Ideal front loader operations with VisioPlus front windscreen and factory-installed front loader
- CargoProfi front loader with smart functions

#### More safety



- Better overview thanks to large glass area in the VisioPlus cab and wide-angle mirror
- Coordinated chassis and suspension system for maximum safety
- Highly effective brake design for reliable deceleration

#### More for the environment



- 95 percent lower NO<sub>X</sub> emissions with SCR
- 95 percent lower particulate matter emissions with SCR
- Lower CO<sub>2</sub> emissions through low fuel consumption
- Use of bio-hydraulic oil possible

## Fendt Spotlights. Notable. Better.

#### A holistic approach.

A holistic approach, and therefore the perfect coordination of all the components in the tractor, is what makes the overall Fendt difference. A Fendt is notable, because it has been designed up to the very last detail by people, who also have an eye on the whole.

#### Notably Fendt. Simply better in detail.

This results in solutions that are not obvious at the first glance, but are decisive in operation, so that you can do more. Look for the Fendt Spotlights – the notable and better solutions – and discover what makes a Fendt a Fendt.





You will find the Fendt Spotlights, mentioned below as an example, in the following sections. Look for this symbol, because we will explain special Fendt solutions in greater detail here.

#### VisioPlus cab

Sophisticated interior lighting concept, for example, LED lights for illuminating the right armrest and control elements or ambient lighting.

The Varioterminal can be controlled per touch as well as with the keys, for example, when your hands are dirty.

#### Engine and transmission

Optimum access to the engine compartment, even when front loader mounting parts are attached.

Fuel consumption indicator for monitoring the current fuel consumption and the consumption during various operations.

#### Vehicle body

Get back home safely with the coming home light, which continues to shine after the tractor is switched off.

"Cross-eyed" work lights for a perfectly illuminated ed field of vision.

#### Mounting areas

Both the DCUP and CUP couplings permit the hydraulic valves to be coupled under pressure and mounting and removing implements is easy. The self-closing valve flaps offer secure protection against contamination through dirt or water.

(DCUP = double-acting couple under pressure CUP = couple under pressure)

# The assemblies on the Fendt 500 Vario







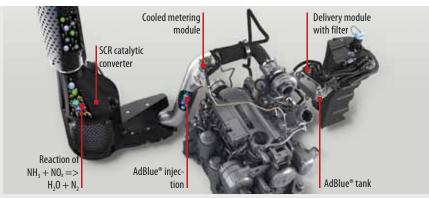
# The ideal of efficiency

#### Save fuel with SCR

The maximum output of the 500 Vario ranges from 125 up to 165 hp. For this new series, Fendt also relies on SCR technology with AdBlue® emission control for compliance with emissions standard Euro Stage 3b (Tier IV interim). On the Fendt high-horsepower tractors, this drive train – the engine together with SCR and the Vario transmission – has already proven itself to be extremely economical. A further plus: exhaust after-treatment takes place after combustion, so it does not impair it. The engine itself is therefore ideally tuned and thus achieves outstanding dynamics.

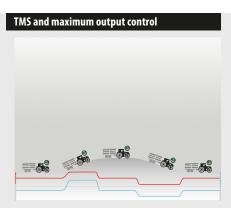
# Fendt automated efficiency functions make saving easy

Stepless speed adjustment provides enormous savings potential in time and money. In the 500 Vario, the continuously variable transmission ensures high drive train efficiency. The Tractor Management System TMS keeps the tractor operating at an economic optimum. Operators only need to specify the desired speed and the activated TMS takes control over the engine and transmission. That means efficiency, fully automatically.

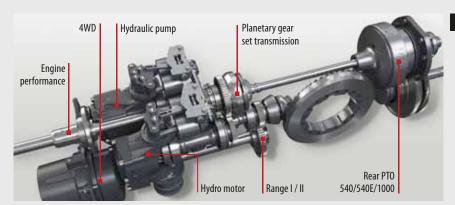


#### SCR (Selective Catalytic Reduction) for exhaust gas after-treatment

With SCR technology, exhaust is after-treated with Adblue®, a 32.5 percent solution of urea, which converts nitrous oxides NO<sub>x</sub> into non-toxic nitrogen and water. The consumption of AdBlue, the standard urea-water solution used by commercial vehicles, lies at an average of seven percent of the diesel consumption. This can vary depending on the operation. AdBlue® is readily available at filling stations or through AGCO Parts.



On a Fendt Vario, automated functions optimise driving. The Tractor Management System TMS controls the engine speed and transmission ratio to ensure as low a fuel consumption as possible. With the automatic maximum output control, the engine load is adapted to the particular operation.



#### The ingenious Fendt Vario transmission

The Fendt Vario transmission is a hydrostatic-mechanical power split drive. With increasing speed, the share of the mechanical power transmitted through the planetary set increases. Power splitting and hydrostats that swing 45 degrees ensure outstanding efficiency. The transmission is uniquely efficient and permits speeds starting from 20 Meter per hour to up to 50 km/h without shifting.

#### Individual driving mode



The driving mode can be individually and freely selected depending on the area of application. Operators can select the pedal mode and control the speed of the tractor with their foot. The alternative is joystick control with up to four different acceleration rates.

#### Automatically drive at the limit

The automatic maximum output control regulates the engine speed (engine load) dependent on the power requirement, so that the engine works in the optimal range in terms of fuel consumption and the preset driving speed. There are different optimum values that can be set as the load limit for different operations, for example transport, heavy-duty draft work or for work with PTO-driven implements. The tractor sets the ideal load limit automatically. Operators therefore do not need to set the automatic maximum output control when entering or leaving the field. And the interplay

between the engine and transmission is just right for every operation. Alternately, operators can also set the maximum output control manually.

#### Ideal weight-power ratio

Get the most out of every bit of horsepower is the motto behind the 500 Vario. The 516 Vario has an outstanding weight-power ratio of 39 kg/hp for excellent dynamics and liveliness.

#### **Powerful cooling system**



The compact cooler unit is very easy to access and can be easily cleaned thanks to the large spaces between the radiators and the flat floor. The smart heat exchanger design lowers hydraulic and transmission oil temperatures, which has a positive effect on the efficiency and lifetime of the tractor.

#### Easy access to engine compartment



The engine compartment is very easy to access for inspection and maintenance, even when the front loader mounting parts are attached. The one-piece bonnet with two separate side panels can be opened without tools.

# **Cutting-edge engine and transmission technology**

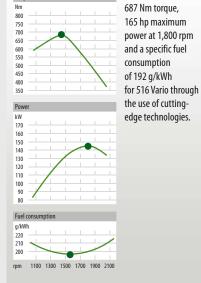
- Four-cylinder engine with 4.04 l cubic capacity and common rail injection:
   165 hp maximum output at 1,800 rpm
- SCR technology for compliance with Stage 3b emissions and low rated speed of 2,100 rpm for favourable fuel consumption
- Vario transmission for stepless driving from 0.02 to 50 km/h
- Large tank capacity for long work days:
   Diesel: 298 litres
   AdBlue: 31 litres
- Tractor Management System
   TMS and automatic maximum output control are standard
- Optimum weight-power ratio of 39 kg/hp (516 Vario)
- Lockable bonnet

#### Fuel consumption indicator



The 500 Vario is equipped with a fuel consumption indicator. It not only monitors the current consumption, but also logs fuel consumption for different operations. Furthermore, it assists the operator in maintaining an efficient driving style.

#### Engine characteristics – Fendt 516 Vario







## **Drive ahead safely**

#### Six points for your comfort

The 500 Vario allows you to perform transport work at 50 km/h at a fuel-saving 1,700 rpm. The chassis design provides the best ride comfort as well as optimum ergonomics. Six points ensure an exceptional driving sensation:

- self-levelling front axle suspension
- the Fendt Reaction steering system
- the shock load stabilising
- the cab suspension
- the seat suspension
- the automatic steering axle lock.

#### Safe driving, even with high payloads

The vehicle design is based on a robust cast half-frame, which enables a permissible overall weight of up to 10.5 tonnes (depends on country). The practically maintenance-free wet multi-disc brakes on the rear axle can brake high loads quickly. Additionally, every time the brakes are actuated, the front wheels are braked with the four-wheel drive. The self-levelling front axle suspension also contributes to driving safety and ride comfort. The suspension can be locked with the push of a button, so front-mounted implements can be guided precisely.

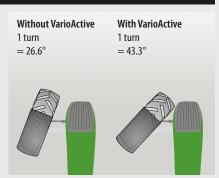
#### Comfort and safety



The design of the suspension on the 500 Vario enables maximum ride comfort in the field and on the road. The combination of front axle suspension, cab suspension and seat suspension, which provide a driving sensation on par with passenger cars, was adopted from the high-horsepower tractors.



Shock load stabilising prevents the tractor and implement from bouncing by actively counteracting movements using the hydraulics. It reduces pitching movements so you benefit from improved steering safety and ride comfort.



With the VarioActive superimposed steering system, a stronger steering ratio can be activated. It adapts itself to the steering movement and ground speed. This enhances operating comfort, especially for front loader work in tight farmyards or at the headlands.

#### Standard front axle suspension



The front axle, which has a suspension system as standard, enables high payloads along with the best ride comfort. The +/-50 mm suspension travel, absorbs uneven surfaces very well. The 8° swing angle ensures optimal ground hugging in rough terrain. The 52° steering angle of the front axle guarantees maximum manoeuvrability.

#### **Clever lighting controls**



The lighting is easily set and adjusted thanks to its straightforward layout. With the smart one-button system, all previously switched work lights can be switched on and off again easily and quickly with just one touch of a button in the keypad.

#### Fendt Reaction steering system

The Fendt Reaction steering system ensures ideal straight-ahead driving. After negotiating a curve, a hydrostat quickly brings the steering wheel back into the starting position and provides the driver with steering feedback from the road. This makes sensitive steering much easier.

#### Automatic steering axle lock

The optional automatic steering axle lock automatically unlocks the steering axle at a predefined speed on trailers with self-steering axles. The rigid self-steering axle ensures stable handling at high speeds and when reversing. The self-steering axle is automatically locked outside of the selected speed range, as well as when reversing – no driver intervention is required.

#### **Powerful lighting concept**



The ingenious lighting concept on the 500 Vario doesn't leave you in the dark. The work lights on the 500 Vario can be individually adjusted for up to 360 degrees of illumination. Xenon or LED lights are available as an option.



The corner lights illuminate the entire wheel arch in the front. This gives you an excellent view to the track at night.



The arrangement of the lights in the 500 Vario is unique – the work lights are "cross-eyed". This completely prevents all shadows and reflections so operators profit from an optimally illuminated field of vision.



The integrated coming home light permits operators to climb down from the tractor safely, even in the dark. The headlights continue to shine after the tractor has been switched off.

# Driving dynamics with safety and comfort

- 50 km/h transport speed at reduced engine speed (1,700 rpm)
- Self-levelling front axle suspension with locking function
- VarioActive steering for faster steering movements
- Fendt Reaction steering system for better straight-ahead driving at fast speeds on the road
- Up to four front Xenon work lights and two rear Xenon work lights
- Two front LED work lights and two rear LED work lights
- Corner lights for good illumination of the wheel arches
- Permissible overall weight of up to 10.5 tons (depends on country)





# The ideal operator environment

#### The Fendt VisioPlus cab

Work is a pleasure in the new Fendt VisioPlus cab, because it is a miracle in visibility and spaciousness. The windscreen curves up into the roof and provides a full view of the raised front loader. More room and nearly six square metres of glazing make the cab feel very spacious. The ergonomic, intelligent operating interface and the high-quality workmanship, provide you with the convenience and comfort that substantially increase your performance.

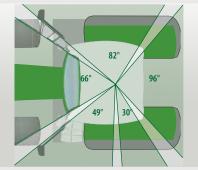
#### Open or closed?

The new front windscreen on the VisioPlus cab is a true plus in visibility. The curved top of the window has tripled the upward view angle. The downward sightlines through the front windscreen and the waisted bonnet have been optimised for an ideal view to the front linkage. The front window of the new Fendt 500 Vario is offered in two variants: the first variant is the familiar opening window and doors on the right and left-hand sides. If you prefer an absolutely unobstructed view, we recommend the second standard version with a continuous front windscreen and a door on the left side.

#### All-round visibility: to the front, side...

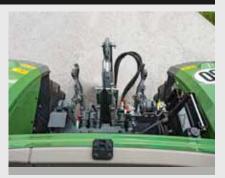


The upward viewing angle has been tripled. The downward sight lines have also been optimised and it is easy to see into the wheel arches.



The models in the 500 Vario series offer outstanding allround visibility. The front window and right window panes are available in a one-piece version as standard for an optimum view to mounted implements. A version with an opening front windscreen and right door is also available.

#### ... and rear



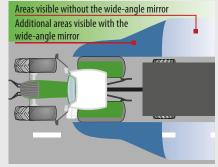
The cockpit is positioned in the cab in such a way as to optimise visibility to the rear. For example, the hydraulic control block for the rear valves is positioned on the right under the cab and this permits an excellent view to the lower link hooks and the linkage.

#### Optimised interior lighting



The interior lighting in the 500 Vario is perfectly designed for the important areas. An LED light illuminates the entire entry area. The right armrest with the control elements is also illuminated with a suitably positioned LED light. The ambient lighting is ideal, if dimmed light is desired.

#### Better overview with wide-angle mirror



The optional wide-angle mirror expands the field of vision, which greatly enhances safety. You have a better overview of things that are happening on the sides of the tractor. The hazard zone, which is usually located in the blind spot, is easier to see into and unforeseen situations can be avoided.

#### Handle on the rear window



A special feature of the 500 Vario is the vertical handle in the rear window, which is always within reach.

#### Panoramic view



The view from the driver seat of the 500 Vario is unique. The large glass areas provide a tremendous feeling of space, which makes work all the more of a pleasure.

#### Wipers with intermittent wipe function



The segment wipers can be set to intervals, like in passenger cars, and clean the front window reliably. The exclusive parallel wiper offers optimum wiping characteristics. The spray nozzles, which are located on the wiper arm, ensure that the front and rear windows are well-cleaned.

#### Opaque roller shade



The opaque roller shade in the front serves as a glare shield when the sun shines low. What's special: It is tailored to the curved shape of the front windscreen and covers the complete width of the window. Furthermore, it holds in any position and disappears completely in the roof liner when it is no longer needed.

#### Pivoting multi-function display



The dashboard, i.e. the multi-function armrest, pivots along with the steering wheel, when it is adjusted. It is therefore always in the best ergonomic position for the driver and always in full view.

#### Fendt comfort seat



The comfort seat features air suspension and easy armrest adjustment.

#### Fendt super comfort seat



The air-suspended super comfort seat is equipped with heating, a rotary adapter, low frequency suspension, pneumatic lumbar support and easy armrest adjustment, so operators can find their perfect sitting position.

#### Ride comfort thanks to cab suspension



The pneumatic cab suspension reduces vibrations to a minimum and provides high ride comfort. It is supported on four points with integrated self-levelling: the cab rests on two conic bearings at the front and on two air spring elements at the rear.

#### Fendt super comfort seat Evolution dynamic



In addition to the features of the super comfort seat, the top high-tech version of the seat also offers lateral horizontal damping, climate control and dynamic damping. This reduces operator fatigue during long periods of work.

#### Passenger seat



Passengers find a safe and comfortable passenger seat in the VisioPlus cab.

#### Cooling compartment



There is space for a meal and a cool drink in the air-conditioned cooling compartment for long work days.

#### Ergonomics as never before

When developing the 500 Vario, special emphasis was placed on the ergonomic design of the operator environment. All operating functions have been optimally placed on the right armrest, which moves along with the driver seat, and in the new Varioterminal. The steering wheel is height and tilt adjustable. The instrument cluster swings along with it and is therefore always in an ideal position. Air-conditioning is standard and automatic climate control is available as an option.

#### Tidy and straightforward



The air-conditioning, radio, tachograph and the components for VarioGuide guidance are neatly installed in the roof liner. The devices are perfectly positioned so they do not impair visibility.

#### Integral cable lead-through



Fendt offers a clever solution for the cables that run from the rear of the tractor into the cab.

Cables can be guided through the lead-through, no matter what kind of cross section they have. The rear window can be closed, so dust, dirt, water and noise stay outside.

#### Plenty of storage options



In a Fendt cab you will find many different stowage spaces and compartments, so that everything has its place. For example, three stretch nets, which can be reached from the ground, stowage compartments around the driver seat as well as one bottle holder.

#### Stretch nets can be reached from the ground



The stretch nets under the passenger seat in the front of the cab are positioned so that they can be reached from the ground – operators do not need to climb up into the cab to get things out of them.

#### The Fendt VisioPlus cab

- Large VisioPlus cab for an exceptional sense of space
- Curved front windscreen, low rear window and narrow, compact bonnet for fantastic visibility
- Ergonomically designed control console on the right armrest
- Comfort passenger seat, folds down, can be used as table
- Air-conditioning is standard, automatic climate control is available as an option
- Pneumatic cab suspension is optional
- Coordinated suspension concept: front axle suspension, plus cab suspension, seat suspension
- Low noise level through good insulation in the cab
- MP3 radio with sound system
- Safe climbing up and down thanks to wide steps and coming home light at night

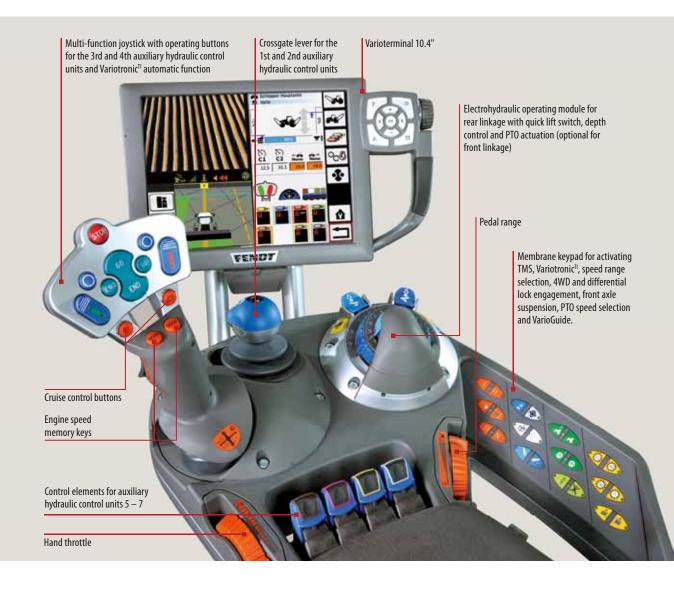
### The ideal controls

#### The Fendt Variotronic controls

The operating elements on the right-hand armrest – the Varioterminal, multi-function joystick, crossgate lever and membrane keypad – have a well-balanced overall design and form an ergonomic command centre where everything is under control.

#### Finally, all functions in one terminal

The Fendt Variotronic is unique in that all functions are united together in one terminal: tractor and implement controls, camera functions as well as the documentation and automatic steering system are completely integrated in the 10.4" Varioterminal and can be operated using the same operating logic. That saves you the cost for additional terminals. For standard farming requirements, Fendt offers the 7" Varioterminal.



#### Flat menu hierarchy and everything in view

Thanks to the flat menu hierarchy and the clutter-free display, operators can learn to use the Varioterminal quickly and always have everything in view. The high-resolution scratch-resistant screen and all function indicators automatically adapt to ambient light conditions. Optimal day and night viewing modes significantly reduce strain on the driver's eyes. The components of the Varioterminal are manufactured according to the motto "Made in Germany", so that you can be sure you are getting high quality, reliable electronics with the best workmanship.

#### Varioterminal 7"



With a 7-inch screen diagonal, the Varioterminal 7" is a handy and functional companion for tractor operations and Variotronic implement control.

#### Varioterminal 10.4



The Varioterminal 10.4" fulfils all operator wishes. Now, in addition to the tractor operations and Variotronic implement control, the external cameras, the new Fendt VarioGuide automatic steering system and the VarioDoc documentation system can be controlled with just one terminal.

#### **Fendt Variotronic**

- Ingenious Variotronic operating interface in the 500 Vario, like on the Fendt high-horsepower tractors
- Varioterminal operated per touch and with the keys on the operating element
- Ideal menu navigation and display in the Varioterminal
- All functions are clearly integrated in just one terminal
- ISOBUS implements can be operated via Variotronic implement control
- Variotronic<sup>™</sup> headland management with easy setting options
- Precise and reliable
   Fendt VarioGuide automatic steering
- Fast documentation and wireless data transfer with VarioDoc

#### Control via keys or touch





You can easily change menu settings in the Varioterminal by either touching the screen or pushing the navigation buttons. You can navigate through the menus using either the keys or the touchscreen. The tractor controls on both terminals are identical.

#### The "4-in-1 Varioterminal"

#### 1,920 hand movements less per day

During turning manoeuvres at the headland, operators usually have to change between different controls, sometimes up to 12 times. In the 500 Vario it is not necessary to change controls, because the right armrest is the central operating control. Operators can rest their arm on it and control the tractor and implement using the multifunction joystick and Varioterminal. The linkage control module next to the crossgate lever controls the quick lift switch, depth control and engagement

of the front and rear PTO. Thanks to headland management, standard on the 500 Vario, operating errors during turning manoeuvres are a thing of the past. Operators can activate automated operating sequences at the headlands with just a touch of a button. To optimise the sequence of the steps, they can also be edited individually and put together when the tractor is at a standstill. On a 10-hour day with some 160 turning manoeuvres, that can save operators up to 1,920 hand movements.

#### ISOBUS implement control



The ISOBUS implement control is perfectly integrated in the 7" and 10.4" Varioterminals (not on Power version). The implement is controlled with the terminal and joystick (if supported by implement), an additional terminal is not required.



The functions for the implement control and head-land management can be assigned to the multifunction joystick as desired, if the implement supports this feature. Operators can find the perfect operating ergonomics for the operation at hand. In general, settings for up to 25 implements can be saved.



For repeating operations, which require a constant engine speed, rpm and driving speed can be set and saved independent of each other. They can be called back up by pressing the button on the joystick. Overall, two settings can be saved.

#### **Headland management**





With Variotronic<sup>11</sup> headland management, operators can create and save operating sequences while driving or standing still. More than 20 steps can be programmed for the sequences, for example, for: the front and rear linkage, front and rear PTO, actuation of the hydraulic valves, cruise control and engine speed, 4WD and differential as well as TMS. The sequence is displayed along with the triggers, such as time or distance. Individual steps can be edited at a later time.

#### Variotronic<sup>™</sup>automatic



With Variotronic<sup>11</sup> automatic headland management, the sequences are automatically triggered at the headland. In the terminal, you can set which sequences will be used when going into and coming out of the turn. An intuitive graphic aids you in the process.

#### Precision during application

The implement control features automatic SectionControl. When working with sprayers, fertiliser spreaders, precision air seeders and seed drills, SectionControl provides further savings potential for inputs. This has a positive effect on your cost calculation and also for the environment.

#### SectionControl







The new SectionControl function enables fully automatic section control via GNSS signal, dependent on the desired degree of overlapping. Up to 24 sections can be set when using ISOBUS-capable sprayers, fertiliser spreaders and seed drills. This results in precise work results and saves seeds, fertiliser or pesticides by preventing double applications or treatments of areas outside of the field. And it makes work easier for operators, day and night.

The controls for SectionControl integrated in the Varioterminal are simple and easy to understand. They are straightforward and clear.

# **Guidance, documentation and telemetry.**

#### VarioGuide guidance in the 500 Vario

Fendt offers the VarioGuide automatic steering system in the power segment from 125 to 165 hp for the first time. VarioGuide is optimally integrated in the Variotronic and can be operated with the Varioterminal. VarioGuide can reduce overlapping by an average of six percent and save fuel and inputs, such as seeds and fertiliser, by six percent. Operators can easily monitor the tractor and implement with VarioGuide, even at night and in poor visibility conditions.

# VarioGuide light – the simple guidance system VarioGuide light is the economical solution for dairy farms, mixed farms or market fruit farms, which are looking for a cost-effective guidance system primarily for tillage and forage harvesting. Integrated in the Varioterminal 7", it offers an accuracy of +/- 20 cm. Please note that VarioGuide light

cannot be upgraded to higher accuracies.

#### VarioGuide automatic steering



With VarioGuide, operators can concentrate fully on the implement. That increases performance and has a positive impact on the overall quality of work, even in poor visibility conditions. In addition to the US GPS satellites, VarioGuide, which is operated with the Varioterminal, is capable of using the Russian GLONASS satellite system and is also ready for use with the planned European Galileo system. The parallel use of several systems guarantees that the automatic steering system is highly reliable.



The antenna unit can be easily transferred between pre-equipped machines in a matter of minutes. The individual components, such as the antenna, receiver and roll bias compensation unit are accommodated in a compact housing unit and fully integrated in the roof. The antenna is therefore optimally protected against external influences such as blows from branches.



You can choose from many correction service providers for the correction signals. VarioGuide works with satellite-based signals, such as EGNOS or OmniSTAR, as well as ground-based RTK signals via radio or mobile network (Ntrip). VarioGuide supports open formats such as RTCM and CMR. You therefore have the choice of three accuracy classes from +/-20 cm to +/-2 cm. The RTK offers the highest accuracy.

#### VarioGuide light – VarioGuide Standard + / - 20 cm accuracy class

Correction signals: EGNOS, WAAS, Autonomous Mode (free of charge), OmniSTAR VBS (requires license, only VarioGuide Standard)
It is ideal for work such as stubble management, spreading compost, mowing or applying slurry





#### VarioGuide Precision+ / - 5 cm accuracy class

Correction signals: OmniSTAR HP (subscription required)
Suitable for almost all agricultural applications, such as cereal sowing, in areas with good signal quality



#### VarioGuide RTK + / - 2 cm accuracy class

Correction signals: Mobile RTK field station or Ntrip (RTK via mobile network)

Provides maximum accuracy — fast, safe and everywhere for all agricultural work,
in particular strip till and controlled traffic farming applications



#### Modern job management with VarioDoc

Documentation is the most important basis for farm management for agricultural businesses. With the new VarioDoc, relevant data can be recorded with a minimum of effort, documented in the field record and analysed in the shortest amount of time. Using the Varioterminal, all important information can already be entered in the field so that follow-up work in the office is reduced to a minimum. And it works the other way around, too – jobs can be created using the PC and transferred to the terminal.

#### AgCommand™ telemetry





AgCommand is the across-brand telemetry solution in the AGCO Corporation. When a Fendt tractor is connected with AgCommand, the following data is automatically logged:

- Fuel consumption I/ha
- Speed km/h
- Engine speed rpm
- Pulling power demand N
- Rear linkage position in %
- Front linkage position in %Rear PTO speed
- Status operating hour counter
- Outside temperature in °C

#### **Documentation VarioDoc**



Modern job management for data logging for field databases.



The starter kit (not included in the scope of delivery of the tractor) provides data exchange between the tractor and the office PC via Bluetooth.

VarioDoc enables wireless data transfer from the Varioterminal to the field database. There is no need to read out data, such as field name and current crop, inputs used and quantity, operator, etc., onto a storage medium. VarioDoc Pro continually records position and machine data and data transfer is possible via mobile network.

Manufacturer	Compatible products
BASF	BASF field record
Helm	MultiPlant • MYFARM24.DE • MYFARM24.LOGISS
LAND-DATA EUROSOFT	AO Agrar-Office field database • AO Agrar-Office Lohnunternehmer • AO Agrar-Office AutoDok
AGROCOM	AGROCOM-NET • AGROCOM-LU
Farm Works	Farm Works Software





# Intelligent technology at the front and rear

#### Powerful hydraulic system

The hydraulic system features modern load-sensing technology. Delivery capacities of 75, 110 or 158 litres per minute are possible as an option. The separate transmission and hydraulic oil supplies prevent oil mixing and contamination in the transmission. Furthermore, bio-hydraulics oils can be used.

#### Powerful lift at the rear

The electrohydraulic rear linkage has a maximum lift capacity of 7,780 daN. The newest load compensating rear linkage means a great gain in comfort, because it automatically maintains the set lowering speed, for heavy as well as lightweight implements.

#### A number of connections are available at the front and rear





#### Interfaces at the front

- Top link
- Two double-acting control valves
- · Unpressurised front return flow
- 7-pin socket
- Front PTO (540 or 1,000)
- Electrohydraulic front linkage control incl. shock load stabilising
- Lower link catch hooks

#### Interfaces at the rear

- Signal socket
- ISOBUS connection
- Hydraulic top link
- Five double-acting control valves
- · Leakage oil line
- Unpressurised rear return flow
- Air brake
- · Control line power beyond

- · Pressure line power beyond
- · Hydraulic trailer brake
- 7-pin socket
- · Lower link catch hooks
- ABS socket
- Hitch
- Rear PTO (540/540E/1,000)
- Low hitch

#### Intelligent control at the front

The maximum lift capacity at the front is 3,400 daN. The comfort front linkage has optional load relief control, which can be adjusted using the Varioterminal. It uses the double-acting front linkage valve to lower the implement and transfers the weight of the implement to the front axle. This is a particular advantage when operating a snow plough or a front mower in grassland operations, since implement guidance can be quickly adjusted to uneven surfaces. Relief springs for the mower are no longer required.

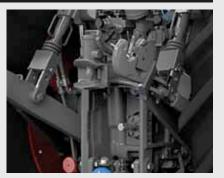
#### The right speed

The PTOs can be easily controlled via the multifunction armrest. External controls are also available at the rear. The PTO speeds (540/540E/1,000) at the rear enable work at a lower engine speed, which means lower fuel consumption. The front PTO (540 or 1,000 rpm) permits operation with a broad range of implements at the front of the tractor.

#### Versatility and performance



On the 500 Vario, the hydraulic connections in the front have their own control values and no longer communicate with the rear valves. You therefore have a full five valves at the rear plus two full valves in the front.



The PTO has outstanding efficiency, since power to the PTO stub flows through a direct drive line from the Vario transmission. At the same time, the rated speeds 540 and 1,000 rpm are already attained at an engine speed below 2,000 rpm, which has a positive effect on lowering fuel consumption.

#### PTO automatic mode



The Fendt Varios have external controls for the linkage and rear PTO. Rear implements are easy to mount. The engine speed can be increased via the rear PTO automatic and the desired PTO speed can be targeted. You save yourself unnecessary steps, for example, when starting the suction for the slurry tank.

#### Integrated front linkage



The front linkage is an integral part of the compact vehicle design. It therefore provides easier and more stable guidance of front implements.

#### Load relief front linkage control



The comfort front linkage on the 500 Vario has optional load relief control. It allows the weight of the implement to be transferred to the tractor over a defined pressure. The pressure can be readjusted during operation. This is especially advantageous for winter operations or with a mower or mulcher, because the weight is shifted to the front axle, which improves steering performance.

#### DCUP/CUP couplings



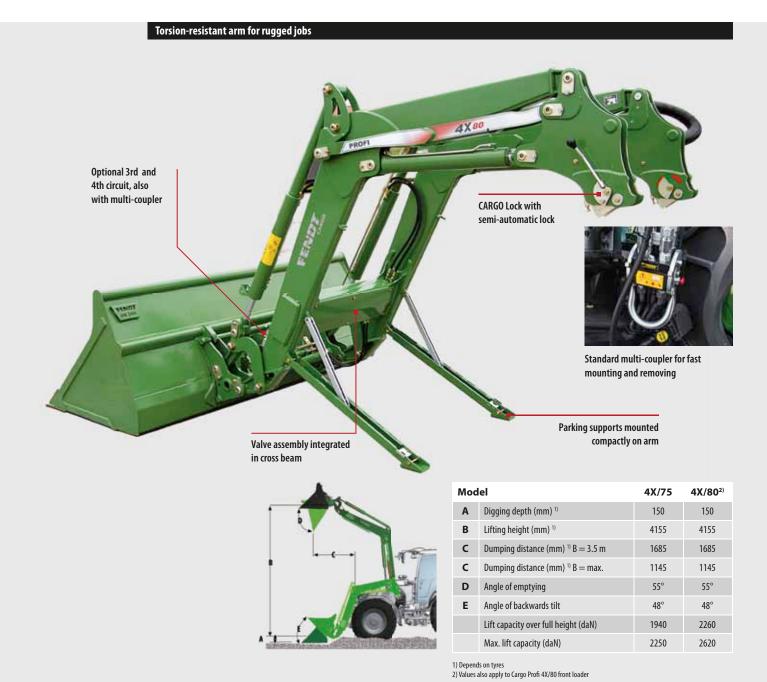
With the DCUP and CUP couplings, the hydraulic valves to be coupled under pressure; mounting and removing implements is easy. The self-closing valve flaps offer secure protection against contamination through dirt or water.

### **Tailor-made and smart**

#### The Vario and Cargo form a perfect unit

The 500 Vario is the perfect tractor for loader work. The compact design of the 4-cylinder engine means agile handling and the overview is ideal thanks to the narrow bonnet. The VisioPlus cab ensures absolutely unique and unprecedented visibility to the raised front loader. High hydraulic capacities at a low engine speed ensure fast lifting movements and precise loader response.

Furthermore, the controls are optimally integrated in the overall operating interface on the right armrest and in the Varioterminal: you control the front loader with your right hand on the crossgate lever, your left hand is free for steering and reversing and you can control the travel speed with your foot. The CargoProfi represents the absolute pinnacle in front loader operation.



#### Smart functions of the CargoProfi

The new Fendt CargoProfi\* is the consistent further development of the tractor and front loader unit. New measuring and tilt sensor systems as well as a job computer permit completely new functions. These are a weighing function for individual and total weight, for example, for monitoring when loading grain, as well as the memo function for saving the positions of the arm and attachments. Limits can also be defined, e.g. lift height

limiting in low buildings. The shake function proves to be very practical. The settings are easy to adjust and view in the Varioterminal.

\*available for the 4X/80 front loader models

#### Perfection for front loader operations



In the 500 Vario, you experience continuous visibility: The front window reaches up into the roof, which permits a full view of the raised front loader.



On the CargoProfi, for example, the tipping angle can be limited when loading very high trailers. The Memo function is especially practical for repeating sequences, for example, the horizontal lower position can be targeted automatically. The weighing function permits monitoring of the weight of the load.

## The features of the Fendt CargoProfi

- Weighing function: Loads are weighed with the push of a button, both individual and total weight possible
- Working range, such as lifting height and tilt angle, can be limited
- Memo function: saves positions for arm and attachment
- End position damping
- Shake function
- Speed-dependent damping (automatic enabling and disabling)

#### **Hinged front window**



On the Fendt 500 Vario it is possible to open the front windscreen when the front loader is fully raised.

#### Settings CargoProfi



Display showing assignment of crossgate lever

Information from the weighing system: individual and total weight Limiting of the working range for arm and attachment





## The sum of the technical solutions creates the technological lead

# Cutting-edge technology united

In the 500 Vario, start-of-the-art technology is optimally merged in a single vehicle, which gives professional farmers and business owners the economic edge.

- 1. Front drive axle with 52° steering lock
- 2. Front linkage with external controls
- 3. Front PTO
- 4. 2 da hydraulic connections at the front
- 5. Planetary final drive
- 6. 4.04 | Deutz engine with 4 valves per cylinder
- 7. Cooler unit
- 8. SCR catalytic converter
- 9. Stepless Vario transmission
- 10. Hydro motor
- 11. Hydraulic pump
- 12. Enclosed 4WD clutch
- 13. Fuel tank with 298-l capacity
- 14. AdBlue® tank with 31-I capacity
- 15. Rear PTO
- 16. Rear axle
- 17. Spool valves
- 18. Rear linkage
- 19. VisioPlus cab with integral automatic climate control and nearly 6  $\,\mathrm{m}^2$  of glazing
- 20. Pneumatic cab suspension
- 21. Multi-function armrest
- 22. Varioterminal 10.4" with integral Fendt VarioGuide automated steering system and ISOBUS
- 23. VarioGuide roof unit
- 24. Air-suspended Evolution Dynamic super comfort seat with climate control, seat heating, pneumatic lumbar support
- 25. Comfort passenger seat with automatic seat belt
- 26. Wide-angle mirror, electrically adjustable, heated
- 27. External rear controls for linkage, PTO and one hydraulic control unit

## Top technology in the Power version

#### **Economy for standard requirements**

Fendt offers the economical Power version for farms with standard requirements. The 500 Vario Power has the most important features, such as the VisioPlus cab and the operating interface on the right armrest, as the Profi and ProfiPlus versions.

#### Clearly laid out 7" Varioterminal

The Varioterminal 7" is the ideal solution for making tractor settings. Like the large 10.4" Varioterminal, it can be operated intuitively, either per touch or using the keys. ISOBUS implement control, VarioGuide and VarioDoc are not available for the 500 Vario Power version.

#### The cab in the Power version



#### **Clever controls**



The control units can be conveniently operated with the crossgate lever and multi-function joystick.

#### Design differences between the versions





#### Passenger seat



A comfortable place to sit: The upholstered passenger seat in the 500 Vario provides a comfortable place to sit.

#### Hydraulics and linkage

The Power version of the 500 Vario is equipped with modern load-sensing technology and a delivery capacity of 75 l/min. Optionally, the capacity can be increased to 110 l/min. The 500 Vario has max. four hydraulic connections, either four at the rear of one in the front and three at the rear. In the Power version, the rear linkage is only available with single-acting valves.



### Fendt 500 Vario Power Version

- VisioPlus cab for best visibility
- 7" Varioterminal for easy tractor and implement control
- Comfortable passenger seat
- Up to four electrohydraulic auxiliary control valves
- Modern load-sensing hydraulics with a delivery capacity of up to 110 l/min (75 l/min standard)

## **Technical Specifications**

#### Fendt 500 Vario Power version



#### Fendt 500 Vario Profi and ProfiPlus version



Photos show optional equipment

Fendt	512	513	514	516
Engine				
Rated power ECE R 24 (kW/hp)	81/110	88/120	99/135	110/150
Maximum power ECE R 24 (kW/hp)	92/125	99/135	107/145	121/165
Rated power EC 97 / 68 (kW/hp)	91/124	99/134	109/148	120/163
Maximum power EC 97 / 68 (kW/hp)	96/131	103/140	113/154	124/169
No. of cylinders/cooling	4/water	4/water	4/water	4/water
Cylinder bore/stroke (mm)	101/126	101/126	101/126	101/126
Cubic capacity (cm³)	4038	4038	4038	4038
Rated engine speed (rpm)	2100	2100	2100	2100
Engine speed at max. power (rpm)	1800	1800	1800	1800
Optim. fuel consumption (g/kWh)	192	192	192	192
Max. torque 1450 rpm (Nm)	550	590	649	687
Torque rise (%)	42	40	38	33
Fuel tank (I)	298	298	298	298
AdBlue® (I)	31	31	31	31
Oil change interval operating hrs	500	500	500	500

Transmission/PTO				
Continuously variable Vario transmission ML 90	50 km/h	50 km/h	50 km/h	50 km/h
Field	Range I: 0.02-28 km/h; reverse 0.02-17 km/h			
Road	Range II: 0.02-50 km/h; reverse 0.02-33 km/h			
Engine PTO rear (rpm)	540/540E/1000			
Front PTO (rpm)	540 or 1000			

Linkage				
Type of control		Electro-hyd	raulic control	
Variable displacement pump capacity (I/min)		Power 75 (	option 110),	
(pressure 200 + 10bar)	P	rofi/ProfiPlus	110 (option 15	58)
Max. lift capacity on the drawbar (daN) 1)	7780	7780	7780	7780
Front linkage max. lift capacity (daN) 1)	3420	3420	3420	3420
Implement weight/front linkage up to approx. (kg)	2460	2460	2460	2460
Max. vertical hitch load (kg) with standard tyres and 50 km/h	2000	2000	2000	2000

Weights and dimensions				
Track width front (mm)	1880	1880	1880	1880
Track width rear (mm)	1860	1860	1860	1860
Overall length (mm)	4453	4453	4453	4453
Overall width (mm)	2451	2451	2451	2451
Overall height cab (mm) without VarioGuide	2930	2930	2965	2965
Max. ground clearance (mm)	530	530	530	530
Wheelbase (mm)	2560	2560	2560	2560
Min. turning circle (m) 2)	5.29	5.29	5.52	5.52
Unladen weight (kg)	6050	6050	6400	6400
Perm. overall weight (kg)	10500	10500	10500	10500

Electrical equipment					
Starter (kW)	3.1	3.1	3.1	3.1	
Battery	12 V / Power 100 Ah, Profi/ProfiPlus 180 Ah				
Alternator	14 V / 200 A				

Tyres				
Standard front	480/65R28	480/65R28	480/70R28	540/65R28
Standard rear	600/65R38	600/65R38	580/70R38	650/65R38
Optional front	16.9R28	16.9R28	480/65R28	480/65R28
Optional rear	20.8R38	20.8R38	600/65R38	600/65R38
Optional front	480/70R28	480/70R28	16.9R28	16.9R28
Optional rear	580/70R38	580/70R38	20.8R38	20.8R38
Optional front	540/65R28	540/65R28	540/65R28	480/70R28
Optional rear	650/65R38	650/65R38	650/65R38	580/70R38
Optional front	270/95R36	270/95R36	270/95R36	270/95R36
Optional rear	320/90R50 <sup>2)</sup>	320/90R50 <sup>2)</sup>	$320/90R50^{2)}$	320/90R50 <sup>2)</sup>

 $<sup>^{1)}\,1\,</sup>daN=10\,N=approx.\,1\,kg,\,^{2)}$  Recommended for row crop tyres, not available from Fendt

= standard	$\square = optiona$
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Equipment levels	Power	Profi	ProfiPlus	Equipment levels	Power	Profi	ProfiPlus
Vario controls				Chassis / safety features			
Multi-function joystick with cruise control, engine speed				Compressed air system			
memory, automatic modes, controls for hydraulics				Automatic trailer steering axle lock			
Varioterminal 7" with touch and key control				Compressed air Duomatic coupling			
Varioterminal 10.4" with touch and key control,			•				
2 camera ports, incl. VarioDoc		<b>—</b> 1)		4WD / differential locks			
VarioDoc documentation system  VarioDoc Pro - documentation system /		1)		Comfort engagement controls for 4WD / differential locks	•	•	•
AgCommand telemetry system		□ <sup>1)</sup>		Rear / front differential with 100% disc locking			
Variotronic implement control (ISOBUS)							1
SectionControl				Power shift PTOs			
Variotronic <sup>™</sup> Headland Management System				Rear PTO 540/540E/1,000 rpm	•	•	
Vario TMS Tractor Management System	•	•	•	Front: 540 or 1,000 rpm			
Preparation VarioGuide automatic steering system				External controls for rear PTO			
VarioGuide automatic steering system VarioGuide light automated steering system							1
VarioActive steering			•	Hydraulics			
<b>,</b>				Load-sensing system with 75 l/min delivery capacity	•		
Cab				Load-sensing system with 110 l/min delivery capacity			
Split windscreen and door on right				Load-sensing system with 158 l/min delivery capacity			
One-piece windscreen	•	•	•	Electrohydraulic rear linkage sa (EPC) Electrohydraulic rear linkage da (EHR), with external			
Mechanical cab suspension				controls			
Pneumatic cab suspension				Control with linear elements			
Height and tilt-adjustable steering column				1st and 2nd hydraulic valve at rear			
Comfort seat, air suspended with back rest	•		•	3rd hydraulic valve at rear			
(w/o rotary adapter/seat cushion adjustment, simple arm- rest adjustment)				4th hydraulic valve at rear or 3rd hydraulic valve at rear			
Super comfort seat with seat heater, lumbar support				and 1st hydraulic valve in front			
Super comfort seat Evolution Dynamic with climate con-				4th to 5th hydraulic valve at rear 1st to 2nd hydraulic valve in front			
trol, seat heater, lumbar support and seat suspension				Radar sensor			
(only with compressed air system)				Top link rear hydraulic			П
Passenger seat with automatic seat belt				Hydraulic power beyond connection			
Comfort passenger seat with automatic seat belt		•	•	Hydraulic valve actuation crossgate lever, c			
Radio mounting kit with 2 stereo speakers				onnect-under-pressure couplings rear			
Radio CD MP3 Blaupunkt with 2 stereo speakers 4 stereo speakers				Double connect-under-pressure lever couplings rear			
Air-conditioning				Easy ballast weight pick-up without front linkage Front linkage da with external controls			
Automatic climate control				Comfort front linkage da, with position control,			H
Pollutant filter (aerosol)	•	•		external controls			
Segment wipers front				Comfort front linkage da, with position control and load			
Parallel wipers front				relief control, external actuation (only together with rear			
Rear window heated				linkage da)			
Ext. rearview mirror, mechanically adjustable Ext. rearview mirror, electrically adjustable, heated							
Ext. rearview mirror and wide-angle mirror mechanically		Ш		Body			
adjustable				ABS trailer sockets	_		
Ext. rearview mirror electrically adjustable and				Mechanical hitch			
wide-angle mirror heated				Auto. hitch with remote control, rear			
Interior rearview mirror		•	•	Ball-type coupling, height adjustable Ball-type coupling in the bottom hitch			
Corner lights / chrome trim on direction indicators				Ball-type coupling long in the bottom hitch	- H	- H	П
Work lights roof, 4 rear, 2 front Work lights A-pillar, roof front, mudguard rear				Hitch			
Work lights Xenon A-pillar, roof front, mudguard rear				Swinging drawbar			
Work light LED A-pillar, mudguard rear				PitonFix			
LED rear lights				Rotating beacon left and right			
Ambient lighting	•	•	•	Pivoting front wheel mudguard Front weights, various sizes			
Bracket for auxiliary devices				Ballast weights for rear wheels			
Cooling compartment				bullast weights for real wheels			
Electric battery disconnect switch  Add. storage space, 12 Volt left, light in roof liner left				Front loader			
Aud. Storage space, 12 voit left, light in roof liner left							
				Front loader attachment parts Front loader Cargo 4X/75			
Engine				Front loader Cargo 4X/75 Front loader Cargo 4X/80			
Fuel pre-filter				Front loader Cargo Profi 4X/80			
Heated fuel prefilter		•					
Preheater package (engine, transmission, hydraulic oil)				1) only for 10.4" Varioterminal			
Exhaust brake							
Transmission							
Shuttle function, stop-and-go function Acoustic signal when reversing	•						
Acoustic signal which reversify							

## Leaders drive Fendt.

You must experience for yourself the ingenuity of the Fendt Vario down to the very last detail. Test a Fendt, convince yourself and make the right investment.



#### **Invest in profitability**

Overall profitability distinguishes the entire product line of the premium brand Fendt. The efficiency of the products guarantees the best cost-effectiveness per hectare. In combination with the extremely high retention of value of a Fendt, you also get an unbeatable resale value at the end of your tractor's service life. As a trendsetter, Fendt continually sets important new standards and installs technology that continues to be in demand in the future. Add to that the high quality, which stands for operational reliability and a long life. The total is a retention of value that only Fendt can offer you.



#### **Certified quality**

We achieve a constant, excellent premium quality through first-class workmanship and use high-grade materials for all components. In the development phase, the tractors undergo comprehensive testing, with up to 10,000 engine hours under the toughest conditions, to thoroughly test the durability of components. In series production, Fendt relies on comprehensive testing processes to ensure that each individual tractor leaves the factory with the highest quality.



#### We offer more - join us!

Fendt not only offers high-quality products with cutting-edge technology, but also assists you in getting the most out of your Vario. With the help of our Fendt driver training Fendt Expert, you can further optimise profitability and learn to make all the settings and adjustments to drive at an absolute optimum in different operations.



#### More freedom for investments

Tailor-made financing from AGCO FINANCE and the customised service package: A custom financing package with attractive conditions and flexible terms offers you an ideal opportunity to match your investment to the needs of your farm or business. With a Fendt Service Package, you also have servicing and repair costs under control. When purchasing your tractor, you can already plan the prescribed service work based on attractive fixed prices – with the Service or comprehensive ProService package.



#### Efficiency – for our customers' success

Efficiency is the recipe for successful financial management in agriculture. We make no compromises when it comes to efficiency, because our objective is to be the leader for cost-effectiveness per hectare and kilometre. Then the best technology is just enough, technology like that which we build into the tractor: for example, the highly efficient Vario drive train and the fuel-saving SCR technology in combination with TMS.

## FENDT

## **Leaders drive Fendt**



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#### Fendt is a worldwide brand of AGCO.

All data regarding delivery, appearance, performance, dimensions and weight, fuel consumption and running costs of the vehicles correspond with the latest information available at the time of going to press. Changes may be made before the time of purchase. Your Fendt dealer will be pleased to supply you with up-to-date information.