

Fendt FOCUS

MAGAZINE FOR PROFESSIONALS

Heavy rain and periods of drought

► Growing crops under difficult conditions in Australia

Responsible for 1,850 ha of land

► Agronomist Eliska Nováková has it all under control

The David among Goliaths

► A Fendt 1050 Vario in an ore mine.



Our compact Varios.
Fendt 200 and 300 Vario can deliver.

1962

Being both independent and efficient – it is what farmers have always had to do to get the job done and be economical at the same time. It's what inspired Fendt to start producing the F12 GT equipment carrier from 1957. Five years later, it was awarded the Silver DLG Coin as the "Fendt one-man system".

The reason being, "The implement carrier and the implements are very well aligned in terms of layout, drive and visibility. They can easily be used single-handedly even in tough conditions."

FendtONE – ONE system to seamlessly connect office and machine.

In a figurative sense, Fendt has gone back to offering a single-handed system. Not in the shape of a tractor, but now in the 21st century as ONE system that seamlessly connects the office to the machine. Whether you're at the tractor terminal or the office PC, the user interface is the same: same buttons, same symbols, same positions. The controls are uniform and intuitive.

All job data (field data, machines, etc.) can now be created and managed on the FendtONE platform – wherever you are. Collected into the same job order, the data is sent directly to the machine terminal. Once the job is completed, a detailed confirmation is automatically sent to the customer. FendtONE is an open and vendor-independent system, with the ability to manage mixed fleets.

In the 1960s when we had the tool carrier, it was still all about having one farmer do the work on one machine. Today, we have one person optimising the entire work process on the farm. And all without dozens of programs and apps. Just a (one-man) system: **FendtONE**.



▲ **Revolutionary:** One person can comfortably do the work alone – that was the idea behind developing the Fendt tool carrier in the 1950s.

2019



▲ **Evolutionary:** It takes just one person to easily create, manage, control, document and, of course, complete orders – that's the idea behind FendtONE.



◀ As a trained farmer and machine engineer, Peter-Josef Paffen likes to keep a close eye on Fendt technology himself.

DEAR READER,

Despite all the criticism and gloomy predictions, farming is still one of the most important and, in my opinion, one of the most beautiful professions that exists. I myself grew up on a farm near Aachen and trained as a farmer.

All the social debates today – from the Fertilisation Ordinance, to plant protection and animal husbandry, to the possible use of genetic engineering – they all matter. But these debates should be considered, fact-based and also self-critical, because, with every purchase they make, it's the consumers who decide what kind of farming they want. And what they are willing to pay for it!

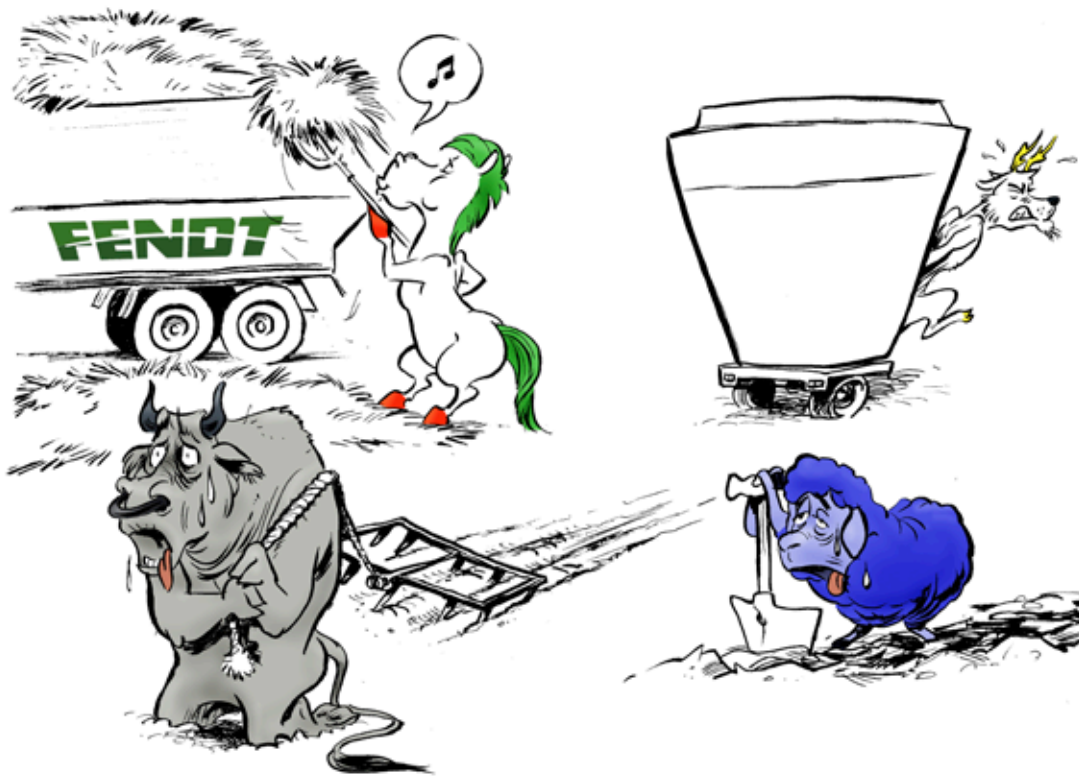
I'm quite clear on this – whether conventionally or organically produced, I want to know how and where my food was made. I want standards that are respected and controlled. That's why it's important to me that Germany retains its farming culture.

And in general, I firmly believe that only with modern agricultural technology can we feed the growing world population and build sustainable trust in society.

Kind
regards,

Peter-Josef Paffen
Chairman of the AGCO/Fendt Executive Board





▲ Where others falter, the new Fendt 314 Vario has 10 hp more to give. Read all about the new multi-performance concept, DynamicPerformance, on page 14.



▶ 18



▶ 26



▶ 48



▶ 06

COVER STORY

- 06 Our compact Varios:
Fendt 200 and 300 Vario can deliver

REPORTS

- 18 Let's talk fruit: on everyone's lips
- 34 Road maintenance service with a Fendt 718 Vario,
with the Scheifling road maintenance department
- 48 Pig breeding and animal welfare – a winning
combination

FENDT WOMEN

- 26 "I am responsible for 1,850 hectares of land." –
Agronomist Eliska Nováková is the plant manager
of Maiwald AG in the Czech Republic

INTERVIEW

- 30 "It's Fendt. Because we understand agriculture."
We talk to Peter-Josef Paffen, Chairman of the
AGCO/Fendt Management Board

FENDT INTERNATIONAL

- 40 Heavy rains and periods of drought –
Growing crops under difficult conditions in Australia
- 52 Uphill. Downhill. Good luck!
Fendt 1050 Vario ore mining in Styria

FENDT TECHNOLOGY

- 38 Fendt VarioGuide Contour Assistant:
Are you making full use of your tractor's potential?

NEWS

- 46 profi survey on spare parts prices
- 46 Fendt is the main sponsor
of the 87th German Farmers' Day
- 47 Fendt 1000 Vario – even safer and audibly better



▶ 34



▶ 52



▶ 38



Fendt FOCUS SPECIAL

All of the **new features** from Fendt and even more interesting reports can be found in our Fendt Focus special edition for **Agrotechnica 2019**. **We hope you enjoy browsing and reading!**



When you think of Fendt, the first thing you think about is tractors. When you think of Fendt tractors, you think of high-powered tractors. But even the compact Fendt 200 and 300 Vario series can pack a punch. There's a reason why the Fendt 211 V Vario was awarded **Tractor of the Year** in the category **Best Specialized** (2017) and the Fendt 313 Vario in the category **Best Utility** (2018).

OUR COMPACT VARIOS

Fendt 200 and 300 Vario can deliver.



Since 2017, the 200 series comes ready for lane guidance. Two companies have developed systems specifically for this purpose, so that fruit, hop and wine-growing companies can benefit from the economic and ecological advantages of automated steering.

FENDT 200 V/F VARIO WITH BRAUN COMBO.

Automatic control of complex implement combinations in viticulture.

As an interesting alternative to the use of herbicides, mechanical weed control in the substrate is experiencing a comeback in viticulture. The most efficient way to work is by using implement combinations consisting of intermediate axle and rear attachments. Accurately steering in the narrow vine tracks, while constantly controlling and steering the intermediate axle implements on both sides and operating another implement at the rear, requires exceptional concentration to avoid damaging the vines or guide wires.

At Agritechnica 2019 and together with Braun Maschinenbau GmbH, Fendt will unveil a unique all-in-one system that makes it much easier to drive equipment combinations (especially with intermediate axle attachments), increases the quality of work and enables complex combinations that were previously not navigable.

This system takes over the control of the tractor/implement combination. It means the tractor can be automatically steered whilst constantly adapting the equipment to the environment.

Relaxed and fatigue-free working

The entire system is based on a Fendt 200 Vario, which houses a Braun intermediate axle frame with a two-sided vertical lift and various implements. A Braun mulcher works at the rear. The Braun VPA (Vineyard Pilot Assistant) system collects and passes on the steering data. The system consists of a laser, a gyroscope, the VPA control unit and a terminal. The laser scans the environment and detects the ground contour, vines and stakes, amongst other things. The gyroscope, a rapidly rotating gyro that rotates in a moving bearing, which picks up the tractor's 3D position. The information from the VPA system is transmitted to the Fendt 200 V/F Vario via the ISOBUS interface. The tractor performs the steering commands and automatically drives exactly in the middle of the vine row. The information is also sent to the intermediate axle implements which are then independently controlled in height and width. The implements work at an ideal distance from the vines, which improves the quality of work and minimises



▲ **Use of complex implement combinations:**
The lower number of cross-overs not only saves time and resources, but also results in less ground compaction. The travel speed can be increased to over 8 km/h.



damage. The implement attached to the rear is adjusted in its width according to the scanned information. The system is activated at the beginning of the row, when the intermediate axle implements automatically take up their ideal working position. This is also a safety feature, so that the implements don't enter their working position unintentionally. With the help of row-end recognition, the intermediate axle implements automatically go into park position at the end of the row.

The components of the implement combination can also be used individually or in other combinations, of course. For example, an intermediate axle could be used with a trailed sprayer.

The VPA system for controlling the equipment is now available. The complete functionality including RCP tractor control can be purchased from Spring 2020 onwards.





TRIED AND TESTED

A wine-growing company relies on lane guidance with Fendt & Reichhardt control technology.



◀ What we can do with ultrasonic sensor technology: Mulching, plant protection, chopping and soil cultivation are all carried out with PSR Sonic. Up to +/- 2 cm accurate even in poor visibility.

For more than 30 years, the Weil family has enjoyed the benefits of Marktoberdorf's solutions. Both on its own 42 ha of land and for contract work. In the early 1980s, technology in viticulture was increasingly gaining ground. Harvesters now make grape-picking easier. Tractors were used for planting vines, towing the sowing machine behind them. But how do you create a new vineyard in economical way? The answer lies in straight vine rows. Laser and GPS control are among the various methods that Rainer Weil has used

» WHY SHOULDN'T WINEGROWERS JOIN OTHER FARMERS IN TERMS OF AUTOMATED STEERING?

throughout his career. "We winegrowers have different requirements for a lane guidance system than arable farmers," he says, explaining his search for a modern guidance system suitable for viticulture. When replanting, the contractor relies on GPS control for the linear arrangement of the vines in the shape of trellises. But older crops – some of which are still planted by hand – are not always straight and have bends or kinks. And that's where an alternative steering system comes in. One that focuses directly on the vine.

The tractor plays a key role in mechanising work in the vineyard. In the case of this 56-year-old winemaker, he clearly needs reliable, motorised machines. And he has found them in his four Fendt Varios. The technology must be effective and ready for use at all times, because every single row of vines is traversed 20 to 30 times over the course of a year. If you can cut out just one passage, this not only has a positive effect on the bank account, but also saves the environment and the soil. A rethink is taking place. New things are being tried out. Not only in the choice of varieties, but in everyday work. The first step is to combine individual jobs into one task.

Fewer crossings = fewer emissions

Different tools can be added to the tractor, both for plant protection and for foliage work. "You get used to the easy life," Weil admits openly, which is why he is starting to look for solutions to help. "10 years ago we still had one hand on the gear stick and one foot on the clutch. Tractor development then gave us the gift of the Vario gearbox for vineyard trac-

tors, making it easier to work comfortably in the cab. Why shouldn't winegrowers join the farmers in their automated steering systems?" When the GPS tracking system is used on arable farms, A-B lines are usually set out to accurately steer straight when cultivating the soil. Driving straight is not always feasible in viticulture.

With his son Christopher Weil, the 4th generation is now in the starting blocks. A student at Geisenheim University, he takes a break from his studies and gets to work on the family business. He's the one who deals with the details of lane guidance systems for viticulture. He already mastered sensor technology while preparing for his bachelor's thesis. And that knowledge is now coming into fruition. Fendt and Reichardt have been offering track guidance with ultrasonic sensors for the 200 Fendt series since 2018. This gave the customer the choice between two systems. There's the row-controlled track guidance system with ultrasound, and the position-led track guidance system using GPS. The system must have an open interface in the cab, which integrates the steering valve, the cabling, additional sensors and the safety system.



Centimetre-precision control

Christopher Weil enters the next row of vines and activates the steering system. "They say that two is always better than one. It's similar here with our ultrasonic sensors," says the young winemaker. Two sensors are mounted on the front right and left of the Fendt 209 V Vario, to detect the distance to the measuring object. They scan the foliage of the vines, which works both in the summer months with a homogeneous leaf mass and in winter with just a rudimentary surface. Now the job automation starts its work, takes over the steering of the tractor so Christopher can take his hands off the steering wheel and concentrate on spraying pesticide at the rear. Gone are the days when you could only turn around quickly to glance at the attached equipment. Is the sprayer boom optimally guided with this multi-row approach? No longer an issue for the wine-growing student, because the Fendt steers through the vine rows with centimetre precision, recording them on both sides and ensuring that the pesticides are applied where needed. Often there is a kink in the trellis or the gaps between the rows might vary. "This would scupper

the GPS system, whereas ultrasonic sensors can still deliver," explains Rainer Weil. That's the advantage of ultrasonic sensors. The sensor angle can be adjusted to allow the PSR Sonic to be used at different growth stages, pruning types and vine spacing in viticulture.

As fantastic as all this is, Weil wants more. He dreams of run-out detection and the tools automatically adjusting after the run-out is confirmed in the tractor software. "Every slope has its own peculiarity. New settings have to be made at each run-out," says Rainer, describing working with front/intermediate axle or rear-mounted implements. He is convinced that further improvements will be made very soon. Faster startup, higher quality of work from third-party workers, easier work and more job safety are the most important objectives for him.



◀ Weil's grapes go to the local cooperative "Wachtenburg Winzer eG", which is supplied by 24 winegrower families. In the performance test of German cooperatives they came first place three times in the Palatinate region: In 2014, 2016 and 2018.

HOW IS CLIMATE CHANGE AFFECTING VITICULTURE?



Gradual climate change is also being felt by German winemakers. A total of 6 of the 13 German wine-growing regions for choice and special quality wine are within the borders of Rhineland-Palatinate. More than 65% of German wine is produced in the Rhineland-Palatinate wine-growing regions of Ahr, Middle Rhine, Moselle, Nahe, Palatinate and Rhine Hesse.

The best-known local wines would include Riesling, Pinot Blanc and Pinot Gris, as well as Pinot Noir and Portugieser. However, the average temperature is increasing year on year while the precipitation remains constant at just under 500 mm per year. This paves the way for Chardonnay, Merlot and Cabernet Sauvignon joining the varieties along the German Wine Route.

FENDT 314 VARIO

Rated power*	kW/hp	97 / 132
Max. performance*	kW/hp	105 / 142
Max. performance with DP*	kW/hp	112 / 152
Max. torque	Nm	595

* (ECE R 120)

BETTER PERFORMANCE

The Fendt 300 Vario series welcomes a new high-end model.

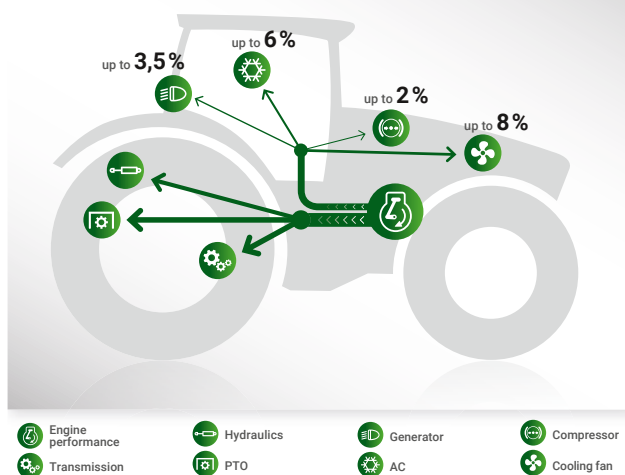
To mark this year's Agritechnica, the 300 series will welcome the new top model Fendt 314 Vario with new multi-performance concept **DynamicPerformance (DP)**. This is a demand-based control system that releases 10 hp more power – exactly when it is needed. It is not tied to driving speeds or special operational tasks, but works purely dynamically. Typically, the engine power of tractors is distributed across numerous power consumers – such as the PTO, hydraulics, engine fans and air conditioning. The system detects when certain components need more power and then delivers it through smart control.

The DP high performance concept is specially designed for stationary-PTO work on dairy farms and biogas plants – like at the feed mixer or slurry stirrer. And during transport and field work, DynamicPerformance (DP) kicks in where needed by power consumers.



Fendt DynamicPerformance

Power distribution – main consumers and auxiliary users





The 10 hp added power of the Fendt 314 Vario is great for farms that need a more compact, lightweight and agile tractor, but can also meet greater power demands when needed.

End-to-end and innovative operating philosophy – FendtONE

Usually, smaller series gradually inherit the key features from the large tractor sector. This time it's different. Just like the Fendt 700 Vario, the Fendt 314 Vario comes with the new operating philosophy FendtONE.

FendtONE combines the familiar operation of the tractor with a platform for planning or control tasks that classically would take place in the office. To find your way around quickly, both the terminal view and the display on the mobile end device or PC have a uniform, consistent look.

FendtONE helps the user optimise their work processes, get the most out of their machines and ensures compliance with legal documentation regulations.

You can use smart farming applications on FendtONE, like the Fendt Guide Sync tracking guide function for managing field data and logging tractor use, and the Fendt Task Manager application for efficient task management. With FendtONE, users can plan their orders and field data on a computer, tablet or smart device wherever they are, then transfer them to the tractor on the mobile network.

More ergonomic in its use

When we developed the new operating philosophy for the Fendt 700 Vario and the Fendt 314 Vario, we focused on intuitive and individual operation as well as ergonomics. We have added buttons and functions to the new multifunction joystick. The cross-shift lever has been ergonomically improved,

so you need fewer motions when operating different attachments. You can choose the allocation of the buttons on the armrest, to further personalise the controls. As well as the well-known crossgate lever, the new 3L joystick with up to 3 operating levels and up to 27 functions is also available as an option.


3x more display area and super sound

The increasing number of terminal applications means you need more display room in a tractor. The Fendt 314 Vario comes with the option of tripling the display area, with the new FendtONE operating philosophy. The combination of 3 display options includes a new 10" digital steering column display (dashboard), a 12" terminal on the armrest and an optional 12" terminal in the roof liner.



▲ With FendtONE, users can plan their jobs and field data on a computer or tablet wherever they are, then transfer them to the tractor via mobile network.

The driver can choose the design of the display and has a better overview of the full range of tractor functions. And if you enjoy good-quality sound, the Fendt 314 Vario is the right choice. An infotainment package and 4.1 sound system including subwoofers are available as optional extras. The infotainment package includes a hands-free speaking system with 8 microphones installed in the roof liner, for the best call quality in any work mode.

Detailed information about FendtONE, the new driver's workstation and the infotainment package can be found in the Fendt FOCUS special magazine, with all the news from Agritechnica in the article "It's Fendt. It's ONE. It's FendtONE." 

MORE INNOVATIONS ON THE FENDT 314 VARIO

- The 12" terminal shows all the assistance systems: Fendt Guide Contour Assistant, SectionControl and VariableRateControl.
- The electronically-controlled Visctronic fan runs quieter and more efficiently, as it is controlled according to the required cooling capacity.
- Connections for a double-acting valve in the front panel to make it easier to attach and detach front units with their own hydraulic function (e.g. hydraulic folding of the side guard on front mowers).
- The Fendt 314 Vario complies with the European emissions standard, Stage 5.
- From Agritechnica, the Fendt 314 Vario, our new top-end model, will be available for order in Profi and Profi+ versions and will be available for delivery from June 2020.





ON EVERYONE'S LIPS

Under the umbrella of the **Sachsenobst** brand, apples are the main produce, grown in the scenic beauty of the Saxon land of castles and heathland – using both conventional and ecological methods. But the main agricultural business is a multi-layered mixed holding.



In the heart of Saxony lies a region that is popular not only because of its stunning hills and cultural history – this is Saxon fruit country. Many of the attractions here are literally 'on everyone's lips', with numerous extensive orchards making produce that is sought-after far beyond Saxony.

“DURING THE SEASON, THE FRUIT GROWER DRIVES UP AND DOWN THE ORCHARDS.”

In the golden triangle between Leipzig, Dresden and Chemnitz, the favourable conditions ripen the most delicious apples, pears, quinces, plums, sweet and sour cherries, strawberries, red currants and gooseberries in huge quanti-

ties every year. Under the name 'Sachsenobst' these fruits and their bi-products, especially fruit juices and fruit wines, are successfully marketed by Obstland Dürreweitzschen AG.

The apple harvest is in full swing. The dynamic 200 P series Fendt Varios drive through the narrow 3.3-metre wide paths between the rows of the apple orchard. In tow is a picking cart fully loaded with wooden boxes. These are removed at regular intervals, so that they can be painstakingly filled by hand.



▲ Spring clean – with 5 equipment setups, the alleys are worked and the ground is loosened for the red currants.

The 800 and more pickers have to pay special attention when picking apples: Is the apple ripe, does it have traces of gnawing, bruising, sunburn or even hail damage? The fruits are sorted accordingly. Last year, the harvest started early. Cold nights are called

for. Because green apples gradually turn red only if they have the right temperature difference. They shine in the

“17 FENDT 200 P VARIO – EACH ONE GIVES OUT BETWEEN 1,000 TO 1,200 HOURS A YEAR.”

Fendt colours – Nature Green with red tones. When the boxes are full, the Fendt is put to work again. A special rear



forklift lifts the filled boxes. The rear hydraulics need to be sensitive; a requirement fully met by this small bundle of energy from the Allgäu. There's no 'Shake and quiver, little tree' called for here. Any small, uncontrolled movement like that can make the

apples fall onto the wooden wall of the box and get bruised; the harvest can no longer be marketed as highly-prized fruit. Once the box has been lifted, the 200 model moves off smoothly, without any jolts. Like the large Varios, this narrow-gauge tractor

is also equipped with the Vario gearbox, which allows for rapid acceleration without switching gears.

Smooth logistics

The load is collected, box by box. On its spring-loaded front axle, it glides through

the rows of trees, over the traverses to the entrance of the orchard. This is where it transforms into the road vehicle – under the same conditions. “It's the combination of the hydraulics, spring-loaded front axle and step-less Vario gearbox that makes this nar-



▲ Advantage of the swinging power lift – precise alignment of the implements and precise control of the rear lift truck.



▲ Plant protection – the use of multi-row processes is important for a driver to achieve greater coverage.

“IT’S THE COMBINATION OF THE HYDRAULICS, SPRING-LOADED FRONT AXLE AND STEPLESS VARIO GEARBOX THAT MAKES THIS NARROW-GAUGE TRACTOR THE BEST PURCHASE FOR BOX LOGISTICS.”

row-gauge tractor the best purchase for box logistics,” says Jan Kalbitz, CEO of the fruit-growing business.

And so apple variety upon apple variety is picked, sorted by commercial and industrial produce, sold, stored or processed onsite. How much will be left at the end of a year? Every penny counts. If the quantity is good, the price is bad. If there are few apples, you can get a good price for quality produce, while industrial produce is processed into purée, juice, etc. The price per kilo for that is usually

way down low. This is another reason why Obstland Dürreweitzschen AG has chosen Fendt. The slightly higher purchase price keeps the follow-up costs low and makes them manageable. The reliability of the tractors proves it – no breakdowns, low maintenance and low diesel consumption. And you need support during peak hours, two service partners are on hand to ensure that the harvest resumes quickly within a very short period of time.

As we all know, after one harvest, the next is just around the corner.

The next assignment is already planned for November – tree care. The crowns of the apple trees are topped on both sides. Full crowns, as you see in orchards, are not wanted even in the production of organic apples. This is the only way to reduce the pressure of illness. The two rows of trees must be cut evenly, so that the trees bear fruit again the following year.

Winter break. Sniff your way through. Refuel, or rather carry out annual maintenance work. This is a must, because each of the 17 Fendt 200 P Varios gives out 1,000 to 1,200 operating hours per year. Since 2012, this fruit producer in Saxony has been putting the technology from the Allgäu to good use. In the past eight years, around 40 tractors have been sold, some





OBSTLAND
**SACHSEN
OBST**

OBSTLAND DÜRRWEITZSCHEN AG

- **Founded in:** December 1990
- **Location:** Grimma
- **Employees:** approx. 400
+ seasonal workers
- **Climate:** mild climate, balanced rainfall
- **Industry sectors:** Fruit growing, field management, fruit processing, fruit marketing
- **Production:** 1,300 ha of fruit trees (approx. 400 ha organic; transition from 2003), 40,000 t of fruit
- **Fruit varieties:** Apples, pears, plums, sweet cherries, sour cherries, red currants, gooseberries, hazelnuts, strawberries



▲ (from right to left) Jan Kalbitz, CEO of the fruit producer company, and his dealer, Klaus Voigt from BayWa AG, Wurzen.



of them resold already. “There's a level interplay of operational requirements, product and service,” explains Jan Kalbitz. He

**“THE
COMBINATION
OF OPERATIONAL
REQUIREMENTS,
PRODUCT AND
SERVICE IS
CONSISTENT.”**

doesn't want to rock that boat, just like he doesn't want to shake his apple trees.

Mid-March. The early season now starts for the fruit grower. Especially in organic apple cultivation, it's important to pick the right time for plant care and protection measures. Since you're limited in terms of the solutions and methods you're allowed to use, the system is based on three pillars: Measures to reduce diseases and pests, promote and protect functional biodiversity and provide plant protection measures. The grass growth between the rows of trees is partially mulched while weeds are removed between the trees by a cultivator. Again, precision is required. The driver must steer the attachment as close as possible to the tree trunk without injuring it. For this, lifting power is needed at the front attachment – the Adelhelm cultivation technology is heavy, so high working speed must be guaranteed for this to work. Once again, the Fendt 200 model shines in its



The video of our visit to Sachsenobst can be found on www.Fendt.TV

triumph – constant traction without switching gears. Agility and dynamics combined with a unique smoothness. Ultimate comfort for the driver. Drive slowly when mulching dense weeds; for less dense weeding, drive faster and continuously, without changing gears or interrupting the traction. The TMS controls the engine rpm and gearbox ratio for the ultimate in cost efficiency.

During the season, the fruit grower drives up and down the orchards, monitoring the amount of pathogens and fruit growth. Plant protection measures may be carried out to prevent the spread of diseases such as mildew or apple scab. Pests like codling moths must be tackled if they become rife. To defeat apple scab and other fungal diseases, organic apple producers have only three active ingredients they can use, which they often combine or use alternately. Copper, sulphur and potassium bicarbonate, otherwise known as baking powder. “Unlike some synthetic fungicides that pene-

trate the plant, these three active ingredients stay on the surface and only work right there,” explains Jan Kalbitz. This means the rain washes them off and the sun's rays decomposes them. So, organic fruit farmers have to treat their trees regularly to protect them from fungi. Effective work processes are required. With multi-row spraying, the active ingredient reaches a number of apple trees at the same time. Enter the unique technology from Fendt – lockable rear hydraulics. This is the only way to use the sprayer where it is needed, without automatic removal.

Now the apple specialist has done everything possible for a successful harvest, thanks to these little helpers. Obstland Dürreweitzschen AG sets standards in the production of organic apples. Just like Fendt did 10 years ago, when it introduced the Vario gearbox to its specialist 200 series tractors. **F**

► On the road with the 3R2 mist sprayer. According to University & Research Centre in Wageningen, the sprayer offers a reduction in drift of 99.7%







“I’M RESPONSIBLE FOR 1,850 HECTARES OF CROPS.”



Large farms require large machines and a lot of organisation. Agronomist Eliska Nováková is the Operations Manager at Maiwald near Prague in the Czech Republic. She coordinates daily jobs, machine operations and plans the soil work.

Maiwald AG manages arable farmland and produces organic eggs for supermarkets throughout the Czech Republic. Maiwald AG's fields are located mainly in Benátky and Litomyšl about 150 km from Prague. Cereals, rapeseed, buckwheat and maize are mainly grown here. As a

trained farmer, Eliska Nováková has been on the farm since 2017 and plans and organises Maiwald's orders, machines and employees. “I'm responsible for planning the sowing, plant protection and soil cultivation work over 1,850 hectares of farmland. My planning depends on me

◀ Healthy root formation – Eliska Nováková checks the plant growth.

monitoring the crop rotation, the stroke size and the water table on the fields,” explains Eliska.

“As an agronomist, you need precise knowledge of the soil conditions, legal regulations and good planning skills. You also need to know the machines, employees and fields really well,” says the Operations Manager, describing her job requirements. During the season, she often works around the clock and spends a lot of time in the company car and online; she needs to keep a constant eye on weather and field data while maintaining close contact with the employees. This

gives her the chance to respond quickly to weather changes – a short reaction time is crucial, especially in plant protection.

The self-propelled Fendt Rogator 655 plant protection

**“I NEED TO KNOW
THE MACHINES,
EMPLOYEES AND FIELDS
REALLY WELL.”**

sprayer has been used on the farm since May 2018. The company was thrilled with the stability of the boom and the area coverage of the sprayer. The application accuracy and manoeuvrability of the self-propelling machine

▼ Together with her colleagues, Eliska checks the machine settings and the results of the soil cultivation.



are of a particular advantage when the weather is changeable – with the conditions changing within a matter of minutes, the legal requirements still need to be complied with. The rising prices of pesticides and fertilisers as well as the volatile prices for harvested material increase the need for steady application volumes and high area coverage, to make work economical.

Large machines for large areas

As well as the Fendt Rogator, the farm runs two Fendt 936 Varios and two Fendt 1050 Varios, which are used for

◀ Final words before she sets off in her Fendt Rogator 655.



▲ "Colleagues like this make teamwork a lot of fun," says Nováková.



▲ The early bird catches the worm – Eliska Nováková loves sharing her passion for farming with the little ones.

IQ EGGS FOR MORE IODINE IN THE DIET



- Germans eat an average of 235 eggs a year. Eggs are popular throughout Europe and are known for being healthy.
- Maiwald AG produces 140 million 'IQEjce', or 'IQ eggs' a year. These IQ eggs are organic eggs with a particularly high iodine content. The chickens are fed with house-made buckwheat and seaweed, to increase the content of selenium and iodine in the egg.
- These trace elements are mainly found in salt and sea fish as well as seafood. People who rarely eat fish or seafood can now meet their nutritional needs with these trace elements in the IQ eggs.
- The house-made feed mixture for the chickens guarantees a consistently high content of the trace elements.

heavy soil cultivation, sowing and removing harvested material. In transport mode, the drivers especially appreciate the small turning circle of the 1000 series and the way

Rogator 655 has already been used on a total of 8,500 ha. The intuitive driving and, above all, the familiar Fendt operating concept made it easy for the drivers of Maiwald to switch between the different machines.

“THE APPLICATION ACCURACY AND MANOEUVRABILITY OF THE SELF-PROPELLING MACHINE ARE OF A PARTICULAR ADVANTAGE WHEN THE WEATHER IS CHANGEABLE.”

the large-volume tyres protect the soil. “Last year we had too little rainfall and very high temperatures in the summer, which made field work difficult,” says Nováková, describing the challenges of 2018. The Fendt

Eliska Nováková joined Maiwald in Spring 2017. She came from a nearby farm where she grew up with her two sisters and brother. Her brother continues to work for the family business. When she's not working, Eliska likes to go hiking or climbing or spend time with her boyfriend and family. **F**

*5 FACTS ABOUT
PETER-JOSEF PAFFEN*

- Favourite food: Wild
- Favourite drink: An honest beer and good wine
- Writing utensil: Fountain pen
- Motto: Take a humble approach to all tasks!
- Current favourite saying: It's Fendt.



IT'S FENDT. BECAUSE WE UNDERSTAND AGRICULTURE.

Peter-Josef Paffen has been working for the Fendt brand for 21 years. Since 2012, not only has he been the Head of Fendt, but also the face of the brand. There's no field day, no trade fair, no dealer event, where he is not at the front, motivates everyone to achieve top results. In this Fendt FOCUS interview, he reveals why he gets so involved and what new ideas drive him.

Mr Paffen, Fendt is part of the American multi-brand Group, AGCO.

What do you think Fendt stands for today?

As ever, Fendt stands for quality – nothing has changed in the last 90 years. That's what we strive for. Quality in terms of the reliability and durability of our machines, but also how we treat colleagues, sales partners, competitors and customers. We want to foster a corporate ethos that is open and respectful. This includes when we have different opinions – when we are divided, we come together and find a proper solution. That's the Fendt spirit. Fendt also stands for innovation, of course, because we want to offer professional farmers solutions to make their work effective. Nowadays, that applies not just to machines, but also smart, digital systems.

So, is Fendt in competition with Amazon or Google?

Of course! (*laughs*) No, we are sticking to our core business – farming equipment. But it's no longer just a matter of building good machines. Farmers need solutions to be able to run their business easily and effectively.

Instead of machine improvements, today it's all about the entire operational management system. And we're adjusting to that. For example, with our new FendtONE platform, we are starting to focus on optimising the

“Farmers need solutions to be able to run their business easily and effectively.”

entire work process. We want to abolish insular solutions and offer a system that connects office and machine; this is not a 9 to 5 system, it's an open, manufacturer-independent solution that helps customers and gives the opportunity to manage their mixed fleets as well. That's what also distinguishes us from the above: we give farmers and contractors the choice. And ownership of the collected

data, which has to be processed for such platforms, always remains with the customer. That, too, makes all the difference.

OK, larger companies with a fleet of machines and a considerable acreage may be the ones that need systems like FendtONE. But it's not something for smaller farms, is that right?

Let me ask you this: should the size of smaller companies limit them to using typewriters and old-fashioned telephones? Every modern farmer has to use modern technology, because every farm has to log their work, operate economically and use their resources efficiently. With FendtONE, farmers can create orders and send them directly to the contractor machine. The completed order is then returned to the farmer by the contractor sitting there in the machine.

The Fendt brand is growing globally?

Why is that?

Well, because today's world works globally. Flows of goods, including cereals, maize, soya, etc., are now traded and distributed worldwide. If crops in certain regions are small, they are backed up by other parts of the world. Fendt is also opening up new markets to sell more machines and make the most of our production sites. But if we are broadly positioned internationally in a number of different markets, we can better compensate for market fluctuations. We believe in our products and would like to offer them to all farmers using modern agricultural equipment. This year's Agrishow in São Paulo, Brazil saw the first launch of our high-performance tractors, the Fendt IDEAL combine harvester and the Fendt MOMENTUM seed drill. The initial sales results are promising. We are also launching an offensive with our dealers in North America with the Fendt 900 and 1000 Vario. These machines are not only designed for the local special features like Row Crop, they are also extremely powerful and are exceptionally high-quality.

When you talk about Fendt in North America, do farmers know what you're talking about?

They do now. We introduced the Fendt 1000 Vario two years ago, and have since earned a very good reputation among American and

Canadian dealers and customers. We are now building on this and introducing the new 900 series and the IDEAL combine harvester exclusively under the Fendt brand. And with Fendt, we are making a new, international brand image. Our new slogan says it all: "It's Fendt. Because we understand agriculture." We have built on our well-known German slogan, "Wer Fendt fährt, führt" (Leaders Drive Fendt)." So, our statement retains its

"It's about solutions that cover every work process and all the management across the entire company."

character but now also works in Brazil or Canada; "It's Fendt. Because we understand Agriculture."

Even in France? As you know, French people don't like Anglicisms, so

"It's Fendt. *Parce que nous comprenons l'agriculture.*" – no problem at all. The statement always starts with "It's Fendt" followed by the relevant national language. You will also be able to experience our new brand appearance, including the new slogan, at Agritechnica. All farmers and contractors are invited. Visit us at

the Fendt booth from 10th to 16th November in Hall 20. As well as all the machines, you will also experience the new driver's workstation as well as the FendtONE platform I already mentioned.

Finally, let us take a look into the future.

What is your forecast for Fendt over the next 10 years?

It's much harder to make forecasts for the future than it was 20 years ago. On any topic. This is down to much faster change processes in a global and internationally connected world. Today, any process can be displayed in realtime and the decision communicated simultaneously anywhere in the world. This inevitably leads to changes – both in our expectations and our behaviour. What's more, 'artificial intelligence' will become even more decisive in the future. This is nothing to be afraid of. If you approach it with a sense of proportion and reason, it can bring plenty of opportunities.

That's why I firmly believe that in 10 years' time, Fendt will offer even more intelligent technology and services to its customers. Not only in terms of its machines, but it's about solutions that cover every work process and all the management across the entire company – for the full value chain.



▲ Agrishow, Brazil: Peter-Josef Paffen with José Galli, the Fendt Director for South America.

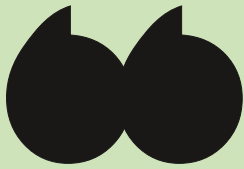


▲ SIMA, Paris: Peter-Josef Paffen motivates the French Fendt team for the key trade fair.

Does the well-educated farmer still need it?
 Absolutely. Today more than ever! But they will divide their work differently in the future. The way we plan, manage and document our work will change. It has to be simpler and more efficient. And linked with global processes, e.g. market data and producer prices. As a manufacturer of agricultural technology, we will be involved in this process chain. But for now, this is just the beginning; like with predictive maintenance, for example. By retrieving machine data while working and process it through intelligent algorithms, we can generate even better, more reliable products. This can guarantee the reliability of the machines and their effective use. And that's a new service with benefits for customers. New smart technologies will only become established if they have tangible added value for farmers and contractors. And that's a very uplifting thought.

Many thanks for talking to us!

Interview conducted by Manja Morawitz. **F**



International Fendt Press Conference: Peter-Josef Paffen presents the latest business statistics to 150 journalists from 30 countries.



Fendt Forum, Marktobendorf: Peter-Josef Paffen accompanies Martin Richenhagen, Chairman, President and CEO of AGCO Corporation (right), through the new large exhibition hall.



Green Week in Berlin: The Fendt boss visits the Allgäu stand and his own Dieselross model, which he lends to the tourist board every year.



Vitality days in Marktobendorf: The boss has employees explain the Fendt health program to him.





TWO WITH A LICENCE TO CARRY OUT ROAD MAINTENANCE

Gerhard Kogler and Harald Panzer have to be able to rely on each other. Their workplace is not entirely free of danger – both work where others like to step on the gas; on the street. To prevent putting themselves and other road users in danger, they work closely together: Harald Panzer puts up warning signs and keeps an eye on the road and traffic, while his colleague takes over the work at hand with a Fendt 718 Vario.



Gerhard Kogler is a driver with the Scheifling road maintenance department. For 22 years, he has kept the roads in Upper Styria in top condition and is responsible for their well-trimmed borders. For the past year, he has been using a Fendt 718 Vario for this work. “The 700 model is a comfortable workplace. Ease of use is important to me. And that includes the infinitely variable transmission. I have great view over the work space. I often have to go back and forward and visibility up and down is very important to me. And I always have to look out for

passers-by and road users so as not to endanger anyone on the road while I work.”

Today, Gerhard Kogler and colleague Harald Panzer are on the road with the Dücker front mower boom. As well as reservations, road signs and lighting, the pair also have to

**“THE 700
MODEL IS A
COMFORTABLE
WORKPLACE.”**

keep one eye on the moving traffic. “This is where the VisoPlus cab of the 700 model is just perfect. I have an excellent view of my mower looking down and to the side, because the cab window is continuous. And if I have to lift out the work equipment to

get past road signs, I don't have to lean forward myself, because the cab window goes back into the roof,” says Gerhard Kogler. “The two large exterior mirrors means I can keep an eye on approaching road users and Harald.”

Colleagues Kogler and Panzer from the Scheifling road maintenance department are on the road all year round. They have 320 km of road to look after. The highest point is in the Lachtal valley at a height of 1,600 metres, and the Tauern mountains at 1,200 m height make a nice change too. “In the summer, we start mowing at 5:30 a.m. In the winter, working hours can vary. We can start at 2 a.m. or not until the afternoon. It depends on the weather and snowfall. When-

◀ (from left) Motorists Kraftfahrer Gerhard Kogler and Harald Panzer, Road Inspection Body of the Scheifling road maintenance department.

ever we are needed, and that includes weekends, public holidays or even at Christmas, we go out so that the local population and tourists can travel safely.”

Whether skiing in winter or hiking in summer – Austria is one of the most popular holiday destinations in Europe. Last year alone, the number of German holidaymakers increased by 5% to 56.26 million overnight stays in 2018 (source: Statistik Austria). But this also means that there is a lot going on on Austria's roads – cyclists and motorcyclists, cars and motorhomes.

Gerhard Kogler and his Fendt 718 Vario are tasked with a whole range of different jobs. Which is why he's already done 800 operating hours on it in just one year. In the spring, the fences have to be transported back to the depot. In the summer – from May to October – the main work is mowing. The water barrel is used for cleaning, flushing channels and cleaning the pollutant basins of the tun-

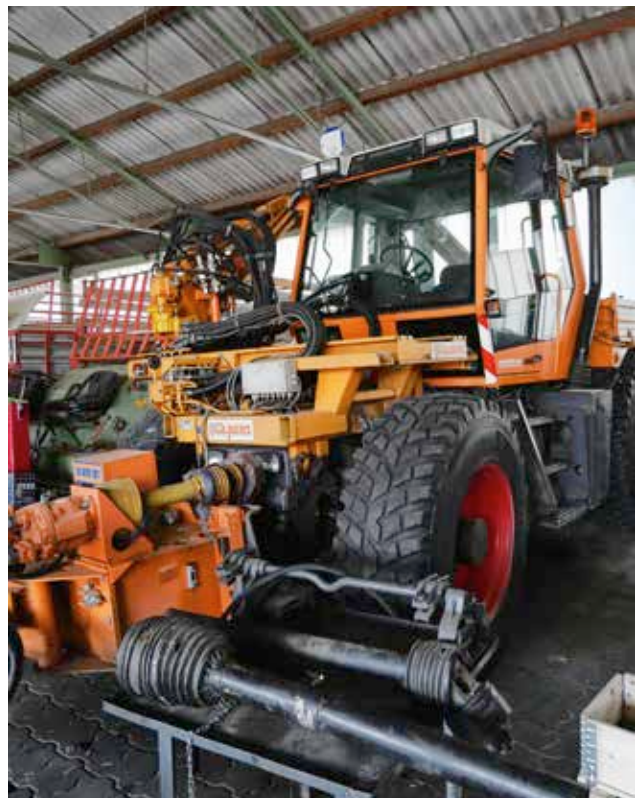
nels. “In the winter, the Vario is used with a snow plough and snow blower. We have a few critical points in our area where there is heavy snow drifting. We know the places where it can quickly become narrow and icy,” says the native Styrian. “Especially in the ski resorts, the tractor comes into its own. It's very manoeuvrable and fast at intersections, in parking areas

“ESPECIALLY IN THE SKI RESORTS, THE TRACTOR COMES INTO ITS OWN.”

and in the chicanes. I couldn't work like that with a truck, it wouldn't be manoeuvrable enough.”

It all started with a Fendt Xylon

Before Kogler got his new Fendt 700 Vario a year ago, he drove a Fendt Xylon for 20 years. “The Xylon ran very smoothly and lasted forever. It's now done 18,000 working





▲ (from left) Dealer Mario Perchtold, driver Gerhard Kogler, road inspector Harald Panzer and the deputy road master Arnold Hansmann of the Scheifling road maintenance department.

◀ The Austrian road masters have a legal mandate to carry out road maintenance including repairing bridges, roads and tunnels, winter service and the upkeep of green areas.

agree on is that the machines have to keep running. “We have worked really well with ACA Perchtold for over 20 years,” says Arnold Hansmann, confirming the good relationship between the council and the dealer. “Let’s say there’s a problem on a Sunday morning at 4 a.m. If a wheel rim is broken, they will take care of the replacement there and then.”

hours. I always loved driving it, so I wanted to have another Fendt again.”

When a new acquisition was coming up, local dealer Mario Perchtold was contacted to test drive a new Fendt tractor. “The drivers check and test the machines and can of course tell us their preferences,” says Arnold Hansmann, Deputy Road Master of the Scheifling road maintenance

company, explaining the selection procedure. “The Plant Manager can approve the request after testing the machine. However, the final decision is made at the headquarters in Graz, so we always need to present sound economic arguments.”

This includes the local dealer. He is the direct contact for technical queries or problems. Because one thing we all

Harald Panzer collects the warning signs and stows them on the tractor. Traffic safety is always about protecting ourselves and other road users. “He’s my police escort,” laughs Gerhard Kogler as his colleague swings into the passenger seat of the cab. For today, the mowing work is done and the team of two go back to their road maintenance depot. **F**



ARE YOU MAXIMISING YOUR TRACTOR'S POTENTIAL?

With each Fendt FOCUS issue, we'd like to introduce you to a practical function on your tractor. This time it's about the **VarioGuide Contour Assistant** and how it calculates **contour segments from field boundaries**.

Calculating contour segments from field boundaries with VarioGuide Contour Assistant

The VarioGuide Contour Assistant can calculate contours from existing field boundaries or waylines for the best way to navigate the field. It's a quick and easy way to create waylines in the form of contour segments from field boundaries. You can convert existing waylines into contour segments and correct errors in the existing track lines by linking, deleting, or adding. This maintains old data and enhances it for easier and clearer use.



PREREQUISITES

- Terminal 10.4 + NovAtel/Trimble receiver
- VarioGuide
- "Contour Assistant" software option available for purchase
- Software Update November 2018

Please note:

Contour segments are set up at the field boundary and must be shifted by half a working width.

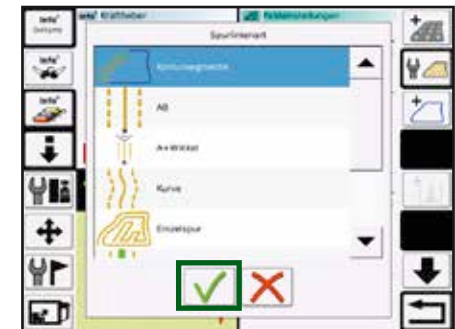
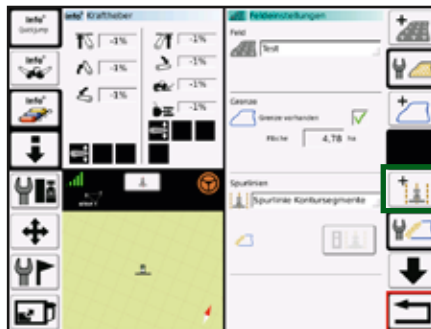
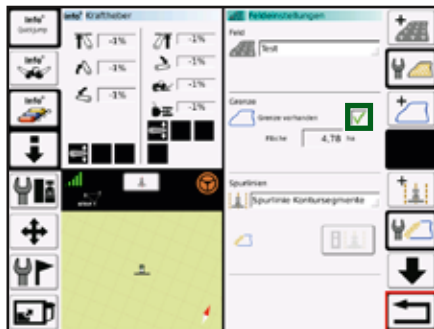
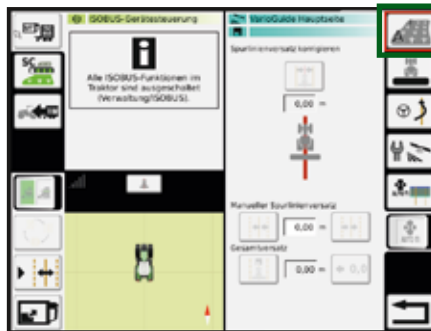


Watch the video on www.Fendt.TV

- 1 Open the VarioGuide main menu by pressing the **VarioGuide button twice** on your terminal.



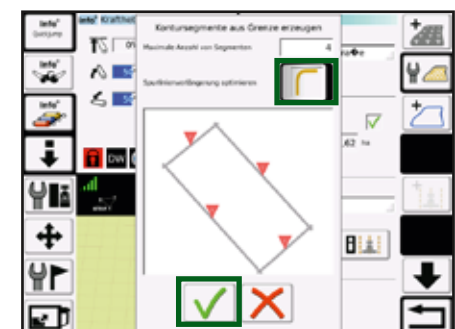
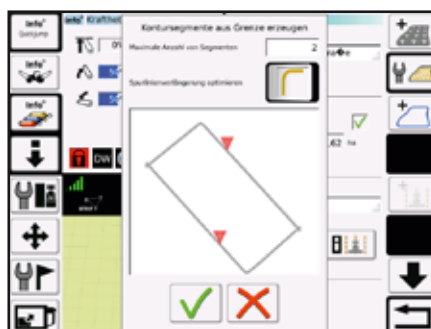
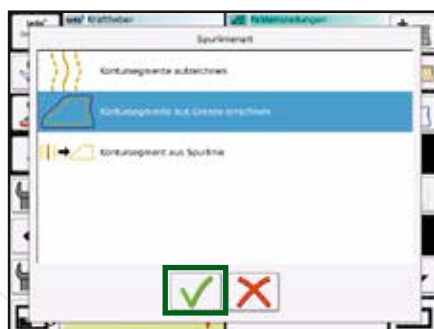
- 2 Now press the **Field Settings** button on your terminal to open the settings menu and **select** the **field** you want.



- 3 As you want to calculate contour segments from existing field boundaries, please **check** whether a field boundary is already there. You can tell this by the **green tick** next to **Field exists**.

- 4 Now press the **Add wayline** button.

- 5 In the pop-up menu, select the wayline type **Contour Segments** and confirm your selection with the **green tick**.

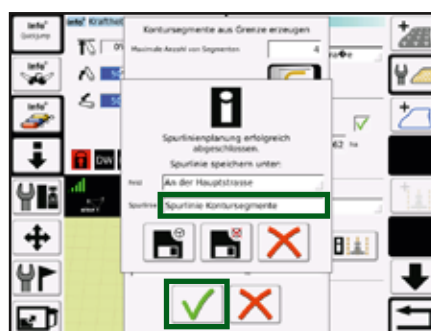


- 6 In the following pop-up window, select **Calculate contour segments from boundary** and **confirm** your selection with the **green tick**.

- 7 A window opens where you can set the **number of existing contour segments**. Depending on the shape of the field, you can create 1-20 individual segments.

- 8 The **optimise wayline extension** button can be used to remove rounded corners, so the track runs straight into the corners. If you are satisfied with the result, **confirm** with the **green tick**.

- 9 In the pop-up window that follows, tap the **input field** to open the keyboard and name the **new contour segment waylines**. **Confirm** with the **green tick**.



- 10 In this **pop-up window** you can also save the new contour segments. Use the **left button** to save the **contour segment** and **apply** it to your **VarioGuide System**.

- 11 In the **map view**, the **new wayline** should now be visible and have been **added** to the saved field boundary.

- 12 Before you start working, **shift** the **contour segments** by **half** the working width. You can then **save** the **shifted contour segments**. **E**

Use the **right button** to simply save the **contour segment**.

HEAVY RAIN AND PERIODS OF DROUGHT



Growing crops under difficult conditions
in Australia



AUSTRALIA

WESTERN AUSTRALIA

NORTHERN TERRITORY

QUEENSLAND

SOUTH AUSTRALIA

NEW SOUTH WALES

Dalby

Murwillumbah

VICTORIA

TASMANIA



Cotton, millet, mung beans, cherry peas – these diverse varieties are grown by **Tom Gooding** with the help of Fendt 936 Varios with a track gauge of three metres in **Dalby**, Australia. By contrast, at the **Citifarm** in **Murwillumbah**, 5 Fendt tractors work 1,000 hectares of land to cultivate sugar cane.



▲ Tom Gooding, Dalby, Queensland



▲ Citifarm, Murwillumbah, New South Wales

WIDE TRACKS DOWN UNDER

Gooding Farm, west of Dalby, is run by Tom with his two brothers and father, Dave. Tom's grandfather bought the farm 40 years ago after selling his dairy farm on the coast. Initially, the Goodings had a cattle farm before bull rearing. But climatic changes made it difficult to obtain food, so, over the past 15 years, Dave and Tom have switched to 3,500 hectares of arable land. "We get along really well and always have fun at work. We talk about the tasks involved and divide

them up among us, so we all pitch in," Tom says of his family of ten.

Stepless tractors from Fendt have been running for 7 years at Gooding Farm – it was the gearbox and engine that won Tom over. "I'd already tried out various stepless tractors, but none of those machines could bring the power to the ground as well as the Fendt tractors. On a Fendt, the gearbox and engine work without any loss of power, even in difficult ground conditions." The

Another advantage is the comfort offered by the 900 series; with single-wheel suspension, sound-insulated cab-

***"I CAN WORK
AT A FASTER PACE
ON UNEVEN
FIELDS."***

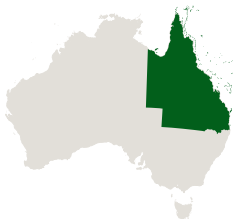
in and pneumatic cab suspension. "This means I can work at a faster pace on uneven fields than with the machines before," Tom concludes. The

single-wheel suspension supports the tractive power and, as well as traction, these two things are extremely important on the heavy, loamy soils of Gooding Farm, especially after heavy rain.

Tom is deeply impressed by the fuel savings after 5,000 working hours on each. "Sowing is one of the most important tasks in any arable farm and with the Fendt 936 Vario with the 8-row 60" cotton planter attached, I achieved an average fuel consumption



▲ (from left) Matthew Cronk (B&B Machinery) Donny Cloney (Fendt Australia and New Zealand), Tom Gooding, Christian Junclaus (Head of Fendt Globalisation), Kris Black (B&B Machinery)



DALBY, QUEENSLAND

- Dalby is located in the lowlands of Darling Downs, part of the state of Queensland in Australia
- It has not rained there over the last 6-7 months, so many farmers can only use about 20 % of their agricultural land right now, and are experiencing major crop failures
- In 2011, there was severe flooding in Queensland, which also caused widespread damage in Toowoomba and Dalby
- Typical varieties: Cotton, beans, barley, chickpeas, sorghum, soy beans and wheat
- Livestock farming: Cows, pigs and sheep
- Darling Downs produces a quarter of Queensland's farming produce

of less than 12 l/h. With my previous machines, the lowest average consumption was 23-24 l/h." Cost savings in fuel and efficiency are just as important to Gooding Farm as performance under difficult growing conditions.

The region is often affected by drought or sudden heavy rain, so the soil can have cracks of up to 10 cm in dry seasons and is almost impossible to navigate after a lot of rain. Some of the land needs to be irrigated so harvest can happen in dry years, too. Controlled Traffic Farming is another method used here. This determines the waylines the first time you cover the land, and now every agricultural machine has used the same track for 10 years. This prevents large-scale soil compaction. Tyre sizes like 710/75

R42 are uncommon in Australia. "Soil compaction can still be detected in the ground up to 5 years later if we drive

**"WHEN
IT RAINS,
THE FIELD IS
ALMOST
IMPOSSIBLE TO
NAVIGATE."**

outside the plotted waylines, and this also affects the growth of the crops. With the wider tyres, the soil compaction is not quite as deep as on other farms where they use very narrow tyres," says Tom, explaining why he opted for the 710 tyres.

All on a 3-metre track

The Goodings work with a track gauge of 3 metres, so the

front axle had to be widened by the company Widetract Extensions in Toowoomba. This conversion is lighter and puts less strain on the front wheels and planetary gears than other options. The rear axle is subject to special clearance under conditions for lighter work, such as sowing, including a reduced permissible axle load. "The tractor must stay as lightweight as possible, and with the 710 tyres I can minimise the soil compaction. So I can achieve good results on the field even at low tyre pressure and start sowing a week earlier than my neighbours."

Reliable and high-quality machines and good service were the main factors for Tom when he was looking into new tractors in 2012. Fendt was not a well-known name

in the north-eastern state of Queensland then, but he had heard about the low fuel consumption. So he contacted the dealer B&B Machinery in Toowoomba, who are now also responsible for the maintenance and service of the machines. Tom is full of praise for them: “The service is excellent and the team knows its Fendt products inside and out.” For this great service, Tom is happy to make the hour-long journey to his sales partner.

“I would also like to go back to Germany and see the agriculture and farming equipment used there. I was in Germany with my parents when I was 8 years old and I liked it.

I was really impressed with the Alps and how clean the whole place was,” laughs Tom. His parents have obviously passed on their passionate interest in European history and culture, as well as their love of agriculture, to their 8 children – maybe because of their European roots.

▼ All machines on Gooding Farm are run with Controlled Traffic Farming. This aims to reduce soil damage.



CHICKPEAS

... are grown in the Australian winter between June, July and August, as they can withstand light frosts. They are then often exported to regions such as India or Europe and are considered to be particularly healthy as they contain a lot of fibre, iron and folic acid.



MUNGO BEANS

... are a legume and are often mistakenly referred to as soy bean sprouts. They are grown in the Australian summer around the turn of the year. Depending on the weather conditions, sowing can take place at the end of December or the beginning of January. If the plants are of high quality, they are used for sowing or marketed as edible vegetables when there's a full harvest.



▼ Full trailers for the sorghum millet harvest,

50 TONNES OF SUGAR CANE PER HOUR WITH 5 FENDT TRACTORS

Dave Bartlett is Operations Manager at Citifarm, which grows more than 1,000 hectares of sugar cane. As well as him, there's a Workshop Manager and 8 permanent staff on the farm. Dave has two major challenges: to calculate firstly the cost of producing sugar cane, and secondly the amount of rain that makes cultivation difficult in the Tweed Valley. He uses four Fendt 822 Varios and a Fendt 512 Vario on his farm.

The 100-day harvest

The 1,000 ha Citifarm is located in a *caldera*, a valley surrounded by mountains and a dormant volcano. Due

to the topography, there is a subtropical climate with strong dry periods but they do have about 1,800 mm of rain per year. For sugar cane, the high rainfall is perfect, but only about 100 days a year remain for soil cultivation and harvesting. Not much time for a plant that needs to be harvested multiple times. One field may get a lot of rain, while another won't get any at all on the same day.

That made reliability and low fuel consumption the decisive factors in the new investment.

"We tried a lot of tractor brands in the heat and tough harvest conditions, but after

5,000 hours of work we had to replace the gearboxes. It just wasn't sustainable in the long run," says Dave. "Some of our Fendt tractors are still running on their original Vario gearbox after 14,000 hours in the sugar cane harvest. We worked out that a Fendt is the most economical despite the acquisition costs, because of its reliability and lower fuel consumption."

Sugar cane is harvested between June and early December at a daily quantity of 600-700 t. The four Fendt 822 Vario tractors pull trailers with a capacity of 12 t during

▼ A grid protects the cooler during sugar cane harvesting.



CULTIVATION IN NEW SOUTH WALES

- Sugar cane is grown in NSW mainly along river banks, as drainage works particularly well here
- Sweet potatoes, tomatoes, passion fruit and bananas are mainly grown in the areas near the Pacific Ocean
- About 2,500 people work in sugar cane cultivation in Tweed Valley during the season
- On March 31, 2017, Tweed Valley was hit by terrible flooding; most of the sugar cane plants survived, but the harvest suffered greatly from the loss of harvesting machinery and vehicles



▼ (from left) Christian Jungclaus (Head of Fendt Globalisation), Patrick Burke (KC Equipment Murwillumbah), Donny Cloney (Fendt Plant Representative for Australia and New Zealand), Dave Bartlett (Citifarm Manager)



harvest, with the trailer reaching a total weight of 23 t. A single tractor transports an average of 50 t of sugar cane per hour. “I think it’s good that the tractors don’t have a boost system, so the maximum force is there right away. The functionality of the terminal and the efficient headland management system mean that drivers are still going strong and safely after 12 hours on the machine,” the Australian reiterates.

Sugar cane seedlings are planted mainly with the Fendt 512 Vario ProfiPlus. An accurate pace and precision-led speed changes are essential to adapting the sowing to the soil. The front hydraulics are used for a pesticide tank that can be filled easily and safely

by lowering the front power lift. With the pneumatic cab suspension and the same equipment offered in the Fendt 1050 Vario, the Fendt 512 Vario stands out from other tractors in this performance class.

20% less fuel consumption

“The Vario gearbox guarantees that the tractor maintains the target speed without any loss of power, even when the traction force requirements change. The interplay between the engine and gearbox is as efficient as it gets,” explains Donny Cloney, Fendt Product Manager for Australia and New Zealand. As the engine produces a lot of torque even at low speeds, it’s under less pressure, the noise pollution is low and the trac-

tor consumes less fuel. “Fuel consumption has fallen by 20% since we switched. The tractors have worked about 9,000 hours together and so far I’ve only had to replace one faulty sensor in the hydraulic oil tank. I’m

“I’M IMPRESSED WITH THE MACHINE’S LOW RUNNING COSTS AND RELIABILITY.”

impressed with the machine’s low running costs and reliability, even in the tight and demanding time windows you get with harvesting and sowing,” says the Farm Manager.

SUGAR CANE



With over 36.5 million tonnes, Australia is the seventh largest producer of sugar cane after South American countries such as Brazil and Asian countries like China. Sugar cane requires high temperatures of 25-30°C and plenty of moisture, but does not tolerate standing moisture. The plant is perennial and can be harvested up to 8 times, chopping the sugar cane with a harvester and then pressing it to extract sugar syrup. This syrup is then processed into cane sugar by crystallisation and sold on the world market or used in the production of rum.

Dave was very satisfied with the support from sales partner KC Equipment and Fendt Australia. “Last year, we organised a driver training session on the Fendt tractors for our entire team. Donny Cloney from Melbourne came to our company with Tony Cullingworth, Fendt’s Plant Representative for Central Queensland, and showed everyone how to get the best results from a Fendt. They were able to organise training early in the morning, before harvest began. That was a big advantage for us because it meant most of the team members were able to attend.”

F

Fendt FOCUS NEWS



7th profi survey on "Spare parts prices": spare parts from Fendt are particularly good value

profi Results from the survey conducted by profi – the magazine for professional farming technology – found that spare parts from Fendt are the best value for money. profi Issue 3/2019 compared the cost of spare parts for 120 kW/170 hp performance tractors. The Fendt 718 Vario was most impressive overall, as having the best value spare parts.

Since 1994, the profi editing team have compared spare parts prices from all the different tractor manufacturers. asking 42 official dealers about 8 tractor brands. In their comparison, the prices for 27 different items have been compared. with categories including wear parts, non-brand and brand-standard spare parts. Wear parts for the Fendt 718 Vario cost around 10% below the average. The study also revealed the costs for engine oil, hydraulic fluid and cab filters. Fendt's prices for non-brand spare parts – such as outside mirrors, brake light switches, door locks and ignition switches – were well below average. As for the brand-standard spare parts, including rear windows and diesel tanks, Fendt ranks the "least expensive, at just 71%". Summarising the overall results, the profi editing team concluded: "When we added up the 3 shopping baskets, even with replacement parts, Fendt's 718 Vario takes first place as the 'best-value' at just 81% of the average."

Fendt is the main sponsor of the 87th German Farmers' Day



Fendt, together with its sales partner BayWa, proudly sponsored German Farmers' Day this year. On 26th

and 27th June in Schkeuditz near Leipzig, the agricultural equipment manufacturer once again presented itself as a strong partner for agriculture. Under the motto 'Change needs reliability', around 1,000 farmers from all over Germany discussed the state of the agricultural economy and the expectations of farmers in terms of politics and market partners.

Special guests at the 87th German Farmers' Day included the Federal Minister of Agriculture, Julia Klöckner, Saxony's Prime Minister, Michael Kretschmer, and Saxony's Minister for Agriculture and Environment, Thomas Schmidt. This year's meeting focused on topics such as biodiversity and climate protection. The two-day meeting also focused on animal husbandry and the future prospects of farms.

"As an agricultural equipment manufacturer, we stand by our customers – German farmers," says Manfred Pöbstle, Fendt's Regional Sales Manager for Baden-Württemberg, Bavaria, Saxony and South Brandenburg. "We know what our farmers are achieving even in difficult years, and that's why we like to support events like German Farmers' Day." The agricultural equipment manufacturer Fendt brought 200 V Vario, Fendt 300, 500, 700 and 1000 Vario series tractors to Schkeuditz to showcase them on the congress site. The focus was also on the new large combine harvester Fendt IDEAL 7.

LEGAL NOTICE

Published by:

AGCO GmbH
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Fendt 1000 Vario – even safer and audibly better

Around 2,000 machines from the 1000 series have already been delivered to 40 different countries. Now we're making the 1000 even safer and more comfortable.

For more work safety and comfort, Fendt offers the option of electrically adjustable comfort rearview mirrors, easily controlled on the terminal. They are also heatable. Position lights are also attached to the mirror casing for better detection in road traffic.

For protection against machine or fuel theft, a coded key for the door, ignition, bonnet and diesel tank is optionally available.

Improved sound – new infotainment package

The Fendt 1000 Vario series comes with an optional infotainment package and 4.1 sound system with subwoofer, easily controlled on the terminal. It includes a hands-free system with 8 microphones installed in the roof liner. They are ideally placed to ensure the best sound quality in all working modes. You can receive both AM/FM and digital channels, and play external audio sources via Bluetooth, USB or AUX.



PIG BREEDING AND ANIMAL WELFARE – A WINNING COMBINATION

Animal rearing, protection and quality seals are the focus of consumers and farmers. As a model demonstration company in animal welfare, Heiko Ranft from the Ranft pig farm in Hesse, develops concepts for keeping long-tailed pigs under conventional pig breeding methods.



"I want to play an active part in shaping the future, and my daily work focuses the development of concepts for animal welfare and eco-friendly work methods," explains the native North-Hessian. Heiko is a 5th generation farmer whose pig farm includes rearing piglets. His farm is located on both sides of the road through the small village of

Neuenbrunslar. The location is typical Hessian with breeding stables in the middle of the village and the fields on the outside. In 2003, the farm owner converted his business from mixed farming to breeding sows. He built new breeding stables in 2007, which were extended in 2016. Since June 2018, Heiko has been part of a research project

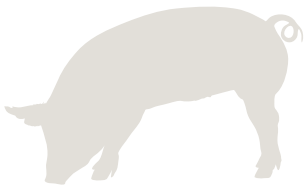




▲ (from left) Thomas Stieglitz, Fendt Plant Representative for the Hessen and Thuringia region; Timo Wyss, Workshop Foreman at Raiffeisen Waren GmbH; Steffen Koch, Sales Gudensberg, Helmut Stieglitz, Johannes Stieglitz, Carina and Heiko Ranft with Noah, Til, Ida and Mila.



**ANIMAL WELFARE –
REARING LONG-TAILS:**



Animal welfare is of great importance to many consumers, which is why the Federal Ministry of Food and Agriculture (BMEL) is planning a state animal welfare quality seal, and has launched a pilot project with model demonstration stables for animal welfare. In these demonstration stables, teams will research rearing under legal animal welfare standards and extended animal welfare measures. In pig farming, the main research topics for keeping the long-tail breed are stable structuring, animal stimulation and feeding.

The participating farms regularly exchange ideas, so that experience is shared across the country to formulate a policy on the development of animal welfare. The state animal welfare label will be developed initially for pig farming and will come into force in 2019.

as a model demonstration company in animal welfare. It explores alternative rearing systems for the conservation of the long-tail breed, funded by the Federal Ministry of Food and Agriculture (BMEL). On his farm, he converts the stables and changes feed and employment materials with a good success rate. To this end, he is still working on the development and expansion of mobility farrowing pens in an in-house project.

Pig rearing takes up most of the farm owner's working time, but he also farms his own land and works as a contractor. Downtime or delays are not an option for him, so he has invested in the towed field sprayer, the Fendt Rogator 355, with a 27-metre wide boom. "For me, impact on the

field is crucial. A lot of tasks depend on schedule or weather. That's why I don't want to

***“FOR ME,
POWER ON THE
FIELD IS
CRITICAL.”***

have to rely on a contractor,” Ranft explains. Especially with integrated plant protection, quick response times are important if harmful thresholds are exceeded.

Helmut Stieglitz is usually seen at the helm of the sprayer, affectionately nicknamed 'third-year apprentice pensioner'. Since it arrived in Summer 2018, the Fendt Rogator 355 has already sprayed 310 hectares of land. It saw a lot of action particularly early this year, in February's warm

spell. Once in use, the farmer immediately noticed that less resources would be needed, as the sprayer works with SectionControl for precision and no overlapping. This is environmentally friendly and reduces costs. He was also impressed with the automated boom height guidance system. "In the Hessian hills, the terrain is full of dips and bumps. The automatic, autonomous boom height adjustment is very practical. In our diverse crop rotation, I use the interchangeable nozzles a lot, so then I always have the right nozzle for the product and can apply it to suit," says Helmut. In action, he noticed the sprayer's many driver-friendly aspects, such as the LED headlights on the spray boom and controlling the Rogator on the Fendt terminal with the sprayer joystick.



▲ "The short transition times and excellent threshing results on the slope are very important for us."

In addition to the Fendt Rogator, Heiko Ranft's machinery also includes Fendt tractors, such as a Fendt Farmer 309 LS, which is used for field edging, a Fendt Favorit 514 C and a Favorit 509 C as well as a Fendt 720 Vario, a Fendt 516 Vario and a Fendt 5275 C PL combine. For their four children they have a Fendt Kettcar and two Fendt pedal tractors, for his two sons Noah and Til and two daughters Ida and Mila to happily race around on.

The Fendt 5275 C PL combine harvester is particularly suitable for the Hessian hills, earning its keep with some run-outs boasting a 15% to 20% incline. It threshes over 250-300 hectares of both rapeseed and cereal across the season. "The short transition times and the excellent

threshing results on the slope are very important for us," says Ranft.

Ranft transports piglets with the Fendt tractor

The tractors on the Ranft farm are put to use in arable farming, yard work and transport work, with the farm manager himself having to transport piglets. He uses one of his Fendt tractors and his own piglet trailer for this. The piglets go to direct sellers in the area, who care about locally sourced produce and animal welfare. One of his customers even has a visitor's stable so customers can form a direct bond with the agriculture, in particular with animal rearing.

Heiko regularly invests in new technology so he always

works with the latest machines and prevents investment backlogs. The plant representative for Fendt Plant Protection, Gerd Leopold, was decisive in the purchase of this sprayer. Heiko was impressed with his in-depth expertise and prod-

***"IN OUR
'DIVERSE CROP
ROTATION,
I USE THE
INTERCHANGEABLE NOZZLES
A LOT."***

uct knowledge, as well as advice that was precisely geared to the requirements of the farm. The purchase was then made through Raiffeisen Waren GmbH, based in

Kassel, and its local branch in Gudensberg. "Cooperation and great service are important to us, as is the short distance of just 6 km to the workshop," says the farm owner. "If a machine breaks down, we need a quick solution, and this partnership makes it all run smoothly," says Timo Wyss, Workshop Foreman at Raiffeisen Waren GmbH.

When Heiko Ranft isn't working on the farm, he spends his free time with his wife and four children or with friends and family doing woodworking. This year, his woodmaking even takes him to the German Championships in firewood splitting. Heiko Ranft signed up as a team together with four other men from the village. **F**



*UPHILL.
DOWNHILL.
GOOD LUCK!*

Large stone terraces that turn pink in the morning sun. Surrounded by a picturesque mountain landscape with sunny alpine pastures, dense mountain forests and pointed church towers – this is the Erzberg mine in the Styrian village of Eisenerz. Here, where ore rock has been mined for more than 1,300 years, the largest Fendt tractor is the smallest machine of all. But the Fendt 1050 Vario has an important role.



At exactly 9:50 am, a siren blares out across the entire valley. The sound is as deep as a cruise ship horn. Unmistakable. It lets everyone know that they're blasting at the Erzberg ore mine. The Erzberg is the largest open-cast rock mine in Central Europe and the most important ore deposit in Central Europe. "Due to the large production volumes, which have increased by 50% in recent years, we work here for 12 months a year, 7 days a

“ECONOMIC AND ENERGY EFFICIENCY ARE ESSENTIAL FOR OUR ORE MINE.”

week, 24 hours a day," explains Josef Pappenreiter, Managing Director of VA Erzberg GmbH. "On average, we have to keep about 40 km of road clear every day for our work. This means that in the summer, the paths have to be irrigated because of the drought and buildup of dust. In the winter we need to

plough snow and spread salt. That's why it is critical for the productivity of our mining industry to have the right equipment to maintain the road."

13 heavy-duty trucks, affectionately called 'haulies', four wheel-loaders and a Fendt 1050 Vario are used here in

northern Styria to mine 12 million tonnes of rock every year. Of these, only about 3 million tonnes of pure fine ore are delivered to the blast furnace in Linz and to the Donawitz steelworks.

"Economic and energy efficiency are essential for our ore mine. With only 33.5% iron content, we can only be economical by being better – that is, both generating high productivity using equipment more efficiently. Just to





MINING AT ERZBERG



- Operation: 24 hours a day, 7 days a week, 365 days a year
- Just-in-time delivery to the furnaces in Linz and Donawitz
- In 1986 the underground mine underwent a planned closure, and since then has been used as an above-ground ore mine
- Other rocks: lime, slate
- 20 levels in operation at the same time
- 3 drills drill the boreholes
- 1 or 2 blasts per day
- Daily mining: approx. 40,000 tonnes of rock
- Removed with Komatsu large wheel loaders (100 t net weight, bucket capacity: 12 m³)



▲ Local sales partners (from left): Driver Klaus Taxacher with Kurt Wipfler (Fendt Plant Representatives for Austria) and dealer Mario Perchtold (Managing Director for ACA Center Perchtold)

THE ERZBERG ADVENTURE FOR VISITORS

From May to October, the Erzberg opens its doors to visitors. Various tours are offered daily, including on the haulies' observation decks in the mine itself.

For years now, it has also hosted legendary events such as the Erzberg rodeo. KTM and Red Bull have hosted the event every year for the last 20 – 1 mountain, 4 hours, 500 starters – only a dusty handful of drivers will reach the finish line. The Erzberg rodeo is considered the toughest Xtreme Endurance Challenge, pushing even the best off-road professionals to their limits.





◀ Josef Pappenreiter, Managing Director VA Erzberg GmbH: "We need to adapt to the market and to customer requirements. "Economic and energy efficiency are essential for our ore mine."

as a comparison, Australian deposits have an iron content of 65% to 68%," says Josef Pappenreiter, explaining the challenge at the Erzberg mine. Having been with the company since 1984, he knows what he's talking about.

The Fendt 1000 Vario joined the miners' workforce in March 2018. You have to do a double-take when you see the tractor driving through the levels of the mine. It looks tiny against the backdrop of this gigantic mine – almost dainty next to the powerful 1200 hp yellow 'haulies'. But the "Little One from Erzberg" has a big responsibility.

"We thought long and hard about what kind of machine would suit our road maintenance tasks, and we made the

"THIS IS WHY WE CALL THE TRACTOR A MULTIPURPOSE MACHINE."

right choice. It's all about diversity. That's why we call the tractor a multipurpose machine," says Josef Pappenreiter. "In the summer, the tractor works constantly to wet the roads. But it's also used in road construction.

I'm particularly happy in the winter, because we can clear the 40 km of road using the right equipment combinations."

And snow falls in swathes here. Last winter was epic. New snowfall measuring more than 200 centimetres had to be managed in the mine. That's when the 517 hp tractor kicks into action with the snow plough and spreader or snow blower. Now, in summer, dust is the biggest challenge. Klaus Taxacher is currently pumping water from a specially designed mine lake into a 30,000-litre barrel. Driving up and down

◀ The Fendt 1050 Vario being used for heavy road transport: with the PTH Multi Crusher, it crushes even the biggest chunks of rock.



▲ The Vario is adaptable – used for road work with the push-off trailer or for winter maintenance. It has clocked up more than 1,700 operating hours since March 2018.

the mine roads with his team, he's bringing out water to try and prevent the dust from building up when the rock is excavated. No-one wants the iron ore mine to disappear under a cloud of dust. This work used to be done with converted heavy-duty wagons, which could be loaded with 70 m³ of water.

But with a net weight of 80 tonnes, this is in a poor ratio to the payload – regardless of maintenance costs and, above all, the fuel consumption.

“THE FENDT 1000 VARIO IS LIGHTER, MORE AGILE AND CAN ALSO DRIVE FASTER.”

Klaus Taxacher then laughs and tells us why he likes his job: “The level of comfort is incredible. The all-round view is perfect and the air conditioning works great. The cab is very spacious. I have a radio, a cool box for my drinks and snacks. And I like not having to switch gears, or use the clutch. All you have to do is go forwards or backwards, accelerate and brake.”

“The Fendt 1050 Vario is lighter, more agile and can also drive faster,” explains Klaus Taxacher. “The big dumper guzzles 70 litres per hour. The tractor has a fuel consumption of about 18 litres per hour. So, it's much more efficient and also more economical.”

This lets Klaus Taxacher concentrate on the task at hand and on the mine. He sets off in his tractor, climbing additional 300 metres. Against a colossal backdrop – whatever time of year. Good luck! **F**



Awesome photos from Erzberg and the Fendt 1050 Vario can be found on www.Fendt.TV



PERCHTOLD & SOHN GMBH

40 years of working with Fendt.



Now in its third generation, the Austrian dealer **Perchtold & Sohn GmbH** from the ACA Center Perchtold offers agricultural and municipal solutions. They have been selling Fendt agricultural machinery for 40 years.

Franz Perchtold Senior founded the company in 1947 in Wöllmersdorf near Judenburg (Styria). At the time, he was one of the first to offer on-site customer service. After opting for the Fendt brand in 1919/1979, they laid the foundation stone for the next few decades. Today, **Mario Perchtold** is Managing Director, whilst his son **Mario Perchtold Junior** works as Sales Manager in the family business. "I remember my father selling the first Fendt tractor in the region," says Mario Perchtold.

"It was a Fendt 108 LSA and he sold it to Johann Kaltenegger. The farmer is still one of our customers and of course drives Fendt," says the Managing Director. **F**

► The Fendt Dieselross has been lovingly restored in the workshop of Perchtold & Sohn and stands as a treasured gem in the showroom.





FENDT

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Find out more: 900.fendt.com

It's Fendt. Because we understand agriculture.