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Press release
Bosch Software Innovations

Connected sensors and smart algorithms
Bosch Deepfield Connect products for agriculture 4.0

November 28, 2019
PI 11060 khb/Bär

- Deepfield Connect Asparagus, Field, and Milk Monitoring solutions and apps enable farmers to keep a watchful eye on their crops and dairy produce
- Weather and other scientific data serve to calculate plant growth models
- Smart algorithms recommend ways to use resources such as water and fertilizer efficiently, assure quality, and boost yields

Stuttgart. While the world's population continues to grow, the per capita area of arable land is shrinking. "Our aim is to maximize yields and use resources more purposefully and thus more efficiently," says Dr. Bojan Ferhadbegović, head of the Deepfield Connect product family at Bosch Software Innovations. In keeping with the idea behind agriculture 4.0, he and his team are working on connected sensor systems and smart algorithms to make life easier for hardworking farmers.

No unwelcome surprises with smartphone fruit-and-veg monitoring

The Deepfield Connect Field Monitoring system transmits temperature and humidity data directly from the field to the farmer's smartphone, at any time and to any place. The app is available for iOS version 11 or later and for Android version 5 or later. A customizable alert gives farmers a heads-up when readings reach critical levels. Featuring temperature, air humidity, and soil moisture sensors, the system comes in four versions that provide a conventional weather station's key climate data. This information keeps users up to date on how their crops are faring in the field, the warehouse, or the seed-priming room. It also clues them in on how to improve their storage, foil management, and irrigation practices. "What's more, the Deepfield Connect product family is very easy to install and use. Anyone can set up the systems on their own in five minutes and start using them straightaway," says Ferhadbegović.

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Black or white side up? Asparagus bed sensors answer that and more

Another option alongside the Field Monitoring system features special sensors for growing asparagus. Improper foil management can compromise quality and cost farmers up to 30 percent of their crop. The Deepfield Connect Asparagus Monitoring system minimizes this risk with sensors measuring at four depths in the asparagus bed to gauge temperature. The app's customizable alert warns farmers before it gets too hot or cold, while a weather forecast specific to that field helps the farmer decide when to turn the foil. The temperature sum helps farmers predict the best time to start harvesting.

Always take the weather with you – in the app

"One of the great risk factors in farming is the weather. We can't influence it, but our sensor systems and the Deepfield Connect app help farmers work with the weather to best support their crops' growth," says Ferhadbegović. The Deepfield Connect app comes with plant growth models for selected standard and specialty crops. The Bosch IoT Suite's smart algorithms combine weather data with the science behind the growth models to keep farmers informed. They can consult the app at any time to gain insight into their plants' current growth phase and in future get the right recommendations for each development stage. "For example, we can use our models to calculate which nutrients the plant has theoretically absorbed from the soil by the time it completes a given development stage. We can also use the weather forecast to recommend the best time to apply fertilizer, so this isn't done when the soil is too dry or when rain would wash it right back out again," says Ferhadbegović, pointing out another of the algorithms' advantages. In near future, the app will also help farmers comply with documentation regulations, for example by providing an audit trail tracking fertilizer use.

Accurate forecasting with the right data from the right spot

"The Internet of Things (IoT) offers great potential for agriculture. Bosch can draw on its extensive expertise in software, sensor technology, and services to tap that potential. The bigger the database, the better the outcomes achieved with algorithms and artificial intelligence," says Ferhadbegović. Even without the Deepfield Connect sensors, every app user enjoys free access to the weather data calculated for a given field. It is based on information from independent weather services and other sources. Users can order sensors right there in the app to obtain even better data and recommendations that are even more in tune with local conditions. "Then the exact readings taken in the user's field will be factored into the calculations. Particularly frost and soil moisture vary in intensity from one location to the next and can never be calculated accurately from general weather data. And if farmers grow the crop in tunnels, external sources won't yield reliable calculations anyway," explains Ferhadbegović.

Keeping tabs on the tank via an app to maximize milk quality

The Deepfield Connect Milk Monitoring system is the latest product to join this family. A sensor measures the temperature directly in the milk and takes other readings to track the tank's functionality. This data is sent to the app on the smartphone. An alert warns the dairy farmer or tank truck driver when readings take a critical turn. "For example, the cooling system may be tailored precisely to the dairy's specifications and thereby save energy," says Ferhadbegović. Installation is an exercise in plug-and-play convenience: simply lower the sensor chain into the milk tank and attach the transmitter and warning lamp to the agitator respectively the tank. Independent bodies such as the Fraunhofer Institute for Manufacturing Engineering and Automation IPA have verified that the system is safe for food.

Farm #LikeABosch – everything for the farmer in one app

Ferhadbegović and his team are already thinking ahead. They want to add interfaces for manufacturing partners so that farmers have access to many important topics at one single point. "What we have in mind are interfaces to irrigation and other control systems, but also for suppliers." The team at Bosch Software Innovations also wants to offer special sensors as modular add-ons – for example to measure hydrostatic leaf pressure – alongside the model already available for asparagus beds. With its digital solutions for agriculture, Bosch Software Innovations is carrying on a tradition that started with founder Robert Bosch, who was a farmer himself in the 1920s. His old farmstead at Mooseurach near Munich still stands today. "We are perpetuating this legacy by making life a little easier for the hardworking farming community by delivering smart solutions that achieve higher quality with more efficient, resource-friendlier practices. That's what Farm #LikeABosch is all about," says Ferhadbegović.

To learn all about the products and the app, visit www.deepfield-connect.com

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Bosch Software Innovations has been active in the Internet of Things for more than ten years. The team of IoT consultants, software developers, solution architects, project managers, UX designers, business model innovators, and trainers brings IoT ideas from strategy to implementation. With its domain-specific, software, and organizational know-how, Bosch Software Innovations supports companies digitally transforming themselves. The company has designed, developed, and operated more than 250 international IoT projects in agriculture, smart homes and buildings, retail, energy, mobility and manufacturing. Its cloud-based Bosch IoT Suite currently connects more than 10 million sensors, devices, and machines with their users and enterprise systems. With over 700 IoT experts worldwide, Bosch Software Innovations has locations in Germany, Bulgaria, Singapore, China and Japan.

More information can be found at www.bosch-si.com, www.bosch-iot-suite.com, www.twitter.com/BoschSI, www.blog.bosch-si.com.

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The company was set up in Stuttgart in 1886 by Robert Bosch (1861-1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-two percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.

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Press release
Bosch compact

Farm #LikeABosch: precision through connectivity
Bosch highlights at Agritechnica 2019

November 11, 2019
PI 11040 RB khb/Bär

- Intelligent IoT applications for precise and eco-friendly crop farming
- App sends weather data, insights from research, and recommendations for optimum crop growing directly to smartphones
- Resource-conserving powertrains, connected control units, and sophisticated camera technology for environmentally conscious and economically viable agriculture

Stuttgart & Hannover, Germany: Bosch is providing new solutions and offerings that allow farmers to strike the right balance between economic and ecological considerations. These include intelligent sensors, apps for farmers, sophisticated camera technology for agricultural machinery, and resource-conserving powertrains. Visitors to Agritechnica can learn more about at these ideas at the Bosch booth (G17, hall 15), the Bosch Rexroth booth (A04, hall 16), and the NEVONEX booth (C10, pavilion 11).

NEVONEX – digital ecosystem for smart agriculture

A manufacturer-independent and open ecosystem, NEVONEX is geared toward smart, digitalized agriculture. NEVONEX-enabled control units help make new and existing agricultural machinery smart, regardless of the manufacturer, and streamline farmers' work processes. Various apps provide a pool of expert knowledge and can be used directly on the machine. Farmers benefit from reliable and seamless implementation across all their work steps. The ecosystem optimizes operating processes, increases yields, and can reduce the use of seeds, fertilizers, and pesticides.

Bosch offers environmentally friendly smart spraying solution

Up to now, high-yield crop cultivation have always called for the use of herbicides to ensure crops have sufficient space, nutrients, and light to grow satisfactorily. However, as herbicides can pollute the soil and the ecosystem, the aim is to use the smallest quantity possible for the best possible yield. With its smart spraying solution, Bosch offers a system that fits the bill: it recognizes the difference

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between weeds and crop plants. Cameras spread across the entire width of the crop sprayer take a continuous series of pictures, identifying weeds and allowing herbicide to be sprayed in the right amount and concentration, precisely where it is needed. This reduces the impact on the soil and the ecosystem, cuts down the volume of pesticide used, and increases crop yields. Bosch is developing the smart spraying solution in partnership with the BASF xarvio™ brand and agricultural machinery manufacturers worldwide.

App sends weather data and recommendations directly to smartphones

The weather is one of the greatest risk factors in agriculture. With the Bosch Software Innovations sensor system and Deepfield Connect app, farmers can be alerted to weather changes and optimize their crop growth. Via the Bosch IoT Suite, weather data is sent directly from farmers' fields to their smartphone. The Deepfield Connect app also provides information on crop growth. This means farmers always know exactly how their crops are growing and receive appropriate recommendations for the respective development stage. In addition to saving time and money, this also helps conserve valuable resources such as water.

IoT speeds up development and troubleshooting

Bosch's vehicle management solution connects vehicles and cloud-based services over the vehicle's entire life cycle. One element of this software platform is a new IoT application known as web-based validation. In the future, this process will accelerate development times for injection and exhaust-gas treatment systems and improve their robustness in production vehicles. Using a cloud-based system, a continuous flow of data from the connected validation vehicles is transferred and evaluated. Together with customers, Bosch can use this information to speed up and enhance the calibration of new systems. The predictive trends application evaluates field data from production vehicles. If diagnostics from the vehicle manufacturer or error information collected by Bosch indicate potential quality issues, special algorithms enable countermeasures to be developed and rolled out at an early stage. In some cases, breakdowns in the field can be prevented altogether.

Connected off-highway solution: open, modular, scalable

Bosch Rexroth's connected off-highway solution (COS) can be used as a complete end-to-end solution or as individual modules for integration into third-party systems. It is based on the tried-and-true Bosch IoT Suite. The modular, open system digitally connects vehicles and their subsystems via a cloud. Users can custom-configure the range of functions using a variety of apps and open development options. In addition to standard applications, such as remote

access to data and fleet management, COS also enables vehicle condition monitoring.

Machine health: the simple way to analyze vibrations

The IVAS intelligent vibration analysis sensor delivers valuable information in real time to increase the availability of agricultural, construction, and forestry machinery. In a typical use case, the information IVAS collects and pre-analyzes is transferred to a cloud via a digitally connected ECU. If required, the cloud can be used to visualize vehicle data and trends. This enables the user to identify deviations, carry out maintenance work in good time, and order spare parts.

Fully integrated tire pressure control solution reduces fuel consumption

Thanks to Bosch Rexroth's GFT 8150 TIS (tire inflation system), harvesters with individual-wheel drive can for the first time ever now be fitted with a tire pressure control system that seamlessly integrates into the machine and is operated via the standard terminal. Controlling the tire pressure of harvesters has numerous advantages. In view of different vehicle handling characteristics on roads and on fields, the system helps saves fuel and increase driving stability.

Land leveling by tractor, thanks to EHC-8

For rice cultivation and in fields with irrigation canals, the ground needs to be especially flat and even to achieve uniform irrigation and crop growth. Farmers will be able to create ideal conditions on their own in the future, thanks to the EHC-8 land leveling system, which combines the tractor's existing hitch components with a laser combination and a leveling plate. Bosch Rexroth's land leveling system reduces irrigation volumes, increases yield, and lowers energy consumption.

New repair-shop software improves troubleshooting and repairs

With the launch of its Grade-X software, Bosch is speeding up the identification and repair of machine faults. On a PC or tablet, the software guides repair-shop workers through the diagnostic process step by step. Once the mechanic has performed a diagnostic test to identify the machine with all its technical features, they receive only information that is relevant to that particular machine. Developed by Bosch, the software generates the appropriate circuit diagrams on the basis of the fault identified. In doing so, the software highlights only those components that are actually installed in the machine and that are causing the error. Through augmented reality (AR) technology, the mechanic receives additional information in the form of text and images as well as the location of hidden components. This information is displayed on the screen of the tablet or in AR glasses. The new Bosch software is open for use with existing customer solutions and compatible with tools from other manufacturers. Sophisticated

encryption technology provides protection against attacks by hackers and ensures secure data transmission.

Bosch common-rail system: the right solution for every diesel application
Bosch offers diesel injection systems for a number of agricultural applications: from emergency generators to combine harvesters. Its portfolio also comprises engine control solutions, various sensors, and exhaust-gas treatment systems. Bosch powertrain solutions help further reduce fuel consumption, thereby cutting the CO_2, pollutants, and noise emitted by the engines.

Bosch vision system for optimum 360-degree vision
The Bosch vision system is a driving and work assistance system for mobile agricultural machines that improves all-round visibility. Its main component is a full HD camera system which generates a detailed bird's eye view of the vehicle. The additional Bosch ultrasonic and radar sensors detect objects in the area immediately surrounding the vehicle, which are highlighted in the live image generated by the system. In this way, the Bosch vision system enables farmers to work and maneuver safely, even in the tightest of spaces. It detects obstacles and people in the danger zone of the machinery in good time, thus preventing accidents.

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Press release

November 8th, 2019
PI 11047 BEG MBC/Af

More yield, lower costs, less time required: NEVONEX increases efficiency in agriculture

Digital ecosystem awarded the Agritechnica Innovation Award 2019 in silver

- Manufacturer-independent and open ecosystem brings digital services directly into the agricultural machine
- Connectivity and automation of equipment and workflows enables more efficient processes in agriculture
- NEVONEX at Agritechnica (Pavilion 11, Booth C10)

Stuttgart - In times of tight profit margins in agriculture, high efficiency in the cultivation of arable land is more important than ever. Modern IT solutions are in demand that help farmers save time and money, increase yields and conserve environmental resources by automating and networking equipment and workflows. "With NEVONEX powered by Bosch, we now offer a comprehensive digitization approach for agriculture. The smart ecosystem is designed as a manufacturer-independent and open platform on which suppliers of agricultural technology, resources or services can offer their services," explains Andrew Allen, responsible for Commercial Vehicles and Off-Road at Robert Bosch GmbH.

Currently, eight active partners - AMAZONE, LEMKEN, Pessl Instruments, RAUCH, Syngenta, Topcon, Xarvio and ZG Raiffeisen - are already developing functions and tools for networking and automating devices and workflows in the NEVONEX ecosystem. Together with Bosch, they received this year's Agritechnica Innovation Award in silver for their innovative, user-friendly platform concept. "The eight current partners are only the beginning, more companies will be added in the coming months and will successively complement the NEVONEX service offering," says Andrew Allen.

NEVONEX provides the technical infrastructure for the services and coordinates the partner network. This ensures that the services of the various companies are compatible. The partners develop application softwares, so-called FEATURES,

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which are then executed directly on NEVONEX-capable agricultural machinery. The integration of the control unit into the electronic architecture of the implement enables active intervention in the functions of the machine and thus the automation of work processes and their documentation. Networking the sensors present or retrofitted on the agricultural machine creates further efficiency potential, for example through optimized application of seed, fertilizers or crop protection agents. Time-saving, direct data transmission to the farmer's farm management system is also possible.

NEVONEX by Bosch will initially be offered in selected regions in Europe in 2020, followed by its market launch in North and Latin America.
Interested visitors can find out more about NEVONEX at Agritechnica from 10 to 16 November 2019 in Pavilion 11, Booth C10.

Press Pictures: #2726726, #2891612, #2891614

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NEVONEX powered by Bosch is an open, neutral ecosystem for smart, digital agriculture. With the help of the NEVONEX-enabled control unit, the common ecosystem approach makes both new and existing agricultural machinery smart, which simplifies the farmer's work processes. The bundled know-how and expertise can be used directly on the machine in the form of digital services (so-called FEATURES). Thanks to the reliable, end-to-end implementation through all the work steps, farmers benefit from higher yields, optimized operating processes and less use of seed, fertilizer and crop protection materials, while at the same time protecting the environment.
NEVONEX offers agricultural players a robust, securely managed framework and an end-to-end infrastructure, enabling partners to develop, deploy and use integrated digital services quickly, easily and directly.

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Press release

Bosch and BASF expand their cooperation for digital agriculture

Project center established for closer collaboration

November 7, 2019
PI11048 BEG MBC/Cd

- Joint development activities placed under one roof
- Smart spraying for efficient, eco-friendlier herbicide use
- Planned market launch in 2021

Stuttgart / Cologne – Bosch and xarvio™ Digital Farming Solutions of BASF are further intensifying their successful cooperation in the development of digital solutions for farming. The companies have now established a project center that enables them to undertake their joint research and development activities at the same location. Since 2016, employees of the two companies have already been working together on the smart spraying project, a technology for precise herbicide application that significantly reduces the total amount of herbicides used. The market launch of Smart Spraying is planned for 2021. Further joint activities are planned.

“Bringing the team members together in a dedicated center of competence pools their expertise and increases the potential for synergies as a result of the direct channels of communication and coordination within the project group,” says Andrew Allen, responsible for the Commercial Vehicles and Off-Road operating unit at Robert Bosch GmbH.

The smart spraying concept by Bosch and xarvio focuses on the precise application of herbicides in the field to control weeds. With the smart spraying solution, Bosch and xarvio provide a smart system that can differentiate a weed from a crop plant and applies herbicides in a targeted manner.

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Smart Spraying finds, detects and sprays weeds within milliseconds

As the sprayer passes over the field, its on-board cameras record the vegetation over the entire area. A smart spraying management system analyzes the sensor signals online and identifies the presence of a crop plant or weed. The system then controls the sprayer jets and the herbicide is applied as needed. Weed-free areas, on the other hand, remain herbicide-free. The entire procedure – scanning, identification, and application – takes just a few milliseconds and is performed in a single processing step.

Bosch's focus in the research and development cooperation is on the camera sensor technology, image processing and pattern recognition, control units, and system connectivity. "In daily practical use in the field, the field sprayer with the smart spraying technology is connected to the xarvio FIELD MANAGER, which uses various parameters to determine precisely which and how much plant protection product the respective crop needs," explains Tobias Menne, head of BASF Digital Farming. xarvio FIELD MANAGER is a digital solution that helps farmers make agronomic decisions in various different areas of their work. The aim is to achieve more efficient and eco-friendly cultivation that ensures optimal use of each section of field. Farmers can at any time view the field status, obtain recommendations for each field, and download a set of maps that indicate the application recommendations for each of the individual field zones.

Initial field trials with prototypes in Europe and in South and North America yielded extremely positive results. "One of the next steps on the road to readying the system for the market is optimization of the sprayer's resolution to achieve even more precise herbicide application," says Andrew Allen.

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About Bosch

Mobility Solutions is the largest Bosch Group business sector. In 2018, its sales came to 47.6 billion euros, or 61 percent of total group sales. This makes the Bosch Group one of the leading automotive suppliers. The Mobility Solutions business sector pursues a vision of mobility that is accident-free. emissions-free, and fascinating, and combines the group's expertise in the domains of automation, electrification, and connectivity. For its customers, the outcome is integrated mobility solutions. The business sector's main areas of activity are injection technology and powertrain peripherals for internal-combustion engines, diverse solutions for powertrain electrification, vehicle safety systems, driver-assistance and automated functions, technology for user-friendly infotainment as well as vehicle-to-vehicle and vehicle-to-infrastructure communication, repair-shop concepts, and technology and services for the automotive aftermarket. Bosch is synonymous with important automotive innovations, such as electronic engine management, the ESP anti-skid system, and common-rail diesel technology.

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About xarvio™ Digital Farming Solutions

xarvio is at the forefront of the digital transformation of agriculture optimizing crop production. xarvio offers digital products, based on a global leading crop model platform, which deliver independent field-zone-specific agronomic advice enabling farmers to produce their crops most efficiently and sustainable. The xarvio products SCOUTING & FIELD MANAGER are being used by farmers in more than 100 countries worldwide. For more information, please visit www.xarvio.com and follow us on facebook or twitter.

About BASF's Agricultural Solutions division

With a rapidly growing population, the world is increasingly dependent on our ability to develop and maintain sustainable agriculture and healthy environments. Working with farmers, agricultural professionals, pest management experts and others, it is our role to help make this possible. That's why we invest in a strong R&D pipeline and broad portfolio, including seeds and traits, chemical and biological crop protection, soil management, plant health, pest control and digital farming. With expert teams in the lab, field, office and in production, we connect innovative thinking and down-to-earth action to create real world ideas that work – for farmers, society and the planet. In 2018, our division generated sales of €6.2 billion. For more information, please visit www.agriculture.basf.com or any of our social media channels.

Press release
Bosch Software Innovations

A smart, pocket-sized operations assistant
Bosch Software Innovations at Agritechnica 2019

October 30, 2019
PI 11038 RB khb/Bär

- The Deepfield Connect solutions let farmers keep a watchful eye on the condition of their crops with a convenient app
- Aided by the Bosch IoT Suite, these solutions use weather data and scientific findings to calculate plant growth models
- Smart algorithms help farmers use resources efficiently, ensure quality, and boost yields

Stuttgart/Hanover – Frost or excessive heat, too wet or too dry? “The weather is one of the biggest risk factors in agriculture,” says Dr. Bojan Ferhadbegovic, head of the Deepfield Connect product family at Bosch Software Innovations. “We can’t influence it, but our sensor systems and the Deepfield Connect app help farmers work hand in hand with the weather to provide optimum support for the growth of their crops.” Farmers who use the Deepfield Connect systems already get current weather data straight from their field on their smartphones, thanks to the Bosch IoT Suite – and they can set customized alerts to notify them when certain temperature or moisture levels are reached. The app is available for iOS (version 11 or later) and for Android (version 5 or later).

There are also plans to expand the Deepfield Connect app in the near future to include plant growth models of all plants common in traditional agriculture and specialty crop production. The Bosch IoT Suite uses algorithms to combine weather data and scientific findings to model plant growth. The aim is to let users know which growth phase their crops are in at any given time and to provide appropriate recommendations for each development stage. “For example, we can use our models to calculate which nutrients the plant has absorbed from the soil by the time it completes a given development stage. We can also use the weather forecast to recommend the best time to spread fertilizer, so as to avoid fertilizing when the soil is too dry or when rain would wash it right back out again,” says Ferhadbegovic, citing one of the advantages of the algorithms.

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Precise forecast: the right data from the right location

"The Internet of Things (IoT) offers great potential for agriculture, and Bosch can draw on its extensive expertise in software, sensor technology, and services," says Ferhadbegovic, adding: "The more data there is available, the better the results of the algorithms and artificial intelligence will be." Even without the Deepfield Connect sensors, anyone using the app can immediately access the weather data calculated for a given field, free of charge. It is based on data from independent weather services and other sources. To get even better data – and soon even more finely tuned recommendations – the sensors can also be ordered right in the app. "Then the calculations will incorporate precise values from the user's own field. Particularly frost and soil moisture vary in intensity from one location to the next and can never be calculated accurately from general weather data. And if farmers use a tunnel, external sources won't yield reliable calculations anyway," explains Ferhadbegovic.

Flexible and easy: installs in just minutes

The Deepfield Connect system is available in several versions, allowing farmers to configure the scope of temperature, air humidity, and soil moisture sensors to fit their needs. In this way, users always know how their crops are doing in the field, the warehouse, or the seed-priming room – and what they need in order to optimize storage, foil management, or irrigation. In addition, a customizable alert enables farmers to respond promptly when critical values are recorded. The app allows farmers to document when they fertilize and when ground frost occurs. Only users themselves can access the data from their own fields; this data is not disclosed to third parties. "The Deepfield Connect product family is also very easy to install and use. Anyone can install the systems themselves in five minutes and start using them right away," says Ferhadbegovic. And it's just as easy to install the other Deepfield Connect systems for Asparagus Monitoring and Milk Monitoring as it is to install the Deepfield Connect system for Field Monitoring. These systems can be ordered online at www.deepfield-connect.de.

The right amount at the right time: using resources efficiently

A long-term study by the University of Bari in Italy on an olive plantation in southern Italy showed that the Deepfield Connect products reduced water usage by as much as 40 percent, for savings of up to 700 euros per hectare on this plantation. "Going forward, we also want to display the disease pressure on crops based on moisture levels at each plant. This will enable farmers to apply plant protection agents more sparingly and with even greater precision and to adjust irrigation for optimum crop health," says Ferhadbegovic.

Farm #LikeABosch: everything you need to know about plants in an App

Ferhadbegovic and his team are already thinking ahead. For instance, they want to add interfaces for industry partners in order to give farmers access to as many important topics as possible in one convenient location. “We are thinking of interfaces for control systems, such as for irrigation, but also for suppliers. The required fertilizer, for example, could then be ordered directly in the app.” They also want to offer additional special sensors, such as the sensor that is already available for asparagus ridges, as modular add-ons. Bosch Software Innovations solutions for digital agriculture follow in the tradition of Robert Bosch: the company’s founder himself engaged in agriculture in the 1920s. His farm in Mooseurach, near Munich, still exists today. “We are continuing this legacy: we make life a little easier for hardworking farmers with smart solutions that help them work more efficiently, using fewer resources, while simultaneously improving quality – in other words, we help them to “Farm #LikeABosch”,” says Ferhadbegovic.

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Press day on Monday, November 11, 2019, 12 pm - 6 pm, Hall 15, Booth G17:

Join our press day at Agritechnica and talk to our business experts about a variety of topics relating to agriculture 4.0, sensor technology, plant growth models, and disease prediction. We would be happy to schedule an individual on-site meeting with you.

Bosch Software Innovations has been active in the Internet of Things for more than ten years. The team of IoT consultants, software developers, solution architects, project managers, UX designers, business model innovators, and trainers brings IoT ideas from strategy to implementation. With its domain-specific, software, and organizational know-how, Bosch Software Innovations supports companies digitally transforming themselves. The company has designed, developed, and operated more than 250 international IoT projects in agriculture, smart homes and buildings, retail, energy, mobility and manufacturing. Its cloud-based Bosch IoT Suite currently connects more than 10 million sensors, devices, and machines with their users and enterprise systems. With over 700 IoT experts worldwide, Bosch Software Innovations has locations in Germany, Bulgaria, Singapore, China and Japan.

More information can be found at www.bosch-si.com, www.bosch-iot-suite.com, www.twitter.com/BoschSI, www.blog.bosch-si.com.

The Bosch Group is a leading global supplier of technology and services. It employs roughly 410,000 associates worldwide (as of December 31, 2018). The company generated sales of 78.5 billion euros in 2018. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT company, Bosch offers innovative solutions for smart homes, smart cities, connected mobility, and connected manufacturing. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to deliver innovations for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 460 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. At nearly 130 locations across the globe, Bosch employs some 68,700 associates in research and development.

The company was set up in Stuttgart in 1886 by Robert Bosch (1861-1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-two percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.

Additional information is available online at www.bosch.com, www.iot.bosch.com, www.bosch-press.com, www.twitter.com/BoschPress.