VDI

5th International VDI Conference

Automation and Robotics in Agriculture

OEM-Keynotes: CNH & Kubota

June 4 and 5, 2025, Dusseldorf

- Automation in European Agriculture – Where Are We from a Farmer's Point of View?
- Managing the Regulatory Landscape: Safe and Efficient Operation of Agricultural Machinery
- From Field to Data: Do We Have the Data Base for Agricultural Automation?
- Sensor Perception in an Autonomy/Automation Context
- Growth of the Agri-Robot Market

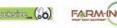**+ Interactive Round Table Session**

Meet international Experts from:

AAT · AGREENCULTURE · AgriRobot (enabling safe autonomy) · AGROINTELLI · AGXEED · ANEDO · Bosch Engineering BOSCH · John Deere · FARM-ING · HOCHSCHULE OSNABRÜCK (University of Applied Sciences) · Kubota · RobAgri

An event organized by VDI Wissensforum GmbH
www.vdi-international.com/ 12KO901025

9:00 Registration & Welcome Coffee

10:00 Chair's Welcome and Opening Address
Ole Green, Founder, Agrointelli, Denmark

10:15 Speed Networking | Make the most of this networking opportunity by participating in these quick and effective 1-to-1 interactions.

I. Automation in Europe

10:30 Automation in European Agriculture –
Where Are We from a Farmer's Point of View?

Opening Keynote

- Solution landscape – easy or complex?
- Which pain points are we trying to solve and are they the right ones?
- Which hurdles do we need to overcome from a farmer's point of view?

Andreas Kaczmarczyk, VP Marketing, Kubota Holdings Europe BV, Netherlands

11:00 Fully Autonomous Machines and Tractors for a Profitable Ecology

- Autonomy for Farming: How autonomy leverages new use cases and new way of farming
- Autonomy as Support for Sustainability: How autonomy enables tools to be used more sustainably
- Autonomy as Support for Profitability: How autonomy of agricultural machinery brings profitability at different timescales

Christophe Aubé, CEO, AgreenCulture & President, Robagri, France

11:30 Networking & Coffee Break

12:15 From Field to Data: Do We Have the Data Base for Agricultural Automation in Europe?

- Advances in agricultural technology are outpacing the practical application of plant production expertise
- The Big Data Disappointment: Current methods fail to produce extensive, high-quality, and standardized datasets across farms
- Farmers are not data scientists – they need insights that provide causality, not just correlation

Jacob von der Decken, CCO, Tunen Limited, United Kingdom

12:45 Reduce Time to Market for Automated Ag Ecosystems by Equipping Conventional Implements with Retrofit Monitoring Kits

- Smart Implements: Conventional implements turn into smart implements to ensure process reliability with automated systems
- Error Detection: Various types of sensors with customized thresholds detect errors and malfunctions to remotely notify or warn supervisors
- Easy Integration: Standard protocols make retrofitting simple and compatible
- Real-World Testing: Test results and feedback on performance in combination with highly automated and autonomous vehicles

Michael Wiebeler, Field Application Engineer, ANEDO GmbH, Germany and
Philipp Kamps, Product Management, AgXeed BV, Netherlands

13:15 Lunch

II. Safety & Regulations – Managing the Regulatory Landscape

14:45 Safe and Efficient Operation of Agricultural Machinery for Seamless Field-to-Road Transition

- Automation Benefits in Agriculture: Boosts efficiency, productivity, and safety
- Standards Integration: ISO 18497 (off-road) and SAE J3016 (on-road)
- Agri-ODD: Standardizes complex agricultural operations and addresses environmental variability

Prof. Dr. Julius Schöning, Faculty of Engineering and Computer Science, Osnabrück University of Applied Sciences, Germany

15:15 Navigating the Evolving Regulatory Landscape for Autonomous Agricultural Vehicles

- The regulatory framework relevant to safety, functional safety, and cybersecurity for autonomous agricultural vehicles
- Insights, solutions, and compliance efforts for several use cases
- Impact on both technical solutions and business models

Tommy Ertbølle Madsen, CEO and Co-Founder, AgriRobot, Denmark

15:45 Networking & Coffee Break

16:30 Autonomous Agricultural Robots in a Public Road Setup – A Safe Road Crossing Robot

- Navigation and route planning with multi fields including public road
- A Danish test setup performed with the Danish Civil Aviation and Railway Authority
- Gains and benefits for farmers and growers

Gareth Edwards, Digital Infrastructure Product Manager, Agrointelli, Denmark

17:00 High Value Crops Harvesting: Automation to Autonomy

Evening Keynote

- Current automation of a harvester
- Straddle tractor capabilities (Isobus/no Isobus)
- Autonomy in vineyards and orchards:
  Grape harvester vs. in-row tractor/robot configuration
- Adoption of GPS and Digital tools
- Ecosystem where all AG equipment coexist, with different levels of automation/autonomy

Thierry Le Briquer, Specialty Crop Business Development, CNH, France

17:30 End of 1st Conference Day

Get-together
At the end of the first conference day we kindly invite you to use the relaxed and informal atmosphere for in-depth conversations with other participants and speakers.

9:30   III. Interactive Round Table Session

During the interactive Round Table Session, we invite you to engage directly with other experts. These consist of interactively moderated conversations on various topics. Discuss and identify challenges within the industry as well as problems, needs, and solutions.

Here are the first announced topics:

#1: Building a Sustainable Business Model for Automated Solutions in Agriculture | Daria Batukhtina, Sr. Manager Strategic Business Development, Innovation Center Europe, Kubota Holdings Europe BV, Netherlands

#2: Partnering is Needed – How Can We Establish Equal Cooperation Between Large and Small Businesses? | Ole Green, Founder, Agrointelli, Denmark

#3: From Prototype to Production: The Biggest Challenges Facing Developers of Agricultural Robotics | James Szabo, Agriculture Autonomy Portfolio Manager, Hexagon, United Kingdom

10:30   Networking & Coffee Break

IV. Sensors Perception in an Autonomy/Automation Context

11:00   Practical Insight: 4D Imaging Radar in Agriculture
- Evolution "4D Imaging Radar", ready for agriculture?
- Reality check of use-cases: expectations vs. real-world experiences
- Say goodbye to GNSS drift or signal loss – radar-based SLAM

Dipl.-Ing. Camille Marbach, Product Management Perception Off-Highway, Bosch Engineering GmbH, Germany

11:30   Scaling Autonomy: A Unified Sensor Fusion Approach from Roads to Agriculture
- Geometrical Interpretable Filtering: Fuses sensor data over time for an interpretable model, improving object detection, tracking, and safety
- Scalability Across Domains: Reduces costs and effort by enabling flexible, cross-domain deployment
- Validation and Certification: Transparent design simplifies compliance with regulations and safety regulations
- Real-World Demonstrations: Showcasing applications from trucking to agriculture for robust object detection

Tim Stahl, Co-Founder, driveblocks GmbH, Germany

12:00   Lunch

V. Livestock Automation – Solutions & Use Cases

13:30   AI Meets Reality: How Automation Tackles the Challenges of Livestock Farming
- Unstructured reality – why livestock environments present unique automation challenges
- Improving worker conditions and farm productivity – an autonomous robot for cleaning of layer houses
- Dealing with uncertainty – computer vision in farm environments

Dr. Christian Lamping, Product Development, Big Dutchman International GmbH, Germany

14:00   Advanced Technologies and Animal Welfare Go Hand in Hand – Use Cases from the Poultry Sector: Hyperspectral Imaging, Accelerated Electrons and a Multi-Axis Robot
- The problem of day-old male chick culling – hyperspectral imaging for in ovo sex determination
- Chemical free and improved hatching rates – accelerated electrons for hatching egg sanitization
- Save resources and improve vaccination quality – a multi-axis robot for poultry vaccination

Jörg Hurlin, CEO and Founder, Agri Advanced Technologies GmbH, Germany

14:30   Networking & Coffee Break

VI. Robotics on the Fields

15:00   Automation vs. Autonomy – Tackle the Limits (of Farmers)
- Practical insights of developing automated Ag-tec for robots
- Sustainable automation – what drives us
- The value of data and AI

Gregor Witzmann MSc., MBA, CEO, Farm-ING Smart Farm Equipment GesmbH, Austria

15:30   Growth of the Agri-Robot Market
- Highlights & trends over the past 5 years
- Added value by field examples: Less robotics, more automation?
- Tech development vs. business process vs. human change vs. environment

Corné Rispens, MSc. BEng., Entrepreneur – Adoption of Agriculture Robots, DUCKSIZE, Netherlands

16:00   Closing Remarks

16:15   End of conference

10th International VDI Conference

Connected Off-Highway Machines
Securing the Path to Autonomy

Date and venue:
June 4-5, 2025
Radisson Blu Conference Hotel Dusseldorf, Germany

Renowned speakers will present their results on the following topics:

· Digital Innovation & Connectivity in Off-Highway
· Off-Highway Autonomous Systems
· Artificial Intelligence & Cyber Security
· Data Management & Regulations
· Innovative Sensor & Radar Technologies

www.vdi-international.com/01KO902025

Participants can attend this event at no additional charge

Reasons to attend

Meet international agriculture industry experts

Hear about automation in European agriculture

Gain Insights into managing the regulatory landscape

Discuss the highlights & trends in the Agri-Robot market

Benefit from practical experiences with Ag-Robots on the fields

Network with innovative companies & organizations

About us

VDI

The Association of German Engineers (VDI) is one of the largest technical-scientific associations in Europe. Throughout the years, the VDI has successfully expanded its activities nationally and internationally to foster and impart knowledge about technology-related issues. As a financially independent, politically unaffiliated and non-profit organization the VDI is recognized as the key representative of engineers both within the profession and in public.

Upcoming Events

International Conference on Agricultural Engineering
LAND.TECHNIK AgEng 2025
November 7-8, 2025 in Hannover, Germany

Call for Papers: Submit your paper before March 31, 2025

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If you want to meet with and reach out to the first-rate experts attending this VDI conference and to powerfully present your products and services to the well-informed community of conference participants, please contact:

Vanessa Ulbrich
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Become a speaker

Become a speaker at our international VDI Automotive Conferences. Make yourself known in the industry and discuss best practice examples with other international experts. We are looking for speakers on: Smart Farming, E/E for mobile Machines, Sensor & HMI Technologies for the Off-Highway Industry.

Please submit your topic to:
Dr. Maria Georgiou-Smith
Product Manager International Business
Agricultural Engineering
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Email: georgiou-smith@vdi.de

Terms and Conditions

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Conference venue
Radisson Blu Conference Hotel Dusseldorf
Karl-Arnold-Platz 5
40474 Dusseldorf, Germany
Phone: +49 211 45 53-0
Email: info.dusseldorf@radissonblu.com

HRS Das Hotelportal

You will find more hotels close to the venue at www.vdi-wissensforum.de/hrs

Hotel room reservation:
A limited number of rooms has been reserved for the benefit of the conference participants at the conference hotel. Please refer to "VDI Conference".
For more hotels: www.vdi-wissensforum.de/hr

VDI Wissensforum service package:
The conference package includes the conference documents (online), beverages during breaks, lunch, and the get-together on June 4, 2025.

Conference attendance conditions and terms can be found on our website:
www.vdi-wissensforum.de/en/terms-and-conditions/

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Registration

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Yes, I will participate as follows:

Participation Fee + VAT
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(12KO901025) **€ 1990**

☐ I am interested in sponsoring and/or exhibition
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