

3rd International VDI Conference

Automation and Robotics in Agriculture

July 06 and 07, 2022, Dusseldorf

- Ag Robot Market Overview
- The Farmers Needs and Readiness for Automation and Robotics
- Legislation and Standards for Agricultural Automated/Autonomous Machinery
- Field Robotics Safety – From Research to a Product
- Animal Automation & Livestock Management – Solutions & Use Cases

+ Panel Discussion: A Market View from multiple Perspectives

+ Interactive Round Table Session

Meet international Experts from:



An event organized by VDI Wissensforum GmbH
www.vdi-international.com/12K0901022



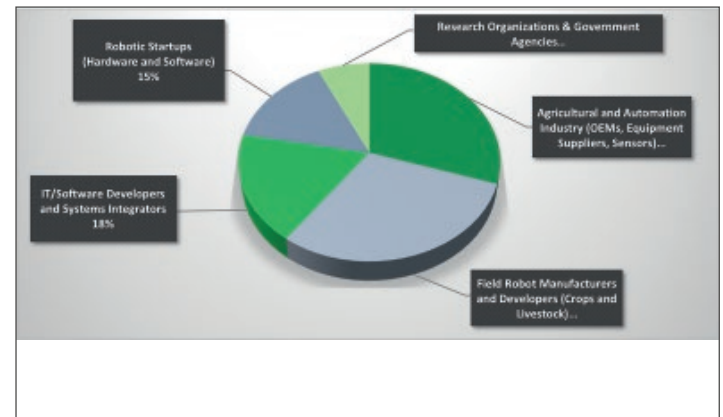


About us



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.

Expected Participants according to Functions



Reasons to attend

Meet international Agriculture Industry Experts

Gain Insights into Standards for agricultural automated/autonomous Machinery

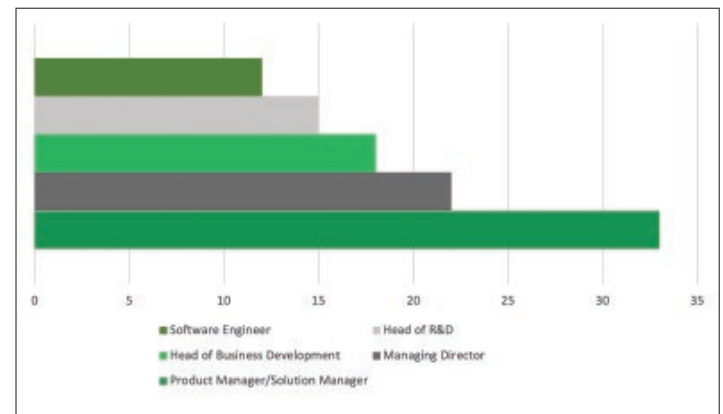
Prepare for Industry-wide Robotics Usage

Benefit from Case Studies and practical Knowledge

Discuss how a Start-up could win the Race to build 21st Century Ag Equipment

Network with innovative Companies

Expected Participants according to Industries



09:30 Registration & Welcome Coffee

11:00 Chair's Welcome and Opening Address

Ole Green, Founder, Agointelli, Denmark

11:15 **Speed Networking** | Make the most of this networking opportunity by participating in these quick and effective 1-to-1 interactions.

Legislation & Safety for agricultural Machinery

11:30 Legislation and Standards for agricultural automated/autonomous Machinery – Work in Progress

- The stakeholders
- Essential legal requirements for machinery
- Tractor vs. machinery
- Standardization activities
- Legal implications of connected and AI driven autonomous functions

Dr. Ivo Hostens, Technical Director, CEMA, Belgium

12:00 Field Robotics Safety – From Research to a Product

- The path from research to commercialization
- Field robotics safety: Fulfilling the safety standards and the EU legislation requirements
- Safety challenges for field robots

Sorin Adam, PhD, Robotics Safety Specialist, Agointelli, Denmark

12:30 **helyOS – A Software Development Framework for Control Tower Software**

- Importance of development frameworks in the software development process
- Significance of control tower software
- SDK for controlling and monitoring of mobile machines and machine fleets
- Outlook and the road to Open Source

Dr.-Ing. Sebastian Wagner, Group Leader Vehicle Control and Sensor System, Fraunhofer Institute for Transportation and Infrastructure Systems IVI, Germany

13:00  Lunch

Ag Robot Market Development & Overview

14:30 International Research Cooperation: Edge Report on Obstacles and Challenges of Autonomous Field Robotics

- High potential of autonomous field robotics – Still market penetration is marginal
- Intl. research cooperation between DIN and SAE Int. to address this issue
- Summary of insights from intl. experts from business, research, consulting, and politics

Johannes Lehmann, Head of Business Development Smart Farming, German institute for standardization (DIN e.V.), Germany

15:00 Buyers of Field Robots in vulnerable Position

- Market overview: Rapidly growing number of manufacturers
- Farmers find it hard to choose due to a lack of standardization and comparability
- Initiatives to take away 'the fear' of robots (and increase affordability)
- Field robots aren't replacing tractors, they're complimentary
- Independent testing and certification

Geert Hekker, Chief Editor, and **René Koerhuis**, Robot Editor, both: Future Farming, Misset Uitgeverij Doetinchem, The Netherlands

15:30 Panel Discussion: A Market View from multiple Perspectives

Hosted by **Ole Green**, Founder, Agointelli, Denmark

Panelists:

Christian Kirchoff, CEO, K.U.L.T. Kress Umweltschonende Landtechnik GmbH, Germany and selected speakers of the conference

16:00  Networking & Coffee Break

Practical Implementation of Robotics on the Fields – Part I

16:30 The Farmers Needs and Readiness for Automation and Robotics

- Tipping points for farmers to dig into robotics
- Bringing great technical solutions together – A complex working field for users
- Don't offer a product – Offer a solution! But how to?

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

17:00 How an Ag Company leveraged Tech to solve its own Labor Problems

- How GUSS was born
- A solution to labor challenges
- Utilizing autonomous technology to improve efficiency, precision, and safety

Gary Thompson, COO, GUSS Automation, USA

17:30 Are Ag OEM's scared of Robots? Why a Start-up will win the Race to build a 21st Century Ag Equipment Company

- Automation vs. Robotics: Why arms and end-effectors are essential for the desired results
- Building a new system from the ground up
- Why specialty crops are the place to start

Peter Ferguson, Director of Business Development, advanced.farm, USA

18:00 End of conference Day One



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.

Automating Livestock Management – Solutions & Use Cases

09:30 How Robotics provide Dairy Farming with a sustainable, profitable, and enjoyable Future

- The cow at the CenterPoint for developing solutions
- Automation tailoring the individual cow needs
- Sensor data into practical actions
- Manage the exceptions while automation takes care of daily business

Geert Kuijpers, Product Manager Milking & Cooling, Lely International N.V., The Netherlands

10:00 Future of Precision Livestock Management – Some Use Cases on:

- Cow monitoring
- Cow positioning
- Augmented Reality in farm surroundings

Joost van Kreijl, Head of Product Livestock Management Dairy, Nedap, The Netherlands

10:30 ☕ Networking & Coffee Break

11:00 Interactive Round Tables

#1: The Do's and Don'ts of Co-creation when developing Data Solutions

Joost van Kreijl, Nedap, The Netherlands

#2: Automation and Robotics are changing the everyday Work of Farmers. But what about the Industry?

Dr.-Ing. Sebastian Wagner, Fraunhofer IVI, Germany

#3: Robots are technical running, but there are still some practical Challenges to get a Robot into real great beneficial Usage. Let us draw the ideal Customer for a Robot.

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

Practical Implementation of Robotics on the Fields – Part II

12:00 Automating Greenhouse Farming

- Current challenges faced by greenhouse growers
- What can be automated?
- How will robots integrate into the greenhouse?

Iddo Geltner, PhD, Co-founder & CEO, Arugga AI Farming, Israel

12:30 🍴 Lunch

14:00 Fieldrobots – Adding Value far beyond the actual Field Work

- Addressing current needs for optimization
- Versatile carriers for multipurpose application
- Integrating robots with the production process

Dipl.-Ing. agr. Thomas Muhr, Managing Director, geo-konzept GmbH, Germany

14:30 The Adoption of agricultural Automation in the UK

- Home Farm Nacton: Ag-robot experience to date
- Why horticulture?
- Barriers to Automation Adoption
- Demand for Autonomy
- Future of UK Farming

Thomas Beach, CEO, Autonomous Agri Solutions, and **Andrew Williams**, Farm Director, Home Farm Nacton, both: United Kingdom

15:00 The Path towards Autonomous Farming – Mobility + Data + Dexterity – Horizontal Platforms or vertical Stacks?

- Status of computer vision based robots' navigation, perception, and ability to manipulate things
- Prototyping this technology is easy – The challenge lies in "robustifying" it for commercial use
- Layered technology consists of chips, computers, operating systems and applications...
- How will things evolve in farm autonomy? How will mobility autonomy, crop perception, and dexterity (i.e. autonomous picking) be layered into one cohesive system?

Charlie Andersen, CEO, BURRO, USA

15:30 Closing Remarks

15:45 End of conference



Upcoming Events

International Congress ELIV-MarketPlace 2022

E/E in mobile Machines

November 15–16, 2022 in Baden-Baden, Germany

International Conference on Agricultural Engineering

AgEng-LAND.TECHNIK 2022

November 22–23, 2022 in Berlin, Germany

Exhibition / Sponsoring

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:

Sandra Schreiner
Project Consultant
Exhibitions & Sponsoring
Phone: +49 211 6214-188
Fax: +49 211 6214-97188
Email: schreiner@vdi.de



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, Sensor & HMI Technologies for the Off-Highway Industry.

Please submit your topic to:
Dr. Maria Georgiou-Smith
Product Manager International Business
Agricultural Engineering
Phone: +49 211 6214-467
Email: georgiou-smith@vdi.de

Registration

Terms and Conditions

Registrations: Registrations for conference attendance must be made in writing. Confirmation of your registration and the associated invoice will be mailed to you. Please do not pay your conference attendance fee until you have received our invoice and its invoice number to be stated for transfer. German VAT directives apply. Please state your VAT-ID with your registration.

Conference venue
NH Dusseldorf City Nord
Münsterstr. 232-238
40470 Düsseldorf, Germany
Phone: +49 211/239486-0
Email: nhduesseldorfcitynord@nh-hotels.com



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 NH Dusseldorf City Nord. Please refer to "VDI Conference". For more hotels: www.vdi-wissensforum.de/hrs

VDI Wissensforum service package:
The conference package includes the conference documents (online), beverages during breaks, lunch and the get-together on July 6, 2022.

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

Data protection: VDI Wissensforum GmbH captures and processes the address data of conference participants for their own corporate advertising purposes, enabling renowned companies and institutes to reach out to participants by way of information and offers within their own marketing activities. We have outsourced in part the technical implementation of data processing to external service providers. If you do not want to receive any information and offers in the future, you may contradict the use of your personal data by us or any third parties for advertising purposes. In that case, kindly notify us of your contradiction by using the email wissensforum@vdi.de or any other of the contact options mentioned.

3rd International VDI Conference

Automation and Robotics in Agriculture



Register online!

www.vdi-international.com/12K0901022



VDI Wissensforum GmbH
P.O. Box 10 11 39
40002 Düsseldorf, Germany
Phone: +49 211 6214-201
Fax: +49 211 6214-154
Email: wissensforum@vdi.de
www.vdi-international.com/12K0901022

VDI Wissensforum GmbH | VDI-Platz 1 | 40468 Düsseldorf | Germany

[www](http://www.vdi.de)

Yes, I will participate as follows:

Participation Fee + VAT

VDI Conference 06.-07.07.2022
(12K0901022) € 1890

I am interested in sponsoring and/or exhibition

Participation Fee VDI-Members* Save 50 € for each Conference Day.

* For the price category 2, please state your VDI membership number

VDI membership no.

Title

First Name

Last Name (Family Name)

Company/Institute

VAT-ID

Department

Street

ZIP Code, City, Country

Phone

Fax

Email

Please state your invoice address if this differs from the address given

Participants with an invoice address outside of Austria, Germany and Switzerland are kindly requested to pay by credit card.

Please register at www.vdi-international.com. Your credit card information will be transmitted encrypted to guarantee the security of your data.