



## Press Highlight Tour, Sunday, 31 March 2019

### RED TOUR

	Company	Hall	Booth	Time
Start	Press Center			11:45
1	5G Arena	16	D38	12:00
2	YASKAWA Europe GmbH	17	B50	12:15
3	Robert Bosch GmbH	17	A40	12:30
4	FANUC Deutschland GmbH	17	A42	12:45
5	Deutsches Forschungszentrum für Künstliche Intelligenz DFKI	2	C59	13:05
6	Leichtbau BW GmbH	5	C18	13:30
7	Microsoft	7	C40	13:50
8	Technologie-Initiative SmartFactory KL e.V.	8	D18	14:05
9	Porsche Engineering	27	F69	14:25
10	Partner Country Sweden	27	H30	14:40



Deutsche Messe

Get new technology first



## Deutsche Messe AG 5G Arena

### **5G industrial applications in a real 5G testfield**

Speaker: Hartwig von Saß, Projekt 5G Arena

The 5G Arena shows in this form for the first time worldwide several concrete application scenarios for the new super-fast mobile standard 5G in an industrial environment. For this purpose, a real 5G test field was set up in the hall in which several exhibitors present their showcases in real use.



## Yaskawa Europe GmbH

### **“EASY” automation in the midst of Industry 4.0 complexity**

Speaker: Armin Schlenk, Director Marketing Europe

A multitude of options combined with ever decreasing time and human resources: By presenting concrete solutions relating to the focus topic of “EASY” automation at the Hannover Messe, Yaskawa will demonstrate how companies caught up in the midst of Industry 4.0 complexity can benefit from consistently easy-to-use components.

A live demonstration from the Yaskawa stand based on a project carried out by the Hans-Dietrich-Genscher-School in Wachtberg near Bonn demonstrates the importance of simple programming and operation when using industrial robots — a topic which is all the more relevant given the recent introduction of the Digital Pact program in schools.

The HC10DT (“Direct Teach”) model variant, a further development of the collaborative Motoman HC10 robot, can optionally be programmed directly via the robot arm. This “easy teaching” is made possible by a special switch box with function buttons. The robot flange of the HC10DT is equipped with three different buttons: enabling button, teach-in button and tool button for opening and closing the gripper. It is thus no longer necessary to hold the teach pendant in the hand during robot programming, which simplifies the process.



Deutsche Messe

Get new technology first



# Robert Bosch GmbH

## Factory of the future

Speaker: Dr. Marc Wucherer, board member Bosch Rexroth AG

The connected factory – from vision to reality

At Hannover Messe 2019, the Bosch Group has some 1,300 m<sup>2</sup> on which to present a hands-on interactive exhibit of the connected factory. At the center of the booth is a platform that displays a reproduction of the fully connected factory of tomorrow: autonomous transport systems deliver components to digital workspaces, robotics solutions support workers in manufacturing, and the final quality inspection is performed with the help of artificial intelligence. Thanks to 5G, communication between machines and systems at the booth happens seamlessly and in near real time. Visitors can watch live how people and machines work together in the factory of the future. A futuristic video demonstration and the exhibits themselves – from fully automatic assembly systems and mobile robots to software and services for manufacturing and logistics – illustrate how Bosch creates technology that is “Invented for life” and that assists, relieves strain, and improves work. The key players in the factory of the future are people – they always have control over what happens there.

Bosch and Bosch Rexroth @hannover\_messe: hall 17, booth A40



Deutsche Messe

Get new technology first



# FANUC Deutschland GmbH

## Collaborative Robot CR-14iA/L

Speaker: Nils Tersteegen, Head of Marketing FANUC Deutschland

The leading industrial robot manufacturer FANUC has expanded its range of "collaborating" robots with the robot model CR-14iA. Unlike standard robots, the green-coloured CR model series does not have to be separated from its human "colleagues" in production by means of safety fences or other protective devices. Instead, it works at close proximity to the human being. The CR-14iA can move loads of up to 14 kilograms, twice as much as the almost identical looking CR-7iA. Because it is very compact, the robot requires little space and fits into many areas of a production line.

The cooperation between man and machine is also perfected by FANUC's own image processing systems. During the movement of a robot, a new 3D vision sensor creates images that are used to determine the gripping position. This saves time during gripping processes because the robot does not have to interrupt its movement to take a picture. In connection with the IoT platform FIELD and the integration of artificial intelligence, system operators and robot users can take the next step towards "production of the future".



# Deutsches Forschungszentrum für Künstliche Intelligenz / DFKI

## Hybr-iT - Smart human-robot teams master agile production Speaker: Anselm Blocher, Senior Researcher

DFKI, together with partners Airbus Operations, Broetje Automation, EngRoTec, and The Captury, developed a technology demonstrator for scenarios in hybrid manufacturing in the aircraft construction industry. The demonstrator represents the results of Project "Hybr-iT – Hybrid and intelligent human-robot collaboration," which was funded by the Federal Ministry of Education and Research (BMBF).

Partners at the DFKI stand (Hall 2, C59) are exhibiting how two people and six robots jointly master manufacturing tasks as a hybrid team. The robots perform the tasks that are non-ergonomic, repetitive, or physically strenuous for people, for example, the seating and sealing of rivets in an aircraft body or the assembly of the cable channels in the wings. The robots "organize around the humans," achieving the freedom and flexibility to complete their production schedule.

Humans perform the tasks that require higher cognition or sensory motor skills, such as the fine adjustments and quality controls. Support is provided by means of an AR application and HoloLens glasses.



## Leichtbau BW GmbH

### World premiere concept lightweight vehicle ILO1

Speaker: Dr. Wolfgang Seeliger, Executive Director Leichtbau BW GmbH

No mobility of tomorrow without lightweighting. A pioneering example is the ILO1 by Emm! Solutions GmbH, which is focused on the dynamic requirements of autonomous driving. As a world premiere, the further developed version of the electric vehicle can be seen at the joint stand "Lightweight Technologies from Baden-Württemberg". Compared to a normal car, the ILO1 only needs half the energy, one third of the weight and one quarter of the required space. In the future, it can be ordered and will take transport the client. The revolutionary concept of the ILO1 could change our cityscape. Lightweight construction was a central enabling technology for the ILO1, without which the vehicle would not have been possible. In addition, the ILO1 shows how to become a game changer by means of lightweighting and digital transformation: the prototype was developed and built by a small team in only four months thanks to a completely digitalised process chain - so you can also play with the big players as a small company. Because lightweighting not only makes products lighter, but also better and more efficient. The ILO1 also contains lightweight components from exhibitors of the stand



Deutsche Messe

Get new technology first



# Microsoft Deutschland GmbH

## Microsoft HoloLens 2: Microsoft Shows the Future of Mixed Reality

Speaker: Michael Zawrel, Senior Product Manager Mixed Reality & HoloLens Germany

At Hannover Messe 2019 Microsoft presents current Mixed Reality and Microsoft HoloLens solutions as well as the next generation of Microsoft HoloLens.

Microsoft HoloLens 2, presented for the first time at MWC Barcelona, offers a larger field of vision, significantly improved wearing comfort due to an optimized center of gravity as well as improved and more intuitive interaction with holograms.

Manufacturers can use holograms to visualize factory, product or machine layouts both in the physical world and in virtual reality. You can easily import plans from other applications to experience designs in scale and context, navigate proposed layouts in physical space or virtual reality, and make changes in real time – all for faster and more cost-effective planning, design, and construction.

Together with partners and customers, Microsoft will demonstrate how companies can work with Microsoft HoloLens and Microsoft Mixed Reality programs such as Dynamics 365 Remote Assist or Dynamics 365 Layout. Furthermore, Microsoft demonstrates how new applications such as Dynamics 365 Guides, can add real value in various areas such as training, maintenance or field service.



Deutsche Messe

Get new technology first



# Technologie-Initiative SmartFactory KL e.V

## Human-Centric Support: Artificial Intelligence in Manufacturing

Speaker: Prof. Dr.-Ing. Dr. h.c. Detlef Zühlke, Chairman of the Board of Technology Initiative SmartFactory-KL

People employed in future production jobs will have an important partner in Artificial Intelligence (AI). The technology is able to quickly and reliably evaluate large volumes of data and provide filtered, context-related results to the operators. Augmented Reality (AR) has proven to be an efficient tool for visualizing this information – in an easy-to-understand way. The partner consortium at SmartFactory-KL demonstrates how this technology is implemented using its Industrie 4.0 production plant at the Hannover Messe on April 1-5, 2019. Several scenarios are used to illustrate how quality assurance, condition monitoring, and anomaly detection can be improved through AI. The joint exhibit stand of SmartFactory-KL and German Research Center for Artificial Intelligence (DFKI) is located in hall 8, booth D18.



Deutsche Messe

Get new technology first



# Porsche Engineering

## Charging Solutions

Speaker: Michael Kiefer, Director Hochvolt Systeme

As a globally successful sports car manufacturer, the product development at Porsche focuses on the customer's perspective. This is no different with the fast-charging system by Porsche Engineering. Progressive technical solutions and the modern Porsche Design form a unique symbiosis in this competitive environment, and generate valuable benefits for charging station providers and end users. With a portfolio of solutions which adapts to every need. The Charging Solutions by Porsche Engineering.



**Deutsche Messe**

**Get new technology first**



# **Business Sweden**

## **Sweden Co-Lab: Partner Country**

**Speaker: H.E. Per Thöresson, Ambassador of Sweden to Germany, and Ylva Berg, CEO, Business Sweden**

### **Sweden Co-Lab**

**Sweden may be a small country, but is responsible for innovations and products used worldwide. What is the secret? Sweden is the Partner Country of the Hannover Messe. Our presence encompasses key players from large industrial companies, to SMEs and start-ups, to public actors under the theme Sweden Co-Lab. We will showcase that we are a greenhouse for co-creation and innovation and how Sweden is a natural partner for collaborations. We focus on innovation, sustainability, digitization and globalization, while positioning Sweden, Swedish companies and solutions as the world leader in smart industry.**

**Learn more about, invest, network or partner with Swedish companies in the Investment Lab and the Start-up Lab. Meet companies for discussion and co-creation in the Innovation Lab. Experience the power of collaboration, with 13 projects changing the industry. Meet our partners and learn more about exciting projects and collaborations from the Inspirational stage and the Co-Lab stage. Visit Sweden Cold-Lab, the most chill place in Hannover. Step right into Swedish winter and see what ideas you will find in the cold.**

**Welcome!**