Press Highlight Tour, Sunday, 31 March 2019

BLUE Tour

	Company	Hall	Booth	Time
Start	Press Center			11:45
1	5G Arena	16	D38	12:00
2	Festo AG & Co. KG	15	D11	12:15
3	SEW-EURODRIVE GmbH & Co. KG	15	F12	12:30
4	ABB AG	11	A35	12:50
5	Beckhoff Automation GmbH & Co. KG	9	F06	13:10
6	Siemens AG	9	D35	13:25
7	Ericsson	8	D28	13:40
8	SAP SE	7	A02	13:55
9	ENERCON GmbH	27	L75	14:15
10	Partner Country Sweden	27	H30	14:30

Deutsche Messe AG 5G Arena

5G industrial applications in a real 5G test field
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.

Festo AG & Co. KG

BionicSoftHand
Speaker: Karoline von Häfen, Head of Corporate Bionic Projects, Festo AG & Co. KG

The human hand, with its unique combination of power, dexterity and fine motor skills, is a true miracle tool of nature. In everyday life, we use our hands as a matter of course for the most diverse tasks. In that regard, what could be more natural than equipping robots in collaborative workspaces with a gripper that is modelled after this model of nature, that solves various tasks by learning through artificial intelligence?

The BionicSoftHand, developed in the Festo Bionic Learning Network, uses the method of reinforcement learning – learning by strengthening. This means that instead of having to imitate a concrete action, the hand is merely given a goal. It tries to achieve this through trial and error. Based on the feedback received, the hand gradually optimises its actions until it finally solves the task successfully.

The BionicSoftHand is pneumatically operated, so that it can interact safely with people. Its fingers consist of flexible bellows structures with air chambers. The bellows are enclosed in the fingers by a special 3D textile coat. This makes it light, flexible, adaptable and sensitive, yet capable of exerting strong forces.

SEW-EURODRIVE GmbH & Co. KG

Innovations in drive technology - in the field of Industrial Intelligence
Speaker: Johann Soder, COO

SEW-EURODRIVE presents future-oriented drive and automation solutions for the intelligent,

networked factory of the future. The use of smart, networkable SEW products is explained and

presented using the example of an automotive vehicle final assembly system solution. The

networking of space, people and data creates a new, adaptable technology-human-centric

working environment. Versatile agile concepts beyond classic line assembly allows a flexible,

efficient production.

Press contact: Stefan Brill, stefan.brill@sew-eurodrive.de

ABB AG

ABB Factory of the Future
Speaker: Jörg Reger, Managing Director ABB Automation GmbH and Head of Robotics Deutschland

How does the analog become a smart factory? How can every surface be used as intelligently and flexibly as possible? With digitization and artificial intelligence. With flexible automation and collaborative technologies: this is what you see in the ABB mini factory. From the production hall to the exhibition stand - the factory in small format shows solutions for customer-specific series production. The new normality of many companies. Robots adapt flexibly to constantly changing requirements. They can be intuitively programmed and enable the individual production of small quantities in various variants in a very small space. They do not work independently behind safety fences, but collaborate, working directly with people thanks to the latest safety technology. Dashboards are used to monitor, analyze and optimize robots, devices and production data in the show factory in real time. Enabled by ABB Ability™ Connected Services. Networked in the cloud and with machine learning, not only is the performance and quality of production increased: unique insights and information lead to better decisions - and close the gap between the physical factory and the virtual world.

Beckhoff Automation GmbH & Co. KG

Artificial intelligence: machine learning for highest efficiency
Speaker: Gerd Hoppe, Corporate Management, Beckhoff Automation

XPlanar: Flying Motion

Beckhoff is opening up new avenues in machine design with XPlanar. This is made possible by planar movers that float freely above arbitrarily arranged planar tiles and enable extremely flexible, precise and highly dynamic positioning. This results in maximum flexibility and simplification in the design of machines and plants.

The XPlanar system combines the individual arrangement of planar tiles with a multi-dimensional positioning capability of the planar movers floating above them. The movers can be moved jerk- and contact-free in two dimensions at up to 4 m/s with 2 g acceleration and 50 μm positioning repeatability – noiselessly and without abrasion.

The planar motor system is highly scalable to suit individual needs and simplifies the design of machines and plants. Due to the maximum flexibility in mover positioning and the very high dynamics it is possible, e.g., to divide product flows simply and individually, so that robots or other inflexible mechanical devices can be efficiently replaced. The contact-free mover travel also eliminates wear, emissions and the carryover of contaminations.

www.beckhoff.com/xplanar

Siemens AG

Digital Enterprise – Thinking industry further!
Speaker: Dr. Wolfgang Heuring, CEO Business Unit Motion Control

Digital twin, additive manufacturing ("3D printing"), innovative robotics, automated guided vehicles: Siemens illustrates the use of these future technologies through the example of electric car and battery production.

The exhibit shows for example how:
- The "digital twin" of the product optimizes the development of the car– e.g., through the simulation of electronics, mechanics and aerodynamics
- The "digital twin" of production increases efficiency and flexibility – through the simulation of machines or even entire production lines
- A robot uses additive manufacturing to create particularly light but also robust components for battery blocks
- Automated guided vehicles transport the batteries for assembly in the car body
- Cloud and edge-based data analysis optimizes production and maintenance

Siemens integrates next generation technologies in its Digital Enterprise portfolio, creating new opportunities for the efficient and flexible production of electric cars and batteries. Companies can meet current challenges such as growing demand for customized products and alternative drive concepts.

Press contact: David Petry, david.petry@siemens.com

Ericsson

5G-based human-machine collaboration in real time
Speaker: Ralf Wellens, Project Manager (5G for Industries)

Sounds a little bit like Kraftwerk's album "Die Mensch-Maschine", but, instead, is an exciting demo at the Hannover Messe in 2019, where human-machine collaboration is showcased: At this year's most important Industry 4.0 tradeshow, the Swedish network supplier Ericsson will deploy a 5G network at its booth. Among other showcases a human-robot interaction in real-time will be presented. The joint research project of Ericsson, Audi and Sick demonstrates the collaboration of a wireless production robot with the visitor of the Ericsson booth in Hall 8.

If wireless production robots and production plant employees want to work hand in hand in the future and if the collaboration is to work smoothly, real-time collaboration is required. The key to smooth human-machine collaboration is the low end-to-end latency of less than ten milliseconds. The playful demonstration at Ericsson's Hannover Fair booth is an example for the collaboration in a factory. The robot's sensors, which are connected via the 5G network, detect the approaching hand of the stand visitor, whereupon the robot hands over a pack of mints to the guest.

Ericsson

5G-based human-machine collaboration in real time
Speaker: Eric Fenger (Solution Architect)

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SAP SE

Computer reads wishes from the eyes
Speaker: Hala Zeine, President Digital Supply Chain

In the age of digitalization, the interaction between people and machine is brought to a new level. So far, the aim has been to make computers, mobile devices and machines that accompany us in our everyday lives easy, intuitive and efficient to use.

Together with the Munich-based startup 4tiitoo, SAP is working on the workplace of the future, which is significantly more efficient, but also more pleasant and effortless for people to handle work processes. Eye tracking - controlling by eye movements - plays a major role in this. This enables computers to be operated faster and more ergonomically with the eyes. Various data can be evaluated in real time based on the analysis of eye movements. The daily mouse and keyboard marathon causes neck, shoulder and arm problems. In the future, work will be much more intuitive thanks to control with looks, gestures and speech - and it will also make it easier to include employees with disabilities.

ENERCON GmbH

System solutions for renewable energies
Speaker: Felix Rehwald, Spokesman

Renewable energies and practical solutions for integrated energy are key factors for successful implementation of the energy transition in Germany and the rest of the world.

As a supplier of system solutions for renewable energies, ENERCON develops efficient onshore wind energy converters and innovative technologies in the integrated energy sector.

These include the newest EP3 platform wind energy converters, along with the E-Charger 600 for ultra-rapid charging of e-vehicles, the E-Storage 2300 for storing energy, and extensive services in the field of energy logistics.

Press contact: Felix Rehwald, felix.rehwald@enercon.de

Business Sweden

Sweden Co-Lab: Partner Country
Speakers: 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!