SmartProduction 2023: Companies discuss energy supply and complex processes

On May 4th, the SmartProduction technology conference was held for the third time at the Fendt Forum. 170 representatives of internationally operating companies and start-ups exchanged ideas on topics including complexity in production, autonomy and energy supply.

One day, two main topics and numerous visitors. This year, the focus of the SmartProduction technology conference was on the topics of energy supply and complexity management in manufacturing companies. This year's patron of the third technology conference was Markus Blume, Bavarian State Minister for Science and the Arts.

Markus Blume (Bavarian State Minister for Science and the Arts) delivered his greeting virtually

"High tech and home belong together in the Allgäu"

Markus Blume explained in his virtual greeting why Marktoberdorf is exactly the right place for this technology conference: "Firstly, because you have great expertise and competence in mechanical engineering in the Allgäu region. One immediately thinks of Fendt and many more, and secondly, because the conference takes place in a picturesque setting." Such a conference is the right approach "because high-tech and home belong together. Fendt brings innovation to the field. We bring high-tech to the region," he continued. With a reference to the upcoming technology transfer center for applied AI and robotics for Marktoberdorf, he jokes in closing: "If this continues, Marktoberdorf will soon become Markt-upper-valley."

Ingrid Bußjäger-Martin (Managing Director for Finance and IT Fendt) welcomes the guests

Smart production a success factor

"Smart production is a key success factor for us with many facets. This includes the smart design of our production to meet the high demand on the market, but also smart use of resources, such as energy or skilled labor, for example," says Ingrid Bußjäger-Martin, Managing Director of Finance and IT Fendt, in her welcome to the guests. "I'm looking forward to exciting technical presentations, interesting discussions, smart solutions from the exhibitors and to the exchange inspiring new solutions."

Dr. Ralf Plieninger (CTO Sonnen GmbH)

New energy sources demand new processes

The very first presentation by Dr. Ralf Plieninger, CTO Sonnen GmbH, focused on the use and storage of renewable energies. "With the energy transition, energy sources and energy consumption are changing. We will use much more electrical energy in the future and its availability will fluctuate more," explained Dr. Ralf Plieninger in his presentation of the developed energy storage systems. Other presentations will focus on how companies can optimize their processes to use less energy and position themselves for the future with renewable energy sources.

"Fendt is a shining example of how smart production should run," says Christian Will (Vice President Production Development Porsche)

"We want to make people's dreams come true"

Christian Will, Vice President Production Development at Porsche, also addresses the consequences for production from a rapidly changing world. "Our world is currently changing as fast as never before - unforeseen events such as a pandemic or war put pressure on supply chains and energy supplies, in addition to that com changes and tightening of laws worldwide, trends towards protectionism and new competitors. As an automotive manufacturer, Porsche's goal is to make people's dreams come true, depending on their needs. Electrification, connectivity, and digitalization are key factors in the further development of cars, and this carries over to production methods. To do this, the mobility environment must be considered, and the company must respond to the changes in its structures," says Christian Will.

Complex processes offer opportunities for innovation

Dr. Peter Bebersdorf (Director Fendt Tractor Plant)

As in the automotive sector, there is also a great deal of interest in the individualization of tractors. "Accordingly, our maxim is to control variance instead of reducing it," said Dr. Peter Bebersdorf, Plant Manager Fendt Tractor Plant, introducing his presentation. He spoke about the Vario Takt, Fendt's own production system with a variable cycle time for tractor assembly. "Fendt had been assembling on one production line for many years before. But the introduction of our world's largest standard tractor, the Fendt 1000 Vario, presented us with major production challenges." Factors such as the pure size of the machine, but also the assembly time, triggered the development of a variable production cycle at Fendt - the Fendt Vario Takt. "We are the only ones in Germany who produce according to this system, because this is exactly how we were able to solve our challenges," says Peter Bebersdorf.

The sequence of machines is planned in such a way that a reliable average cycle time is created from the different cycle times per machine on the assembly line. "In this way, all tractors from the smallest model with 70 hp to the Fendt 1000 Vario with 517 hp run over one production line."

In the subsequent panels, various company representatives presented and critically discussed their own solutions in dealing with energy management and energy systems as well as complex requirements in the automation of processes or even the connection of robots.

Impressions from SmartProduction 2023

About the SmartProduction Technology Conference

In February 2020, the first conference on the topic of the future in production was held in Marktoberdorf with over 100 participants. The SmartProduction initiative in Marktoberdorf shows that the Allgäu region is home to numerous manufacturing companies, many of them market leaders in their fields, and startups in a wide range of industries that are facing the challenges of the future. The goals of the conference are the exchange and inspiration in the field of the future production sector, as well as networking in the regional manufacturing industry. Participants include CEOs, scientists, engineers, and tech experts. Further information at:

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