## THREE QUESTIONS ABOUT AWK'21

TO PROFESSOR THOMAS BERGS



**Dr. Ir. Thomas Bergs MBA** is a Member of the Supervisory Board of the Fraunhofer Project Center at the University of Twente, member of the Board of Directors of the Fraunhofer Institute for Production Technology IPT, and holds the Chair of Manufacturing Technology at the Laboratory for Machine Tools and Production Engineering (WZL) of RWTH Aachen University.

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## to **Professor Thomas Bergs**

InnovatieNU: Glad to meet you, Professor Bergs! The Aachen Machine Tool Colloquium had to be postponed by more than a year due to the Corona pandemic. What significance does this have for the content of the new edition of the event?

Bergs: The entire manufacturing industry has been subject to a kind of stress test since the beginning of the Corona pandemic: Companies today have to be able to react quickly at any time to enormous changes that cannot be calculated at all in the medium term. We have learned that companies that have come through the crisis better than others are already using Internet of Production approaches as valuable tools. The AWK'21 will show success stories and describe ways in which other companies can also gain resilience by a networked, adaptive production.

InnovatieNU: More major crises may be ahead of us with climate change - how could we in production contribute to a timely turnaround?

Bergs: The threat of climate change and the necessary energy turnaround make it absolutely essential to look at production and all associated processes in terms of their sustainability. IT networking of machines and systems, data analyses and simulations help us to evaluate and optimise the use of resources over the entire product life cycle - from creation and use to disposal. In the future, we will be able to use for example the digital twin to estimate which alternative manufacturing processes would be more resource-efficient in the overall balance, and on this basis even design products completely differently.

InnovatieNU: How is it possible to produce more sustainably by using collected data?

Bergs: Digitisation and networking help us to master the increasing complexity of processes and to optimise and ultimately evaluate our products in terms of environmental aspects, corporate social responsibility and corporate governance. If we analyze the enormous volumes of data available in a targeted manner and make intelligent use of the information gained from it, we can produce much more efficiently, flexibly and ecologically with existing technology. Here, the Internet of Production offers us countless possibilities, which we would like to discuss with our guests during AWK'21.

InnovatieNU: Thank you very much, Professor Bergs, for this short interview! We are excited to see which new methods and concrete application examples you will present to us at AWK'21.

