Press Release

BENTELER proves technological competence with "Big Data Solutions"

- **Research project BOOST 4.0: Together with the Fraunhofer IEM, BENTELER implements a process model for predictive maintenance within the technology network it´s OWL.**
- **At the BENTELER Automotive site in Paderborn, the partners are engaged in data analysis and evaluation for the maintenance of machines.**
- **In a presentation, BENTELER showed how Big Data is used in practice.**

Paderborn, September 09, 2020. The future is free of malfunctions. This is the ambitious goal of BENTELER. In order to guarantee a smooth production operation, the Paderborn-based company cooperates with the Fraunhofer IEM within the technology network it´s OWL in the research project BOOST 4.0. The institute is developing a model for the predictive maintenance of machines using Big Data. BENTELER puts the process model into practice. This allows customers to be served faster, more efficiently and more flexibly - in terms of time, quality and costs.

Data help to assess actual conditions correctly

Big Data is a term used to describe very large data volumes, which are too complex to evaluate them through manual or conventional methods. Data volumes of this magnitude are, for instance, generated in production. BENTELER and the Fraunhofer IEM use methods of machine learning and models for handling Big Data. "If we understand the relevant data, we can accurately assess the "state of health" of the machines. This enables our teams to avoid imminent production stops and to initiate appropriate measures in time", emphasizes Dr.-Ing. Daniel Köchling, Project Manager Industry 4.0, BENTELER Automotive.

From theory to practice

This was exactly what the 18th (digital) owl maschinenbau trade congress on 09.09.2020 was all about. In his presentation "BOOST 4.0 - Big Data for Factories", Dr.-Ing. Daniel Köchling explained how Big Data is used in practice. Using the example of a production line from BENTELER, where the focus is on predictive maintenance. Because here, patterns in the production process of a hydraulic press and a material conveying system can be identified. Thanks to systematic collection and evaluation of machine data.

Photos and captions:

Big_Data.jpg: With the help of Big Data solutions, machine breakdowns are prevented and impending faults are avoided.

Pred_Maintenance.jpg: BENTELER implements a process model for predictive maintenance together with the Fraunhofer IEM.

Contact:

BENTELER International AG

Birgit Held

Vice President Corporate Communications/Marketing

Salzburg, Austria

Phone: +43 662 2283-101040 / Mobile: +43 664 88361890

E-Mail: public.relations@benteler.com

BENTELER International AG

Anne Frank

Communications Specialist

Salzburg, Austria

Phone: +43 662 2283 101044

E-Mail: public.relations@benteler.com

About BENTELER

BENTELER is a global, family-owned company serving customers in automotive technology, the energy sector and mechanical engineering. As innovative partner, we design, produce and distribute safety-relevant products, systems and services.

In the 2019 financial year, Group revenues were €7.713 billion. Under the management of the strategic holding BENTELER International AG, headquartered in Salzburg, Austria, the Group is organized into the Divisions BENTELER Automotive and BENTELER Steel/Tube. Our around 30,000 employees at 100 locations in 28 countries offer first-class manufacturing and distribution competence – all dedicated to delivering a first-class service wherever our customers need us.

www.benteler.com

About BENTELER Automotive

BENTELER Automotive is the development partner for the world´s leading automobile manufacturers. With around 26,000 employees and more than 70 plants in about 25 countries we develop tailored solutions for our customers. Our products include components and modules in the areas of chassis, body, engine and exhaust systems, as well as solutions for electric vehicles.

https://www.benteler-automotive.com/en/

About the Fraunhofer IEM

The Fraunhofer Institute for Mechatronic Systems Design IEM is an expert for intelligent mechatronics in the context of industry 4.0. Scientists from the fields of mechanical engineering, software engineering and electrical engineering collaborate interdisciplinary at the Paderborn site. Focusing on "Advanced Systems Engineering", Fraunhofer IEM explores innovative methods and tools for the development of intelligent products, production systems and services. Underlying core competencies are intelligence in mechatronic systems, Systems Engineering and Virtual Prototyping.

About it´s OWL

In the technology network "it's OWL - Intelligent Technical Systems OstWestfalenLippe", more than 200 companies, research institutes and organisations develop solutions for intelligent products and production processes. With support of the State of North Rhine-Westphalia, projects worth EUR 100 million will be implemented between 2018 and 2023. The focus topics will be artificial intelligence, digital platforms, digital twins and work 4.0. Named as one of the Leading-Edge Clusters by the Federal Ministry of Education and Research, it's OWL is considered to be one of the largest Industrie 4.0 initiatives for SMEs. Over the last seven years, it's OWL has established itself as a driver for competitiveness of the manufacturing industry in OstWestfalenLippe, Germany.

About BOOST 4.0

BOOST 4.0 and the associated pilot projects were launched in early 2018. BOOST 4.0 is designed to span three years; the project involves cooperation of 50 companies from 16 countries. The European Commission is funding this project with approximately 20 million euros. The participating companies are investing another approximately 100 million euros. The ten European pilot projects are the hub of project BOOST 4.0 and its 50 partners. They promote pan-European exchange of industrial Big Data by designing models and tools for industrial data analysis and utilization. Through these methods, the BOOST 4.0 initiative is creating a technological foundation for the successful implementation of Big Data and Industry 4.0 strategies throughout Europe. Moreover, it is currently one of the largest European initiatives on the topic of Big Data in industry.