

<u>Competences</u> . Production Organization

Production Organization

In close cooperation with industrial partners, the Production Organization team at Fraunhofer IGP develops individual solutions for the design of tomorrow's production.

In the field of factory and logistics planning, the latest methods and tools from the **Digital Factory**, such as material flow simulation, 3D-layout planning and robot simulation, are applied. Among other things, this supports industrial partners in safeguarding their reorganisation or investment projects.

At the shop floor level, the focus is on development and implementation of individual solutions for the smart factory in the context of **Industry 4.0**. These include IT-based Production data acquisition systems, which are used in combination with the most modern positioning technology to increase the transparency of the production process. At the same time will provide a fast and flexible delivery of digital information is becoming more important for the employee. In order to achieve these goals assistance systems such as data spectacles, tablets, and and other Smart Devices.

A further field of focus are **ergonomic assistance systems**. By using intelligent workplace systems and ergonomics simulation, assembly processes can be designed ergonomically correct and efficient. In addition, innovative production concepts based on human-robot

collaboration are developed.



Digital factory planning and ergonomics analysis using virtual reality



Combined production data processing and information visualisation



Evaluation of the assistance system in the virtual wind park

Contact



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