A German industrial partner is planning a new greenfield factory that shall optimally suit manufacturing and logistics requirements. Hence, the manufacturing and logistics processes shall be re-thought and re-designed, before the design and construction company is involved.

The planning process follows the project phases according to VDI 5200. Digital, data-driven validation of the developed concepts is a crucial aspect for the company. A simulation model for the manufacturing processes of two product types shall be set up and linked to the warehouse and logistics operations.

Finally, the implementation planning entails developing a detailed roadmap for implementation, including timelines, resource allocation for ramp-ups and –downs at both locations, and risk management strategies.

Prior knowledge in integrated production planning (IPP) helpful

Programming knowledge in Java/Python advantageous

Motivation to work at the interface between German and Chinese colleagues

- Data Collection, preparation, and analysis
- Machine Layout and Material Flow Design
- Development and Assessment of Layout Design
- Production Concept Validation using Discrete Event Simulation (e.g. Anylogic)
- Logistics Concept Validation using Discrete Event Simulation (e.g. Anylogic)
- Preparation of Management Presentations and communication of requirements towards building developers

- Start in July 2024 in Suzhou, China
- Duration: 6 months
- Specialization: Mechanical engineering, electronic engineering, industrial engineer, mechatronics

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