Networked Production

A digitilization and networking of production, even beyond the borders of companies and countries, forms the core of „Vision Industry 4.0“. After the 4th industrial revolution with the steam engine, conveyer belt and automated production lines various units, should in the future, communicate together and towards the end even organize themselves.

The machines of a completely „linked production“ already know exactly which component is needed at the right moment and how it is to be executed, how the quality standards are defined and where possible storage bottlenecks exist. For this to work, all components involved in the production process such as machines, aggregates, handling systems and the store communicate via sensors and networks independently with each other.

Factory of the future
A complete network around the globe means that production is also highly flexible to market changes and can react to customer requirements and external influences - in constant interaction with suppliers, partners, sales and customers.

How can the company produce more energy and resource efficient? Where are the raw materials cheapest and where are delivery bottlenecks to be foreseen? At the same time products are optimized further due to customer feedback and adapted to the requirements.

Thanks to the permanent exchange of data, manufacturing becomes a self organizing and constantly optimizing process that involves intelligent products, machines and resources which control each other. For this unified interfaces and standards for the data exchange are essential.

Then the fusion of digital and the real world becomes reality: Industry 4.0.

The „linked production“
The complete networking of mechanics, electronics and data enables high individuality of the end products and thus the fulfillment of constantly changing customer requirements - economical and in batch size 1. Even in the current production process change requests can be considered - without losing any speed.

Today it is already clear that the trend towards the individual housing as a place of recreation continues to grow in importance. Especially furniture manufacturers will base their production more strongly on the individual housing requirements of the end customers.
Well connected

The human in the lead role
The „linked production“ stands for an individual and maximum efficient production according to customer requirements. First of all, it is important for all involved components in the production process to communicate with each other. A central manufacturing control system is organized and monitors the information flows.

The decisive factor for success is the human being: He oversees the smooth running of production and brings in his experience. The human being is the only universal sensor we know and as a decision-maker in the factories essential. Not everything can be automated - so the employee is still indispensable in the production.

→ Point of Sale
With an app the end customer places his individually planned furniture virtually at home and transforms furniture designs into actively experienceable ones. The offer of the furniture and an immediate order are also done via the app and via the internet.

→ Order processing
The order processing ensures that the ordered furniture or parts are clearly recorded and are defined. There are part lists, pricing and a description. The quality of the data is crucial for the subsequent processes. On the basis of the order data the production data is efficiently generated in the shortest possible time.

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Industry 1.0
The mechanical weaving loom, water and steam power

Industry 2.0
First assembly line, mass production with the help of electrical energy

Industry 3.0
First storage programmable logic control, use of electronics and IT for further automation

Industry 4.0
The linking of real with information processing / virtual objects and the processes through information networks

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