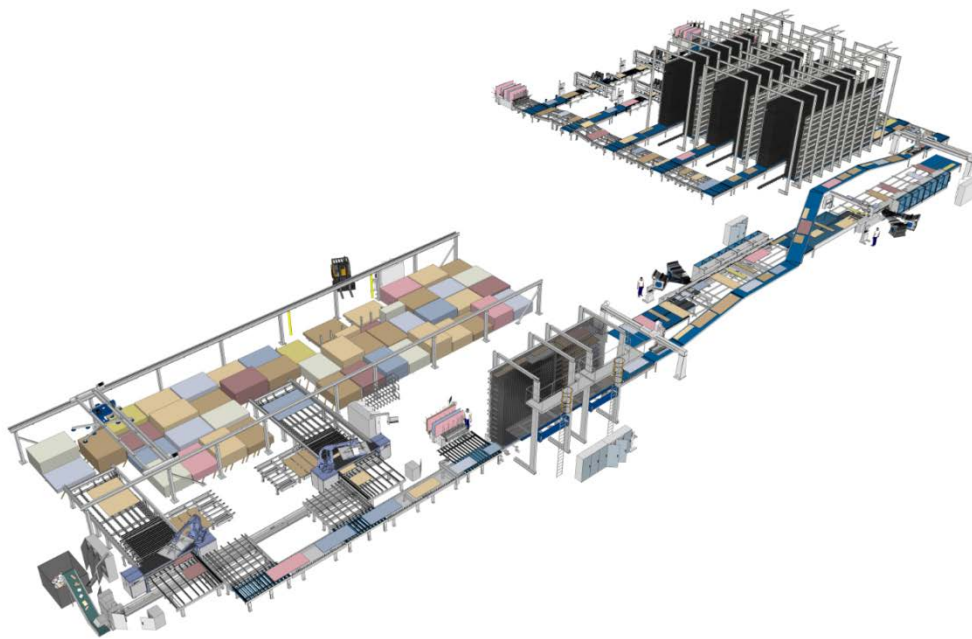


YOUR SOLUTION for plant engineering at the LIGNA 2017

Hall 14



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Batch size 1 plant: Completely networked.

Networked production: HOMAG enables future-proof production.

HOMAG will be showcasing a batch size 1 plant live in action in Hall 14 at the LIGNA demonstrating impressive data continuity and technical solutions for individual component production. The components of this high-tech furniture plant are completely networked, demonstrating a solution for the production of individual, high-grade furniture of exemplary quality both today and in the future.

The plant comprises the following components:

- **Horizontal storage system TLF 411.** The storage system and suction traverse ST 71 demonstrate outstanding scope for transporting wide-ranging materials.
- **Cutting cell HPS 320 flexTec.** This robot cell has been extended to include various stacking facilities.
- **Edge processing with Profi KAL 610.** The tandem plant comprising two edge banders comes with an unprecedented circulation system.
- **Order picking center TLB 321.** The TLB buffers, sorts and picks the material flow over the entire process chain.
- **Drilling and hardware fitting technology with the ABF 600.** The CNC-controlled machine processes sensitive fronts gently and efficiently.
- **Electrical throughfeed case clamp MDE 120.** This technology enables the automatic, careful clamping of any carcass to a high standard of quality. It copes equally with sensitive, ultra high-quality or mitred carcasses.
- **Cardboard cutting machine VKS 250.** This machine produces required packaging just-in-time – tailored precisely to fit and at minimal piece costs.
- **Machine operation with powerTouch.** All machines of the batch size 1

NEW!NEW!NEW!

plant feature standardized operating elements and software modules, ensuring a familiar look and feel which is: Simple, standardized, ergonomic.



Fig. 1: A wide range of aids and wizard functions makes for significantly simpler machine operation

- **Cell control system woodFlex.** This control system takes charge of networking all the machines of the batch size 1 plant. It has a modular structure and is open for future requirements and upgrades. woodFlex creates security, optimizes sequences and enhances efficiency. With woodFlex, the user is making another decisive step towards “Industry 4.0”.

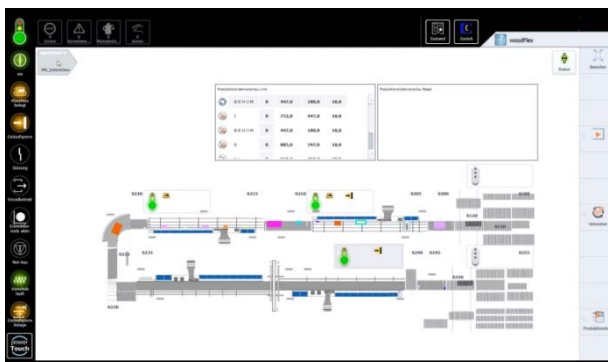


Fig. 2: woodFlex: Control and visualization of flexible production cells and their part flow



Fig. 3: In Hall 14 there will be a batch size 1 plant on show providing an impressive demonstration of networking, data continuity and technical solutions in the individual components (here: Batch size 1 production at the LIGNA 2015)

Are you interested in details of the stand-alone machines? All the information is available at www.homag.com/ligna

Virtual commissioning.

Next-generation plant engineering and availability.

When it comes to plant installation, the focus is on **a rapid commissioning phase** and **maximum availability**. This requires an ideally coordinated plant concept. HOMAG will be offering the ideal answer to this in the future with “virtual commissioning in real time” of machines and cells. This futuristic concept is currently running as a study at HOMAG and is due for process integration in the medium-term. This will allow all the machine components of a plant to be simulated ahead of actual machine construction in a virtual environment. Using what are known as “digital twins” (3D behavior models), the experts are able to simulate the structure and behavior of plants and cells. The use of real control components and simulation PCs means that operators are unable to tell whether they are communicating with the real plant or its digital twin. In this way, HOMAG is able to achieve **real-time simulation of material flows** and **perform checks of mechanical and control-related interfaces**. As a result, it will be possible to guarantee the reliability of a plant concept and be sure of its future performance.

“We aspire to create the best products and solutions for our customers. A growing degree of automation, the networking of plant components and individual integration into the customer’s environment call for a rethink of the approach to project engineering and processing. In our company, customers and their individual requirements form the focus.”

Olaf Daniel
Director Installation & Commissioning, Systems

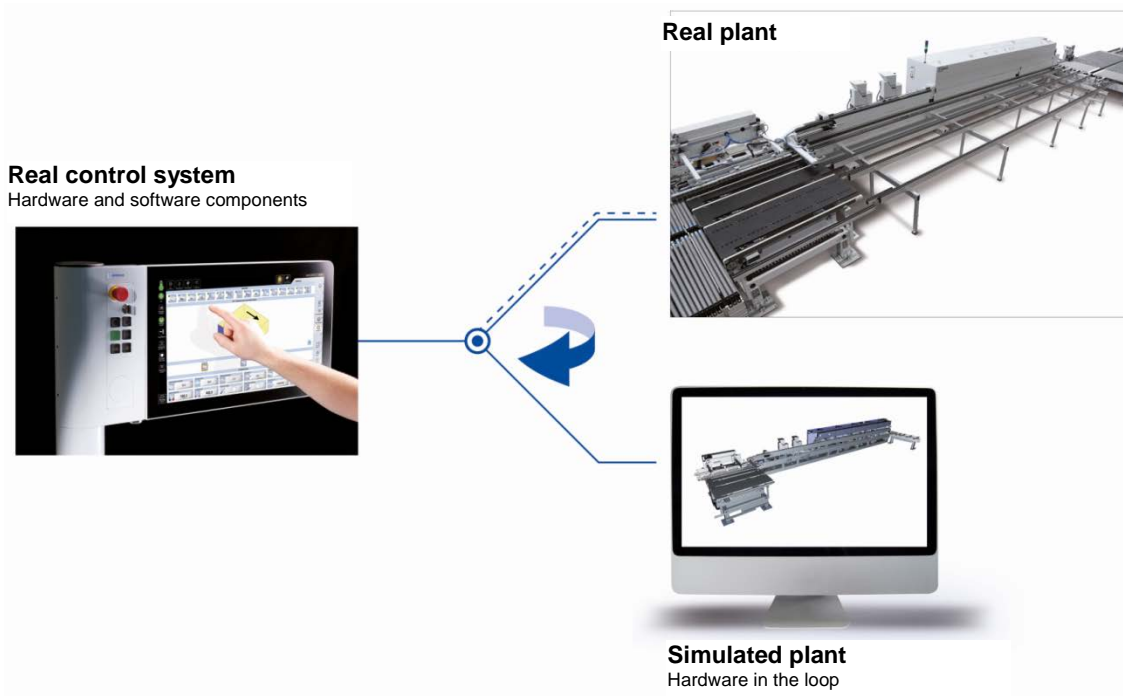


Fig. 4: With virtual commissioning, it will be possible to guarantee the reliability of a plant concept and be sure of its future performance.

Would you like to find out in detail about “virtual commissioning”?
Get in touch with us – we will be pleased to provide you with a prepared PR article (julia.weber@homag.com).

Pictures

Pictures courtesy of: HOMAG Group AG

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