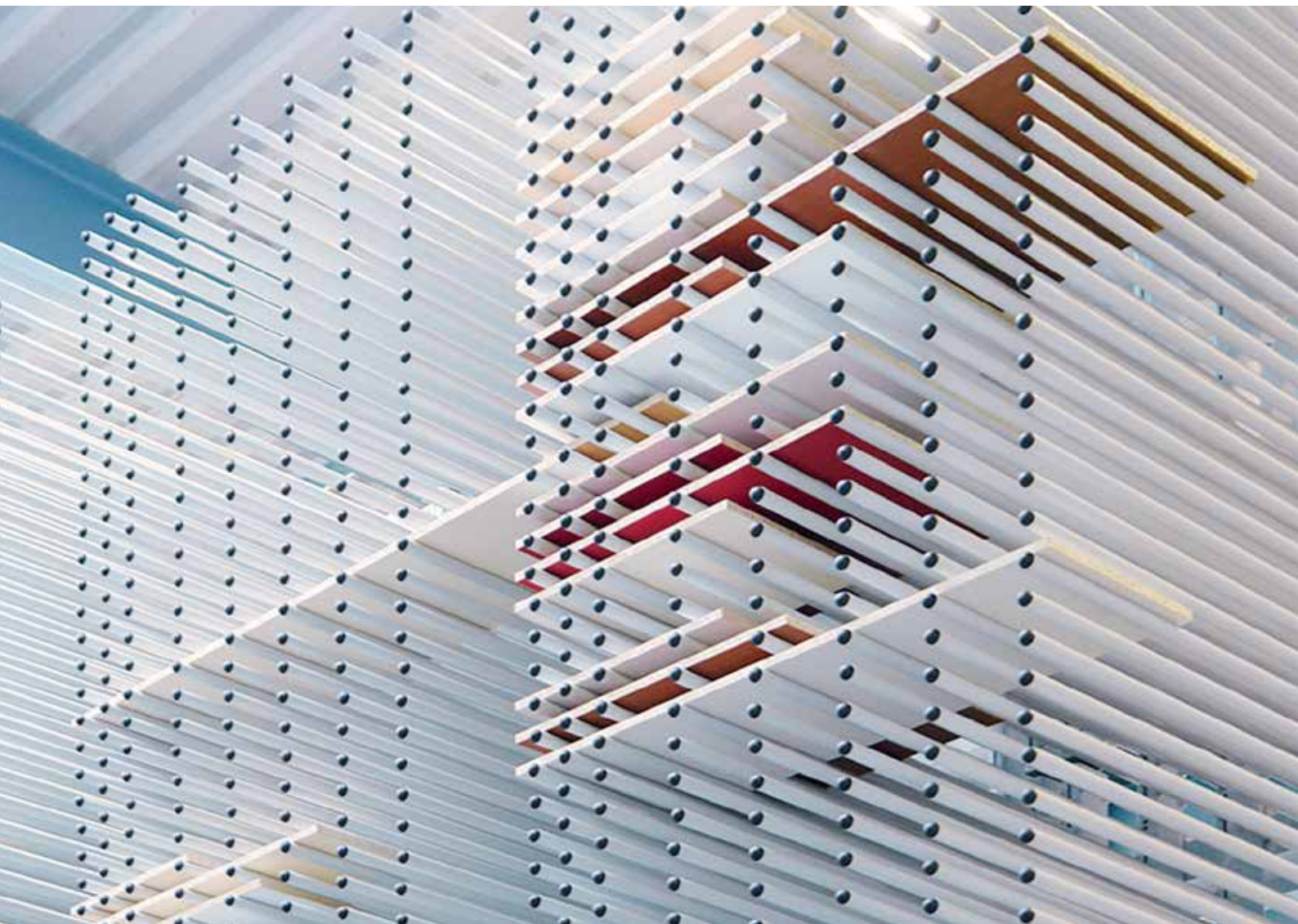


Flexible part streams in production.

HE HOMAG

Buffering, Sorting, Collating
STORETEQ, SORTBOT, SORTEQ

YOUR SOLUTION





More output without idle times - Customized solutions for networked production

Operating machines working in an automated environment have a clearly greater utilization factor than machines that are supplied manually in a traditional way with material. Automation solutions of HOMAG connect individual machines to user-friendly operation cells with high added value due to the control by intelligent software.

YOUR SOLUTION

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Buffering, Sorting,
Collating

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YOUR SOLUTION. For your best articles.

Individual design, customization and fast delivery require an intelligent production with optimal material flow. Batch size 1 production requires an absolute process command. HOMAG machines change furniture production in a revolutionary manner due to the material and data flow. The optimal capacity utilization of the operating machines and production center is a key element of the production's organization. Intelligent continuous software solutions link operation cells through innovative feeding and stacking

systems, robot guided pick & place applications, and automatic storage and collating systems. The result: Efficiency and productivity multiply. Precision and repeat accuracy on high availability and process safety are improved in yet unknown magnitude. The fully automatic material management reduced costs in noticeable degrees. Right here we have the best knowledge. Today we offer you best technical solutions for your tomorrow's production.

„Today, it is our demand to develop affordable machines for all market segments so that also a handicraft enterprise may partly be automated. In this respect intelligent material streams are important which are only enabled through a continuous data management, and a project team that develops solutions by design.“

Uwe von Allwörden - Technical Sales, Automation

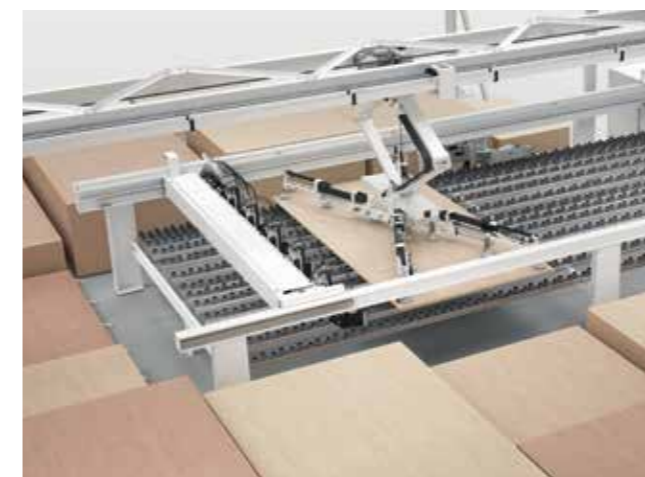


Intelligent logistics is a key to success

HOMAG horizontal storage systems are intelligent multi talents where no wish remains open. From the smallest storage that „fits in a double garage“ up to a multi storeys storage for industrial demands. The material flow is optimized in all production sizes, stocks are managed transparently and operating machines are used optimally.

„Now we benefit from the fact that all material is stored concentrated in one space, there are no more collating failures and damages in the panels are virtually excluded beside the benefit from the high performance of the system. Furthermore we were able to save labor.“

Jürgen Schmitt - Head of Technique, LEICHT Küchen AG



Much of leeway for the industrial production - There is something for every demand

- Different kinds of material can automatically be managed and large-area stored
- intelliStore, the optimizing program as guarantee for short ways to the next operating step.
- Automated return routes for the transport of offcuts from the operating machine back to the storage.



Reduction of the utilized capital from storing up to operating

- Materials consumption is coordinated with ordering and the job order planning
- Low capital commitment by means of stock-keeping as needed
- Low resource consumption by means of automatic offcut management - also for panels that do not fit into the storage.

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Buffering, Sorting,
Collating

Direct access to each workpiece - fully automatic.

Robots are the crucial key to higher productivity and more efficiency. They improve the quality of the products and reduce the use of expensive material and scarce energy resources. The keyword is „direct access to each workpiece, and that fully automated“.

With a robot as central element, the sorting cell can create a maximum storage volume in smallest space. The robot sorts the workpieces flexibly into the different compartments, and thus enables a variable access to parts for the whole production.



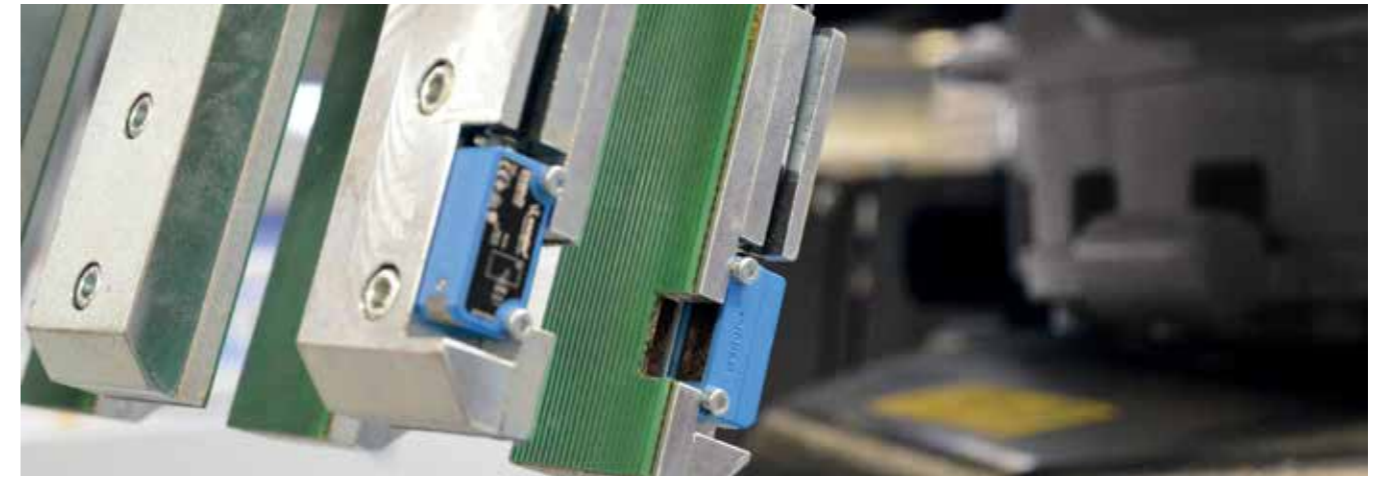
Reliable Workpiece Flow - Robotics Solution by HOMAG

High repeat accuracy and availability makes a robot the central element of a sorting cell and enables production processes able to schedule.

- **Maximum transparency** due to monitoring the precise position of each workpiece
- **Optimum material flow** thanks to free determinable storing and removal strategy
- Direct access to each workpiece enables **high system speed**
- Flexible component arrangement offers **variable storing capacity**
- **Energy saving handling by** means of gentle gripping technology

„In principle, every customer has to sort his workpieces. By using the cell he can do that automatically and feed workpieces in optimum order to his material flow. Or he will use the cell as central workpiece storage out of which panels are fed to the individual processing stations.“

Christian Heißler - Technology consultant, HOMAG Group



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Buffering, Sorting,
Collating

Buffering for the adjustment of the material flow

These decouple components from processes or block components to ensure optimum preparation of the downstream machine. Entry into and removal from storage take place in multiple layers or lanes. Decoupling buffers are used between dividing and edge application, between edge application and drilling, or within a process step.

„Today, if you want to be better, you have to be able to work transparently and quickly. That is only possible with the right logistics. „The HOMAG solution convinced us by the simpleness of the system that largely uses the gravity.“

Otto Breitschopf, Head of industrial engineering, König + Neurath AG

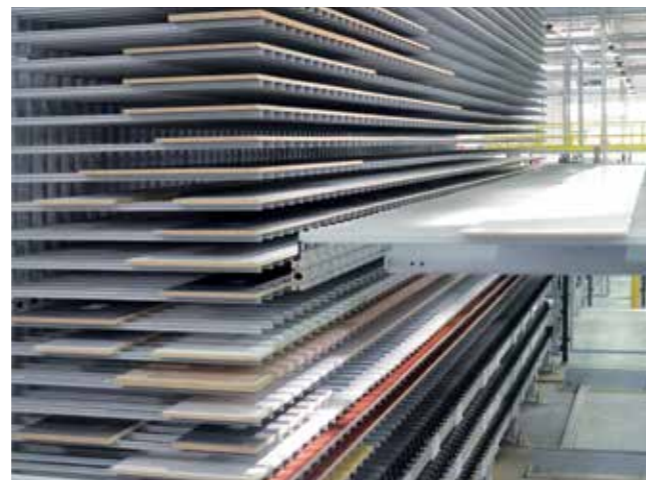


Optimum use of space thanks to the ideal positioning of the material: The components are already ideally positioned in the infeed area in order to ensure an optimum use of the shelves.



Decoupling buffering between the processes cut - edge banding

- Quick buffering with gentle dynamic for the simultaneous manipulation of several panels
- Gentle, low-energy transport by means of „holding the components“
- Increasing of capacity by means of multiple deep storing



Maximum capacity utilization for the whole production process

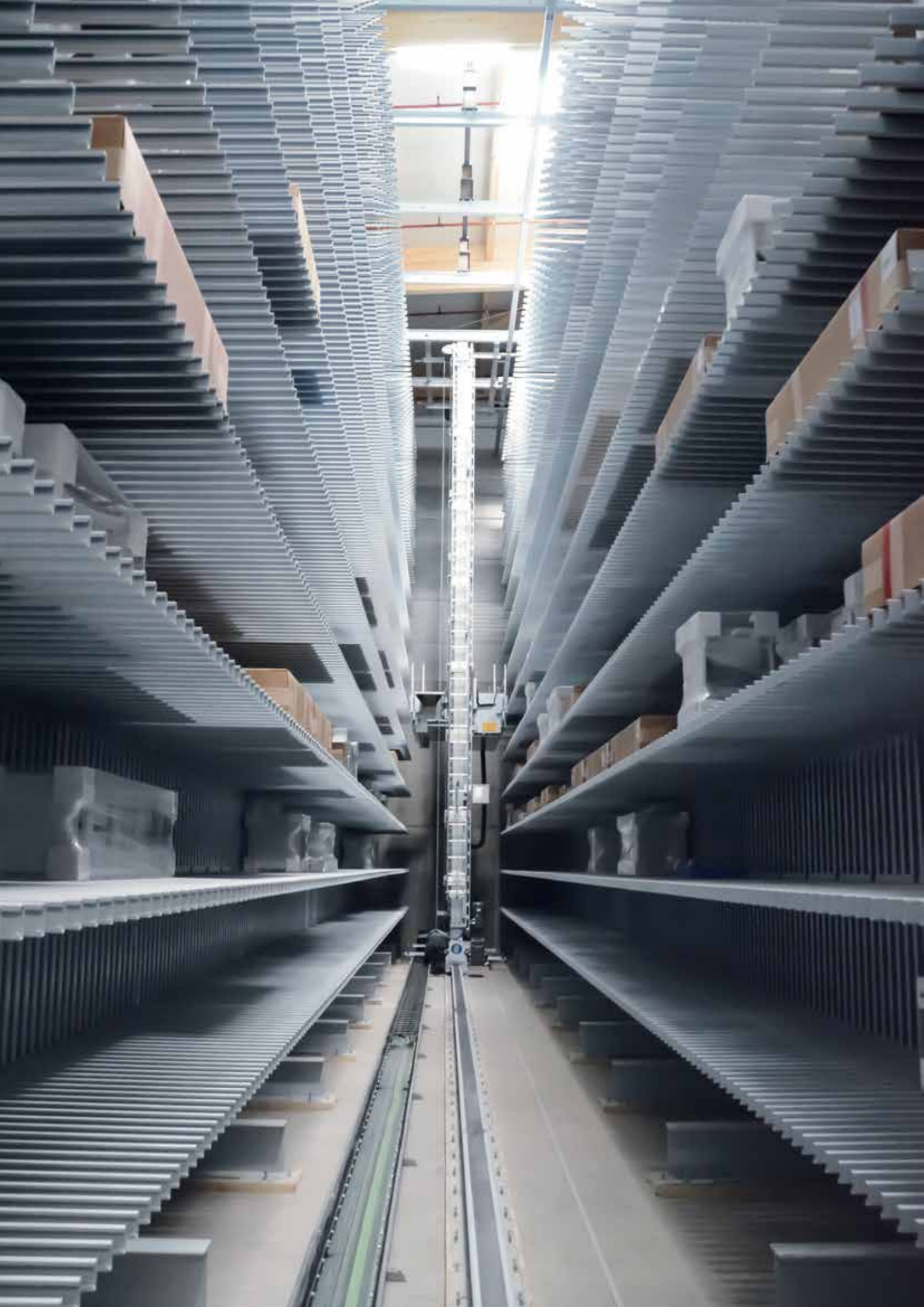
- The material flow is equalized due to different buffering zones and in- and outfeed transports.
- Storing and removal of components in layers or rows
- Optimization of the material flow due to sorting possibilities in layers



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Buffering, Sorting,
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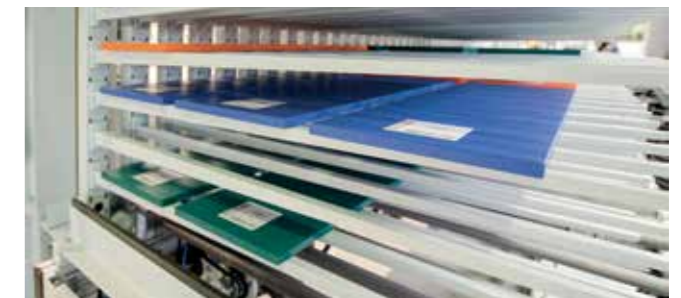
Collating center - Collating without restrictions

„We opted for the guaranteed error-free working sorting buffer. It enables also the completeness check before packing the dispatch pallets. Already the first line gained us an enormous market advantage.“

Steffen Göpfert, Director, Göpfert Möbelteile GmbH



Collating between format and edge banding and drilling: Buffering and collating e.g. for assembly and tour order or color, form, dimensions etc..



Optimum sorting order without idle times: Incoming part streams are decoupled, sorted and prepared for the next process in an ideal order



High storage capacity thanks to an ideal positioning of the material already in the entrance area: The material is exactly positioned while taken from the transport belt in order to fill the shelves ideally.



Material flow without searching times and with high transparency: Operating status and the relevant position in the sorting unit are absolutely transparent

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Buffering, Sorting,
Collating



HOMAG LifeCycleService

The sale of our machines comes with all-in optimum service backup and individual advice. We support you with service innovations and products which are especially tailored to your requirements.

With short response times and fast customer solutions we guarantee consistently high availability and economical production – over the entire life cycle of your machine.



HOMAG Finance – precisely the right financing

- We offer you tailored financing proposals for your machinery or plants. Our financial advice goes hand in hand with our expertise relating to technical questions. Your personal contact person will take care of the whole process.
- The benefit for you: The ability to invest without delay in new technologies and remain financially flexible.

1.200

Service employees around the world

650

processed spare parts orders / day

>90%

less on-site-services through successful remote diagnosis.

>150.000

machines, all electronically documented in 28 different languages – in eParts.



Remote Service

- Hotline support via remote diagnosis regarding control, mechanics and process technology. Thus the on-site service can be reduced by 85.2 %!
- Mobile applications such as ServiceBoard reduce the costs through fast help in case of troubles by mobile live video diagnosis, online service message and the online spare parts shop eParts



Spare Part Service

- Identify, request and order spare parts around the clock via www.eParts.de
- Local availability of parts offered by our sales and service companies as well as sales and service partners all over the world
- Reduction of downtimes through defined spare parts and wear parts kits



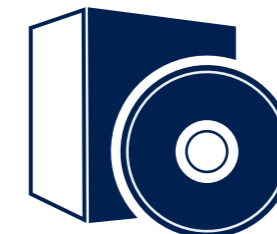
Modernization

- Keep your machinery up-to-date and increase your productivity as well as your product quality. This is how you can meet tomorrow's requirements today!
- We support you with upgrades, modernization as well as individual consultancy and developments



Trainings

- The trainings perfectly suit to your requirements. Through this your machine operators can operate and maintain the HOMAG Group machines optimally.
- The trainings also include customer-specific training documents with practice-proven exercises



Software

- Telephone support and consultancy through software support
- Digitalization of your spare parts via 3D scanning saves time and money compared to new programming
- Subsequent networking of your machinery with intelligent software solutions ranging from construction to production



Field Service

- Increased machine availability and product quality by certified service staff
- Regular checks through maintenance / inspection guarantee the highest quality of your products
- We offer you the highest availability of technicians in order to reduce downtimes in case of unpredictable troubles

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