

# Everything, effortlessly, in one place: How the Körber Ecosystem paves the way to top production



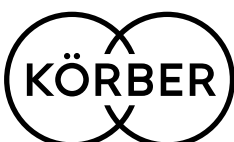
**As a pharmaceutical manufacturer, you need to be agile, innovative and flexible in a highly complex and highly regulated environment. The Körber Ecosystem aims to support customers in the pharmaceutical industry by helping them to optimize their production processes and to establish a so-called “Factory of Excellence”. We achieve this goal together with you through a strategic approach, connected solutions in all areas of expertise and our many years of experience in the pharmaceutical sector.**

## It starts with your challenges

Everything starts with your challenge, be it small and isolated or comprehensive and strategic. We at Körber look at the bigger picture. Our goal is to overcome challenges and solve your problems to drive progress towards your Factory of Excellence. This requires understanding your problems from your perspective and the introduction of special, customized tactics and solutions.

## At a glance

Challenges	Solutions	Customer benefits
<ul style="list-style-type: none"><li>• Reducing complexity, minimizing risks</li><li>• Connecting machines, software and all production-relevant components</li><li>• Utilizing production lines to the maximum while staying agile and flexible</li></ul>	<ul style="list-style-type: none"><li>• Digital transformation consulting (MES, AI-enabled inspection)</li><li>• We help to realize your full production potential (validation and lifecycle services)</li><li>• Developing an individual path to high operational quality</li></ul>	<ul style="list-style-type: none"><li>• Staying ahead and leading the competition from the top</li><li>• Utilizing the full potential of production lines while being compliant</li><li>• Supercharged digitalized journey</li></ul>



And this is just a small selection of what your challenges might be and what we in turn can achieve for you. Continue reading to learn more about our connected solutions and how they will benefit your business.

At Körber, we understand the complexity of your operations and the need for an integrated approach. Our ecosystem combines advanced hardware, cutting-edge software, and pharma expertise into a seamless platform.

By connecting these elements, we simplify intricate processes and ensure harmonious production. This mindset drives us to innovate, collaborate, and support our customers, giving you an edge in a

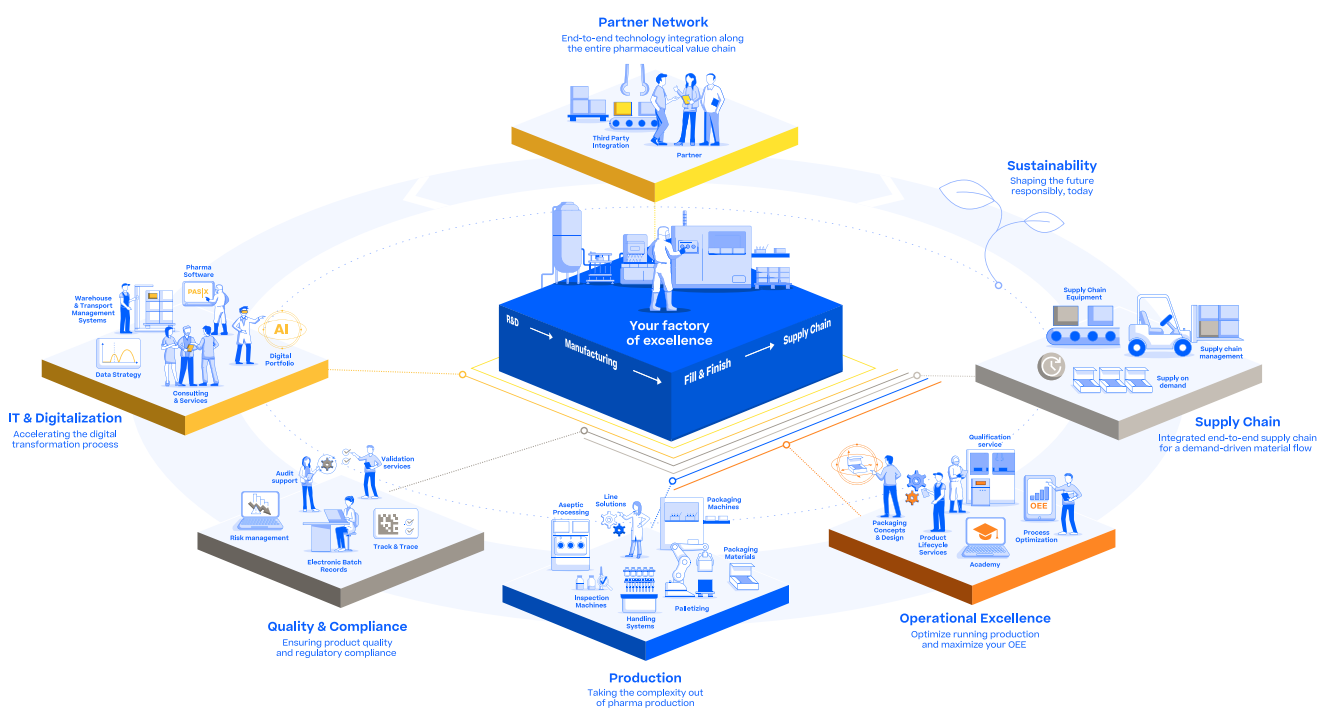
complex world. With the Körber Ecosystem, you're not just managing complexity – you're mastering it.



**“Thanks to our ecosystem, customers benefit from the best possible solution for them. We guarantee end-to-end excellence in all areas. Because our job is pharma, 100 percent.”**

**Peter Grassl**  
Senior Vice President Pharma Solutions,  
Körber Business Area Pharma

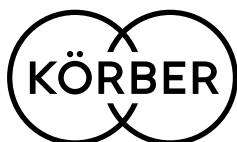
## Learn how our different areas of competence aim to find the best possible solutions for you



### IT & Digitalization

Perfectly controlled processes and informed decisions are crucial for pharmaceutical production. Körber helps customers achieve digital excellence at every level of digitalization, tailored to individual business goals. This includes digital transformation consulting, MES solutions, Line Management Solutions (LMS) and AI-enabled visual inspections. With our Werum PAS-X Savvy you can manage, visualize and analyze your bioprocess data fast, compre-

hensive and in real time while our PAS-X MES Suite enables you to reduce the error rate and the manufacturing costs. In addition, you can shorten time-to-market and increase efficiency for your company. Our LMS “Line Optimizer”, on the other hand, helps to identify bottlenecks in production and eliminate them through data-based decisions, which can lead to a significant increase in production capacity. With our Digital Maturity Assessment, we assess the current situation to know where the journey regarding digitalization is going.



## Quality & Compliance

Pharmaceutical production is ultimately about the well-being of patients. Körber helps customers realize their full production potential and implement regulatory updates with ease. Through comprehensive consultations and tailored action plans, Körber ensures holistic optimization of manufacturing processes in terms of quality and compliance. A typical example is the implementation of an effective Standard Operating Procedure (SOP) management system to ensure that all processes and procedures comply with applicable regulations. Körber also offers Good Manufacturing Practice (GMP) consulting and training to ensure that employees are always up to date with the latest regulatory requirements and eValidation to get your software production-ready. With our Master Batch Record (MBR) design, your production is consistent in quality and GMP compliant.

## Production

Körber's production lines are designed to ensure the highest product quality and operational efficiency. This is achieved by reducing complexity and minimizing production-related risks. Körber offers solutions such as production line planning, intelligent handling systems, compact small batch systems, AI-enabled inspections and automated packaging – for small lots and mass production almost along the entire value chain. One example of this is an automated packaging line that increases efficiency while minimizing the risk of contamination. Within our Körber Ecosystem our aseptic processing solutions can be integrated into all other solutions, guaranteeing aseptic excellence for patient safety. In addition, AI-controlled inspection systems can be used to detect defects at an early stage and thus ensure product quality.

## Operational Excellence

For Körber, it is essential to remain at the forefront of innovation. Operational excellence encompasses all components from hardware and software to the people involved and the dimensions of sustainability. Körber provides proactive, data-driven consulting and services to help customers continuously improve their operational efficiency and exceed the highest standards. One example is the use of IoT technologies to monitor and optimize production facilities, resulting in improved plant efficiency and reduced downtime. And very tangible: Our packaging qualification service gives you the possibility to quickly and flexibly test a wide range of properties and behaviors of your folding boxes and to draw valuable conclusions for the optimization of their packaging regarding safety and sustainability.

## Supply Chain

Efficient logistics are crucial for smooth production. Körber transforms supply chain complexity into a competitive advantage through intelligent standardization. Automated guided vehicles (AGVs) and autonomous mobile robots (AMRs) improve worker productivity and safety while making logistics processes more effective. Körber's global network and partnerships with leading robotics manufacturers guarantee innovative solutions for material handling in the pharmaceutical industry. A practical example is the implementation of an AGV system that optimizes material flow in production, reduces human error and accelerates efficiency.

## Partner Network

We build strategic partnerships to support you and your pharmaceutical manufacturing as best as possible. If we do not have the best solution for you, we partner with other companies to provide you with the best possible support.



## A world of connected solutions

Through these comprehensive and integrated solutions, Körber helps you to achieve a Factory of Excellence characterized by exceptional product quality, high operational efficiency and innovative practices.

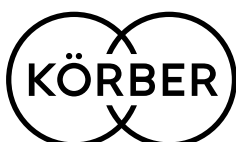
Our approach to creating a Factory of Excellence revolves around several key principles and strategies that ensure high standards, innovation, and sustainability in pharmaceutical production. It is our philosophy to lead the competition from the top by constantly improving and managing standards at the highest level. This involves innovating processes to achieve groundbreaking excellence that reflects all important aspects today and tomorrow. The result is a more reliable and error-free production, leading to higher yields and fewer rejects and defects. Excellence combines profitability with the highest quality and pioneering sustainability ambitions, ultimately setting the next standards.

Körber enables your pharmaceutical company to transform into a Factory of Excellence or set up a new

production facility as such. We advise and guide you every step of the way to exceed standards and continuously improve overall equipment effectiveness (OEE) holistically. This includes assessing the status against ambitions and developing a path to exceptional product quality, high operational efficiency, and innovative practices. Körber ensures adherence to regulations and compliance such as cGMP, strict safety, and environmental standards.

Körber's comprehensive solution landscape in pharma manufacturing, deep expertise in digitalization, pioneering activities in sustainability, and 100% focus on the pharma industry are the foundations for profound consulting and solution design. We offer customized innovation through comprehensive excellence initiatives to keep all key players up to date and achieve top performance with excellent quality: machines, software, and people – all under the premise of sustainability. Companies need to navigate these challenges while maintaining high standards in pharmacy and sustainability.

Your challenges	Our solutions
<p><b>IT &amp; Digitalization</b></p> <ul style="list-style-type: none"><li>• Customers are faced with the challenge of establishing perfectly controlled processes and making well-founded decisions, which are made more difficult by high complexity and market dynamics.</li><li>• Fully exploiting the potential of digitalization requires more than just transferring the status; companies must transform themselves to harness the full power of digitalization and remain fit for the future.</li></ul>	<p><b>IT &amp; Digitalization</b></p> <ul style="list-style-type: none"><li>• Körber helps companies leverage digitalization to create new business models and production methods.</li><li>• We offer expertise in pharma production processes, regulations, and dynamics, providing consulting, implementation, and proactive maintenance.</li><li>• With ecosystem thinking, we design your digital production architecture as a modular and open system, ensuring flexibility and adaptation to market changes.</li><li>• We seek collaboration with other Körber entities and external strategic partners.</li></ul>
<p><b>Production complexity</b></p> <ul style="list-style-type: none"><li>• Pharmaceutical manufacturers often struggle with the complexity of their operations and the associated risks.</li><li>• Connecting various machines, software, and production-relevant components to ensure seamless operations.</li></ul>	<p><b>Production</b></p> <ul style="list-style-type: none"><li>• The Körber Ecosystem addresses this challenge by offering digital transformation consulting, including MES (Manufacturing Execution Systems) and AI-enabled inspections. These solutions help to streamline processes, reduce errors, and enhance overall efficiency.</li><li>• Providing integrated solutions that connect these elements, thereby simplifying intricate processes and ensuring harmonious production. This approach helps manufacturers utilize their production lines to the maximum while staying agile and flexible.</li></ul>



## Your challenges

### Regulatory Compliance

- An enormous amount of regulations define mandatory standards that must be achieved and continuously adapted to the latest developments.
- Compliance with pharmaceutical and sustainability standards is crucial.

### Operational Efficiency

- Achieving minimal downtimes, high product quality, and sustainability targets requires seamlessly connected and digitally optimized high-performance components.

### Supply Chain Complexity

- Efficient production requires synchronizing input and output, matching the flow of materials to the production rhythm, and considering sustainability aspects.

## Our solutions

### Quality and Compliance

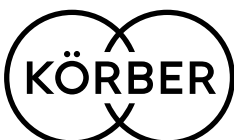
- Körber assists companies in maximizing their production potential while seamlessly integrating regulations into their processes.
- We provide tailored action plans, efficient implementation, meticulous tracking, and thorough documentation to achieve optimization.
- Körber's comprehensive solutions in pharmaceutical manufacturing, profound expertise in digitalization, innovative sustainability initiatives, and dedicated focus on the pharmaceutical industry establish a strong and progressive foundation for expert consulting and solution design.

### Operational Excellence

- Körber streamlines operational processes, mitigates production-related risks, and ensures the highest standards of quality while enhancing overall efficiency.
- Within our ecosystem approach, we provide consulting and planning services for entire production lines and enhance existing ones with meticulously selected components.
- Our approach includes tailored innovations through comprehensive excellence initiatives to keep all key stakeholders informed and to achieve optimal performance with exceptional quality. This encompasses machines, software, and personnel, all guided by principles of sustainability.

### Supply Chain Management

- Körber turns supply chain complexity into a competitive edge through intelligent standardization.
- Our innovative material handling solutions boost productivity and employee safety.
- The Körber Ecosystem ensures seamless integration of pharmaceutical manufacturing solutions with our supply chain expertise, promoting excellence and sustainability.



## Empowering our customers to stay ahead of the competition

Adopting an ecosystem approach allows us to design your production architecture as a modular and open system, ensuring flexibility and responsiveness to market developments. We proactively pursue collaboration and partnership opportunities with other Körber entities and external strategic partners.

The Körber Ecosystem enables customers in the pharmaceutical industry to transform their production processes into a Factory of Excellence. By taking an integrated approach that covers all areas from IT and digitalization to quality and compliance, production, operational excellence and supply chain, Körber ensures that you can achieve your ambitions and meet the challenges of the future.

### Contact us

Do you feel prepared for your organization to embrace the digital transformation towards Pharma 4.0? We will partner with you on your way to your Factory of Excellence.



Let's unlock your Factory of Excellence together.

## About Körber

We are Körber – an international technology group with around 13,000 employees at over 100 locations worldwide and a common goal: We turn entrepreneurial thinking into customer success and shape the technological change. In the Business Areas Digital, Pharma, Supply Chain, and Technologies, we offer products, solutions and services that inspire. We act fast to customer needs, we execute ideas seamlessly, and with our innovations we create added value for our customers. In doing so, we are increasingly building on ecosystems that solve the challenges of today and tomorrow. Körber AG is the holding company of the Körber Group.

### Delivering the difference in pharma

At Business Area Pharma, we deliver the difference along the entire pharmaceutical value chain by offering a unique portfolio of integrated solutions. Based on in-depth experience spanning consulting, inspection, transport systems, packaging machines and materials, track and trace and software, we understand the challenges in pharmaceutical processes and regulation that our customers face day to day, from the beginning to the end of their production. For them, we deliver the difference to unlock the potential of global pharmaceutical and biotech manufacturing.

# Delivering the difference in pharma

**Benefit from connected solutions and our 100 % focus on pharma. Get started now for your business advantage.**

- Leverage the expertise of industry-leading professionals who have in-depth knowledge of pharma, biotech, and medical devices.
- Tailor a solution that fits the unique size and needs of your business.
- Stay ahead by tapping into our extensive insights on future trends in Pharma 4.0.
- Maximize your business potential with the support of over 2,500 pharma experts across 100 global locations.

