



NEW PARTNERSHIP - CASE STUDY LIFE SCIENCE

Körber

Known for transforming entrepreneurial thinking into customer success and shaping technological change, **Körber** is a global technology group with about 13,000 employees, and more than 100 locations worldwide. In their Business Areas Digital, Pharma, Supply Chain, Technologies, and Tissue, Körber provides products, solutions, and services that inspire. With their innovations, they respond quickly to customer needs, integrate ideas seamlessly and create added value for their customers. Körber is increasingly leveraging ecosystems to address today's and tomorrow's challenges.

When it comes to producing and packaging medicines quickly, safely and with the highest quality standards, the software experts of Körber's Business Area Pharma make the decisive difference. The pharmaceutical and biotechnology industries benefit from their expert knowledge, decades of experience, and market leadership in many areas.

The safety of pharmaceutical products is particularly important. With its portfolio of machines, software, and materials, the Business Area Pharma offers user-friendly and intelligent solutions. The company also provides independent consulting services in serialization and track & trace projects.

By combining cutting-edge technology with outstanding expertise, Körber develops holistic solutions. In addition to being a partner, they are one of the leading international system providers in the pharmaceutical and biotechnology industries. With a highly regulated industry and a complex market, the company supports its customers in production, packaging, and inspection, as well as implementing software for the entire process.

Safe and efficient medicine production with Werum PAS-X MES

In the pharmaceutical and biotechnology industries, the software experts of Körber Business Area Pharma provide Manufacturing Execution Systems (MES) and Manufacturing IT solutions and build together with external partners an ecosystem to fulfill customer needs. Pharmaceutical manufacturers can increase their manufacturing efficiency, increase productivity, and meet regulatory requirements. MES programs are being rolled out at large multinationals, along with implementations at leading regional and midsized enterprises in Europe, North and Latin America and Asia Pacific.

Werum PAS-X MES, Körber's world leading Manufacturing Execution System (MES) Suite, controls, monitors, and documents every step of their customers' manufacturing process digitally and in real time. This reduces the error rate and manufacturing costs, in addition to shortening the time-to-market and increasing the company's efficiency.

Pharmaceutical, biotech, and cell & gene therapy companies can utilize Werum PAS-X MES for the entire process development and commercial production cycle. All important manufacturing functions are included in a modular production management system.





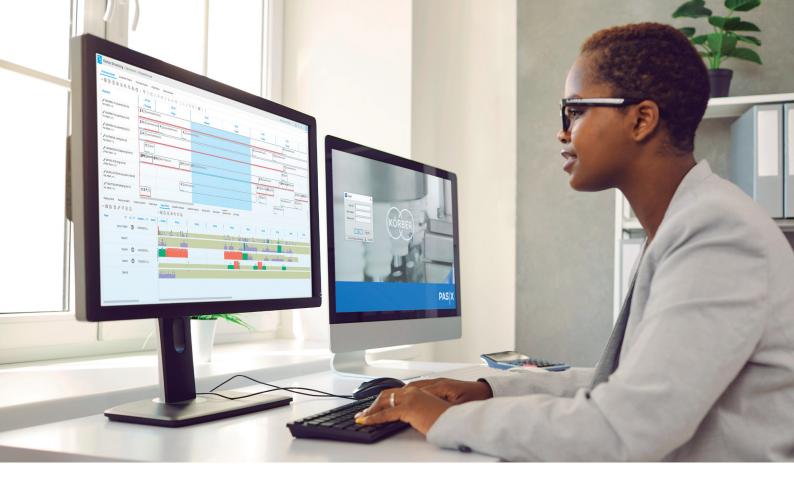






EMPLOYEES 13,000 SEDAPTA MODULES

PAS-X SCHEDULER
TRANSPORTATION MANAGEMENT
DEMAND MANAGEMENT
INVENTORY MANAGEMENT
RESOURCE & SUPPLY PLANNING
ORDER PROMISING
WEB SUPPLY ENGINE



Werum PAS-X Scheduler powered by sedApta's Factory Scheduler

The Werum PAS-X Scheduler enables careful planning of manufacturing procedures to maximize pharmaceutical production. Pharma companies are being compelled to change their production to a schedule-oriented operating model by current trends in pharmaceutical production, including digitization, increase demand for flexibility, pharmaceutical serialization, functional integration, and personalized medicine. A close integration of planned activities and the production's actual as-is status is necessary to synchronize the production operations with supporting activities.

This is the main focus of the close integration of PAS-X MES with the planning and scheduling architecture of sedApta. Answers to these trends are available in Werum PAS-X Scheduler, which covers the entire production planning process.

Thanks to the use of heuristics that are easily configurable, Werum PAS-X Scheduler enables users to produce plans that are optimized for both lead times for order fulfillment and production costs. Werum PAS-X MES now incorporates sedApta's Factory Scheduler to deliver best-of-breed solutions for today.



Key functionalities of the Werum PAS-X Scheduler

- Enables the temporal positioning of production errors to be done automatically
- Generates production schedules using constraints and heuristic rules
- Makes it possible to act on business-critical issues
- Enables the user to enforce the work plan in a clear and simple manner
- Schedules the activities involved in production
- Determines when each customer order will be fulfilled
- Assigns production orders, minimizing setups and taking into account customer deliveries
- Permits for top-down analysis that is structured.

"The PAS-X Scheduler distributes manufacturing and shopfloor orders while considering the real-time availability of business assets, such as centers/machines, multi-batch machines, manpower, equipment, materials, and general production constraints. We are pleased to contribute to the PAS-X MES Suite by offering the scheduling functionality, which enables its users to enhance customer service, create work plans that are feasible, practical, and efficient, increase the quality and timeliness of supplier reminders, reduce equipment setup times, and immediately recalculate the schedule in the event of disruptions. Customers benefit significantly from the strategic alliance between Körber and sedApta." said Michael Fatum, managing director of sedApta GmbH.