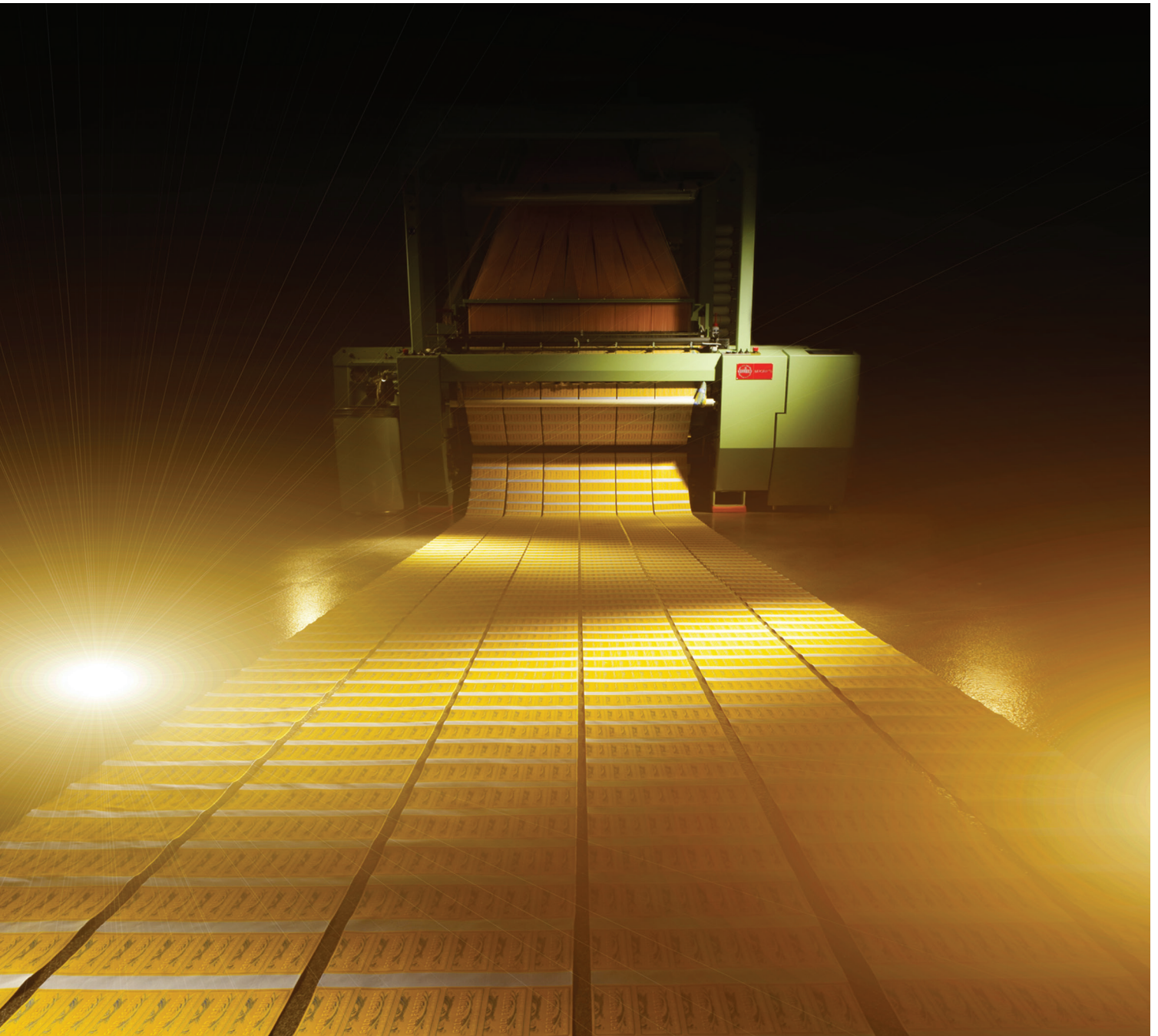# Jakob Müller AG
Industrial Equipment Case Study

Challenge
Jakob Müller needed to manufacture its customized textile machinery faster, at a reduced cost, and with the high quality standards expected by its customers.

Solution
The company selected Dassault Systèmes' **3D**EXPERIENCE Platform, including the Single Source for Speed industry solution experience, to speed product development across its global sites.

Benefits
With Single Source for Speed, Jakob Müller engineers work with a single source of the truth, can trace revisions and approvals throughout the product lifecycle, and react quickly to customers' specific requirements.

Running like clockwork 24/7
Almost everyone has used, at one time or another, a product made with a Jakob Müller machine. It could be the seatbelt in a vehicle, the straps on a knapsack, or for construction works, the slings and fasteners that carry heavy loads. Consumers expect reliable products, which is why numerous manufacturers choose Jakob Müller equipment to do the job.

"What differentiates us from our competition is the quality of our products and our attention to customer service," Michael Stöckli, Head of IT business solutions, Jakob Müller, said. "At Jakob Müller AG, we continuously innovate to develop new systems and new areas of application. One example is our new NH2 53 machine for light to mid-weight elastic and non-elastic narrow fabrics with unlimited repeat lengths. The electronic control of the frames powered by linear motors permits unlimited repeat lengths of a pattern in quick succession."

Another innovative machine from sister company Textrace incorporates RFID (radio frequency identification) chips into labels for tracking purposes. "Our customers know that they are getting quality and innovative machines, which pay off in the end. Proof of that quality is that our machines usually run 24 hours a day, 7 days a week," Stöckli said.

More flexibility when transferring products
Jakob Müller faces some key product development challenges. An international company with development sites in Germany, the Czech Republic, China and India, in addition to Frick, Switzerland, Jakob Müller must be able to rapidly shift development and production of its machines to different locations to satisfy its customers' requirements.

It must be able to trace the history of revisions and approvals from one site to another in a streamlined manner. "Each site develops a different type of machine. Easy access to our product development data, including previously created components, regardless of where they are located, improves our efficiency considerably," Stöckli explained.

Another important requirement is the need to protect the company's intellectual property. Sharing construction-related and metadata is regulated at Jakob Müller AG by a three-step access control system and a workflow management system.

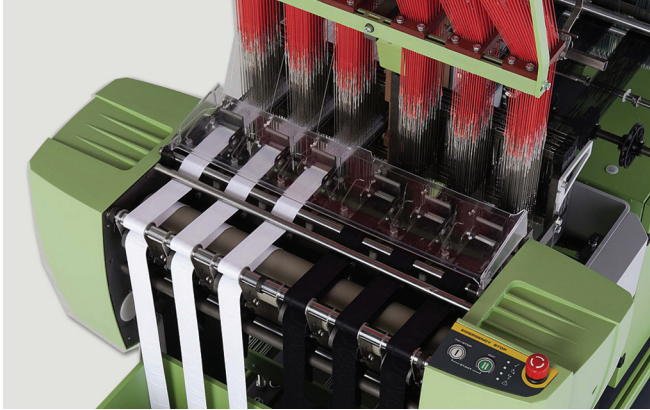## Central data management system for all locations
Jakob Müller AG relies on Dassault Systèmes' **3D**EXPERIENCE Platform and its Single Source for Speed industry solution experience for Industrial Equipment manufacturers. "With Single Source for Speed, we have a single, global data source for product creation and change throughout the lifecycle of our products," Stöckli said. "We can visualize, from concept design to delivery of manufacturing data, the entire item approval process. ENOVIA Version 6 is the central information management application. It manages our CATIA Version 5 data perfectly. It's a net advantage being able to trace a component's change history worldwide and benefit from a database of 200,000 items, including all revisions and approximately 15,000 amendment requests."

Jakob Müller uses the 3DS application CATIA for product design. "Using applications that come from the same platform avoids many unpleasant and time-consuming issues such as dealing with heterogeneous data formats, and maintaining an array of applications," Stöckli explained. "With Single Source for Speed, we have a complete view of our product information, traceability, and efficient management and control at all times," Stöckli said. "We are able to keep tabs on the development workflow throughout the entire company and can adapt it whenever and wherever needed, such as shifting the responsibility to another country."
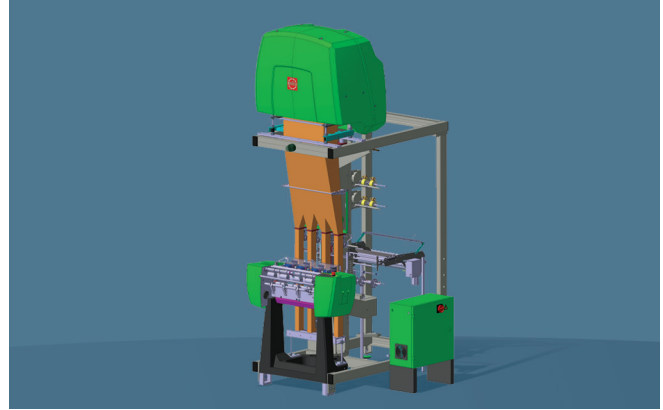
"With Single Source for Speed, we have a complete view of our product information, traceability, and efficient management and control at all times."

Michael Stöckli, Head of IT Business Solutions, Jakob Müller AG

Electronically controlled narrow fabric loom, model NHJM2 53

CATIA 3D Model of narrow fabric loom NHJM2 53

Minimal administration for developers

According to Stöckli, it is also important for designers to spend as little time and effort as possible administering product data to keep costs down. With Single Source for Speed, Stöckli has seen a significant improvement in this area. "Designers spend more time doing design work and less time on administrative tasks. Their productivity has improved. For instance, the lock mechanism's in ENOVIA Version 6 prevents someone from making unauthorized changes when several designers collaborate on a design. The system helps make the design process more intuitive," he said. All of Jakob Müller's CATIA V5 data, approval processes and workflow management are handled in ENOVIA Version 6. Moreover, its designs are linked to the corporate resource planning department enabling designers to provide manufacturing with bills of materials for production management.

Meeting new market requirements faster

"The **3D**EXPERIENCE Platform is robust and flexible enough to enable us to adapt our processes to any situation," Stöckli said. "For example, if we extend access to machine designs from Switzerland to our site in China, or from Italy to our Swiss site we can be very reactive by easily assigning proper authorization in the system. This agility is due to the fact that, throughout the company, we work with the same environment - the **3D**EXPERIENCE Platform."

Multi-discipline integration

Today's machines are a combination of mechanical, electrical and software components, making a multi-disciplinary approach to design essential in modern textile machinery. "In the future, we aim to achieve the management and control of the entire workflow with Single Source for Speed to speed up development processes," Stöckli said.

Jakob Müller plans to transition from CATIA V5 to CATIA Version 6 and will also implement **3D**EXPERIENCE application 3DVIA to rapidly create and label exploded views of machinery components, which are used for the production of its electronic spare parts catalogues. "With 3DVIA, we are broadening our use of 3D virtual technology, which will improve communication between our different departments and make our catalogues clearer and more attractive for our customers," Stöckli said.

Focus on Jakob Müller AG

Swiss company Jakob Müller AG is the world's leading provider of systems and solutions for ribbon and narrow fabric manufacturing industry.

Products: Jakob Müller AG's product portfolio covers all the equipment needs of the ribbon and narrow fabric manufacturing industry – a single source of machinery for activities ranging from yarn warping through to final weaving, knitting, crocheting and label manufacture.

Employees: 1,000

Headquarters: Frick, Switzerland

For more information
www.mueller-frick.com

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