



SUCCESS STORY

When tradition meets technology: How a Swiss chocolate classic is getting ready for the future

A Routeco customer project with Maestrani Schokoladen AG and Staedler Automation

staedler

Member of Advaton

For many people, that first bite into chocolate is a familiar moment - a piece of childhood, a piece of Switzerland. At Maestrani Swiss Chocolate AG, however, these small moments of enjoyment represent far more than traditional craftsmanship. They are the result of a carefully balanced combination of heritage, process reliability, and modern automation.

To ensure that this exceptional quality can be maintained in the future, a central production facility at the Flawil site underwent extensive modernization. In collaboration with system integrator Staedler Automation and automation partner Routeco - the preferred distributor of Rockwell Automation in Switzerland - a retrofit project was implemented that highlights how strong partnerships and technical precision come together to achieve outstanding results.

When proven technology reaches its limits

For more than 170 years, Maestrani has stood for premium Swiss chocolate. Iconic products such as Munz Prügeli and Minor chocolate sticks are produced in large volumes every day. To ensure this high output remains consistent, reliable processing of the chocolate mixture is crucial. This is where an extruder unit played a key role while at the same time, over the years, it evolved into a risk factor.

The control system had become outdated, spare parts were increasingly difficult to source, and unplanned downtime was rising. With an output of around 296 pieces per minute in a two-shift operation, even short interruptions had a direct impact on production. In addition, the system no longer met current standards for safety and maintainability. As a result, the decision was made to carry out a retrofit—modernizing the technology while preserving the machine's proven functionality.

A strong partnership: Staedler Automation and Routeco

The project began as a close collaboration between Maestrani and Routeco. Together, they assessed the existing system and, based on this analysis, defined a tailored automation solution. For the implementation phase, Staedler Automation - an experienced system integrator - was brought on board. While Staedler Automation was responsible for engineering, integration, and commissioning, Routeco provided key support in the selection and supply of the appropriate automation technologies. From control systems and HMIs to drive and servo technology, Routeco delivered the technological foundation for the upgrade.

Through close coordination, all components were seamlessly integrated. The result was a collaborative implementation: Routeco supplied the technology, while Staedler Automation ensured its precise integration into the existing production environment.

Technical implementation with Rockwell Automation: precision during operation

The modernized production section is responsible for the continuous application of the chocolate mass onto the conveyor belt. To ensure consistent product quality and high output, parameters such as temperature, viscosity, and discharge rate must be precisely controlled and perfectly synchronized. As part of the retrofit, the existing automation structure was not completely replaced but selectively modernized. The existing control logic was carefully analyzed and migrated to a modern platform using Rockwell Automation technology. This included the implementation of advanced control systems, visualization solutions, as well as high-performance drive and servo technologies.

Together, these components enable more precise control of the extrusion process and improved synchronization across all system elements. At the same time, they provide greater transparency, enhanced diagnostic capabilities, and increased operational reliability. A key focus throughout the project was to ensure a smooth and low-risk migration. Existing components were selectively upgraded without altering the underlying machine logic. This approach minimized project risk and enabled commissioning within a tight timeframe.

In addition, an independent safety assessment of the system was conducted. For this purpose, Staedler Automation carried out hazard analyses as well as functional and validation tests, and derived recommendations for further optimization.

Rapid implementation and lasting results

The modernization had to be carried out within an extremely tight timeframe, with only one week available for the entire retrofit. Through meticulous planning, a clearly defined allocation of responsibilities, and close coordination between Staedler Automation and Routeco, the project was completed on schedule and without major disruptions.

The retrofit not only eliminated a critical risk but also established the foundation for long-term, stable operation. The system now runs reliably and fully meets the demands of modern food production. The Rockwell Automation technologies implemented as part of the upgrade play a key role in ensuring high availability, improved maintainability, and enhanced operational transparency. For Maestrani, this means one thing above all: maximum production reliability - both today and in the future.

Conclusion: a classic endures - while technology continues to evolve

Maestrani's iconic chocolate sticks have represented quality and consistency for generations. Ensuring this legacy continues requires ongoing development behind the scenes. This retrofit project demonstrates how existing systems can be successfully future-proofed through targeted modernization - without compromising their proven strengths. At the heart of this success lies not only advanced technology, but above all, the strength of true collaboration between the right partners.

“Our collaboration with Routeco was defined by fast response times, strong technical expertise, and a deep understanding of our requirements. Together with Staedler Automation and Routeco, we were able to deliver the project exactly within the planned timeframe and secure our production for the long term.” - Bojan Eggenberger, Head of Technical Services, Maestrani Schokoladen AG

About Routeco GesmbH

As a leading distributor of Rockwell Automation (Allen-Bradley) in Switzerland, Routeco supports companies with tailored solutions and a dedicated local warehouse in Flamatt. With a strong focus on innovative technologies, Routeco helps optimize manufacturing processes and enables customers to successfully navigate digital transformation. Beyond offering an extensive product portfolio, Routeco stands for added value through expertise, service, and partnership - because Routeco is more than distribution.

About Staedler Automation

Founded in 2009, Staedler Automation AG specializes in industrial automation, control systems, and robotics, with a particular focus on the food industry. The company delivers customized solutions across the entire value chain - from raw material handling to the finished product - and brings deep process expertise, especially in the dairy and cheese sectors. Its portfolio includes plant and machine control systems, robotics, automated guided vehicle (AGV) solutions, and retrofit projects. With its proprietary digitalization platform ADVATCON, Staedler enhances transparency, process reliability, and operational efficiency. In addition, the company offers independent safety consulting, CE certification services, and comprehensive after-sales support.

About Maestrani Schweizer Schokoladen AG

For over 170 years, Maestrani Schweizer Schokoladen AG has embodied authentic Swiss chocolate craftsmanship. At its production facility in Flawil, dedicated chocolatiers create high-quality chocolate specialties under well-known brands such as Munz, Minor, Chocolat Ammann, and Avelines, as well as selected private-label products. The company combines artisanal expertise with state-of-the-art production technology, placing strong emphasis on quality, sustainability, and continuous innovation. With a diverse product portfolio, deep process know-how, and strong manufacturing capabilities, Maestrani ranks among Switzerland's leading chocolate manufacturers.

Contact:

Lisa Thurner, MA



Marketing Manager at Routeco GesmbH

lisa.thurner@routeco.com | +43 664 1426014

Egger-Lienz-Strasse 10 | 4050 Traun | www.routeco.at

Images:

Nr.	Content	Image
01	Routecco Logo	
02	Detailed view of the chocolate machine	
03	A section of the facility featuring the following individuals, starting from the left: Walter Unterberger (Account Manager at Routecco), Marco Butcher (Team Leader of Software Engineering at Staedler Automation), and Bojan Eggenberger (Head of Technical Services at Maestrani Schweizer Schokoladen AG)	

<p>04</p>	<p>The heart of the machine – the control cabinet</p>	
		<p>Additional images for use in the graphic, if needed:</p>
<p>05</p>	<p>A scene from the Maestrani Experience World, featuring (from left) Marco Butcher (Team Leader, Software Engineering, Staedler Automation) and Bojan Eggenberger (Head of Technical Services, Maestrani Schweizer Schokoladen AG)</p>	

06 Presentation of the famous chocolate sticks

