SUCCES STORY MÜLLER PRODUKTIONS GMBH

Green Factory 2.0, focus on energy.

Innovative, efficient and environmentally friendly Müller Produktions GmbH

Over a 45-year period, the Alois Müller Corporate Group has developed from a family business to a company with around 350 employees. The company is regarded as a specialist in system engineering, energy and building technology (heating, ventilation, sanitation and air conditioning). It demonstrated its comprehensive know-how in various projects, including the new construction of the Allianz Arena in Munich. Its own flagship project is the Green Factory 2.0 in Ungerhausen (DE). With a total area of 18,000 m^2, it is the world's largest virtually energy self-sufficient green factory. Sustainable and energy-efficient production is also the focus at BELIMO Automation AG. With the new generation of butterfly valves and the PR and PRK butterfly valve actuators with emergency control function (SuperCap), Müller has found a solution to achieve its targets.

TYPE OF BUILDING
Production

PROJECT
New building

SECTOR
Heating, ventilation and air conditioning (HVAC)

PRODUCTS
Retrofit butterfly valve actuators (PRK) with SuperCap, butterfly valve-actuator combinations

BELIMO

Sustainability paired with state-of-the-art technology.

Green Factory 2.0 – imposing dimensions in size and sustainability

Alois Müller is equally famous for tradition and innovation. The family-owned company in Ungerhausen in Unterallgäu demonstrates this with the Green Factory 2.0, the world's largest virtually energy self-sufficient production and office building. The company's approximately 4,000 m^2- Green Factory, which has been in existence since 2012, will be expanded by a further 10,000 m^2 of production and storage space. 90% of the energy required to supply the entire Green Factory with electricity, cooling, heat and compressed air is provided by regenerative solar energy through a 1.1 MW photovoltaic system. The remaining 10% is covered by a cogeneration plant. The energy costs and CO_2 emissions thus drop to practically zero. Once the new factory is completed in Spring 2018, it will mainly be used for the production of energy module systems and supply technology components for plant construction such as steel and stainless steel piping systems.

"Products from Belimo convince with reliability."

Darko Zanic, Project Head for Instrumentation and Control Systems
e-con AG

Müller exemplifies a sustainable, resource-saving production environment

The degree of prefabrication has already been increased with the Green Factory, which led to improved process reliability and offers customers higher quality. With the new factory, Müller would also like to show the industry how a sustainable and resource-saving production environment can actually be implemented in everyday practice. At the same time, the Müller Group can present itself as an innovative employer with the Green Factory 2.0.

The centrepiece is the ingenious energy management system

The centrepiece of the Green Factory is the new power station. It is from there that the entire energy management system of the plant in Ungerhausen is controlled. The system was developed by e-con AG, a subsidiary of the Müller Group. An intelligent power network continuously monitors electricity consumption and controls the switch-on times of the system in order to avoid peak loads. Excess energy is stored in order to ensure that the plant and equipment are reliably supplied with uninterrupted energy. Generated electricity which is not required in the Green Factory, flows into the general power grid, supplying other companies in the vicinity with electricity.

Flexibility, reliability and customer focus.

Butterfly valve actuators from Belimo guarantee reliability

To ensure optimum control, the e-con AG energy management system for the energy flow in the Green Factory requires components it can rely on. Thus, for example, two butterfly valve actuator combinations with open-close control were installed by Belimo in the cooling circuit for switching between heating and cooling. They are controlled by open-close actuators.

Retrofit actuator with emergency control function

A particular challenge was to supply the Green Factory using well water. This is more aggressive than stationary water in cooling and heating systems, which is why the materials used have to meet corresponding criteria. The only valves certified for well water are provided by KSB AG. Since the new butterfly valve actuator from Belimo moves into a predefined position even in the event of power failure thanks to its SuperCap option and can be parameterised quickly and easily per Near-Field Communication (NFC), the company opted for a retrofit solution from Belimo. Like all Belimo actuators, the compact PRK actuator is of universal design and fits onto butterfly valves from different manufacturers using simple adapters. "Using the new PRK actuator with SuperCap from Belimo was no risk for us. "Products from Belimo convince with reliability", comments Darko Zanic, Project Head for Instrumentation and Control Systems at e-con AG, and adds: "Something can always go wrong with new products, but then I expect a rapid solution to be forthcoming, and that is what Belimo provided."

Added value for the customer is of the highest priority for Belimo

In the search for a suitable actuator for the KSB butterfly valves, it was the price-performance ratio and the short delivery distances and times that were the decisive factors. Belimo was able to meet the requirements and supplied all of the products needed. "In the first delivery, the retrofit linkage did not fit on the butterfly valves. "Within a few days, however, the Product Manager and a Technical Supporter travelled from Hinwil to Ungerhausen and quickly found a solution", reports Darko Zanic and continues: "That is what makes Belimo what it is".

Change-over application for cooling and fire-extinguishing operation fed by well water and powered by a retrofit butterfly valve actuator with emergency control function (SuperCap).

Supply of cooling to the building via open-close control of the new generation of a butterfly valve actuator combination.

All inclusive.

Belimo is the global market leader in the development, production, and sales of field devices for the energy-efficient control of heating, ventilation and air-conditioning systems. The focus of our core business is on damper actuators, control valves, sensors and meters.

Always focusing on customer value, we deliver more than only products. We offer you the complete product range for the regulation and control of HVAC systems from a single source. At the same time, we rely on tested Swiss quality with a five-year warranty. Our worldwide representatives in over 80 countries guarantee short delivery times and comprehensive support through the entire product life. Belimo does indeed include everything.

The "small" Belimo devices have a big impact on comfort, energy efficiency, safety, installation and maintenance.

In short: Small devices, big impact.

- 5-year warranty
- On site around the globe
- Complete product range
- Tested quality
- Short delivery times
- Comprehensive support

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