



SUCCESS STORY SWISSCO SERVICES AG

Reliability, security and energy efficiency.

New chiller with communicative butterfly valve actuator

A reliable cooling circuit is particularly important for the pharmaceutical company SwissCo Services AG in Sisseln (Switzerland). The temperature and above all the humidity in the production plants are decisive for manufacturing the company's effervescent and tablet products. Alongside reliable operation and keeping temperature and humidity levels constant, the aim of refurbishing the cooling plant was to optimise energy consumption.

TYPE OF BUILDING

Production

PROJECT

Renovation

SECTOR

Cooling system

PRODUCTS

Butterfly valve-actuator combinations
with BACnet MS/TP

Reliable, energy-efficient production.

Controlling factory ambient environment influences the HVAC system

Ambient environment in the pharmaceutical industry are strictly controlled and particularly in the manufacture of moisture-sensitive tablets, humidity and room temperature play an important role. This means that the products manufactured in Sisseln need to be produced at max. 20% humidity and max. 18°C / 64°F. The manufacturing process for tablets only works if the right pressure, the right temperature and post-hardening processes are coordinated correctly. The production plant in Sisseln runs 24 hours a day every day. To keep production flexible, SwissCo keeps refitting the production facilities. This means that it is also possible to produce small batches. The chilling and dehumidification process is particularly important here, and distinction is made between two phases:

- In the preliminary dehumidification process, most of the humidity is removed from the air.
- The remaining humidity is removed from the air at various temperatures with silica gel driers (first cold and then at 130°C / 266°F).

Two chillers support this process (see figure), although generally only the new plant is in operation. Chiller one is used when the outside temperature rises above 35°C / 95°F or if Chiller two is out of service. The older plant from 2005 is scheduled to be retrofitted in the near future to meet the company's energy saving goals.



“We like working with Belimo because we can depend on the reliability of the products.”

Andreas Wechner, Project Manager
Trane (Switzerland) GmbH



Communicative, simple and safe.

Belimo is synonymous with reliability and energy efficiency

The challenge for the HVAC system is that the required ambient temperature and humidity needs to be constant the whole year round, regardless of the weather conditions. That is why a reliable and precise plant is hugely important. "We like working with Belimo because we can depend on the reliability of the products," explains Andreas Wechner, Project Manager & Field Controls Representative at Trane (Switzerland) GmbH. SwissCo also wanted to reach a new level when it comes to energy efficiency. Compared with the energy consumption of the previous year, the company was able to save a total of 128,000 kWh of energy between March and August 2017.

Communicative actuator with diagnostics capability

The fact that the new Belimo PR actuator is communicative makes it unique. "The communicative PR actuator allows us to see at any time whether the system is working properly so we can intervene rapidly if there are any deviations. That provides both us and our customer SwissCo with the necessary safety and peace of mind." Thanks to the BACnet® MS/TP interface which is easy to integrate to the BMS, the plant operator and plant installer can access the PR actuators from anywhere via secure web access and thereby obtain information on the plant's current operation. At SwissCo Services AG, two passive temperature sensors have also been connected to the communicative PR actuators so that precise measurement data can be transferred via BACnet MS/TP protocol.

Simple commissioning thanks to NFC

Another advantage of the PR actuator is that commissioning, setting parameters and maintenance are easy. "With NFC (Near Field Communication) I was able to commission the PR actuators in just a few minutes from my own smartphone. It is really easy to do and saves a lot of time," confirms Andreas Wechner. Using Near Field Communication makes simple diagnosis possible even during operation. This means for example that the health status of the actuator can be queried at any time. This function is another important element for guaranteeing the reliability and user-friendliness of the PR actuator.



Visual position indicator

Because it is not possible to see the position of butterfly valves from the outside once they have been installed, Belimo has developed a new position indicator. "The position indicator is practical because it allows you to see the position of the valve from a distance," says Andreas Wechner. When the new cooling circuit project was in the planning phase, the Project Manager was quite clear that he wanted to work with Belimo: "Belimo does all it can to find a solution quickly and if anything should ever not go quite to plan, then the company is very accommodating."

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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