Proven user-friendliness and reliability of the new PR actuators

The latest product within the Belimo product range has been specially developed for the HVAC industry and meets its requirements by 100%. This is confirmed by the first experiences within the new plant of Kuhn Champignon AG in Full-Reuenthal (CH). The production plant is in operation since June 2015. The new generation butterfly valve actuator from Belimo was installed there in March 2016 and has been running since then flawlessly. The innovative actuators proofed, that they are in highly user-friendly and reliable in the application. The project management for the plant is handled at Trane and the project manager and contact person for Belimo and Kuhn is Andreas Wechner. His experience with this solution was exclusively positive.
Initial situation
In the production plant of Kuhn Champignon AG seven to eight tonnes of mushrooms are produced daily. In order to accelerate the growth, an artificial “autumn climate” is created in the production. Under ideal temperature and humidity, the mushrooms ripen and become ready for harvest within three weeks. The existing plant and especially the hydraulics were obsolete after 30 years and no longer met the current standards of sustainable production. Therefore, the entire plant has been renewed with the purpose of saving energy and switching to variable amounts of water.

Project requirements
Energy saving was defined as the main objective for the new production plant. Additional requirements are:
- Constant temperature and humidity in the production for the optimal growth of mushrooms
- Switching to variable amounts of water in order to be able to react according to the season and demand
- Reliable and innovative products that contribute to energy saving

Belimo solution
The new butterfly valves and PR actuators from Belimo fulfill the task of dissipating the heat within the plant. This means that the warm water will be pumped into the ground water for cooling again. Depending on the season this happens daily. The new PR actuator is also easy to install thanks to its lower height and reduced weight. "Compared to the previous model, the new PR actuator is easily installed", confirms Andreas Wechner from Trane and continues: "Only there were early difficulties in terms of control as it was different than the previous model." But with the new instructions this is no longer a problem. Another advantage is the functionality of hand crank. Thus, should the need be to switch the system to manual operation, it can be switched. This is an important aspect especially for Kuhn Champignon AG. Another benefit of the new PR actuator is the high energy saving potential. 80% savings can be attained in combination with the new butterfly valve.

Customer satisfaction
“As a project manager for building automation, I am responsible for all aspects and phases within the automation of the plant”, describes Andreas Wechner (see picture right) his role for Kuhn Champignon AG. “I had no concerns in installing the new Belimo PR actuator in the plant. Since the product has been tested at the factory and additional customer experiences were incorporated as a result of field applications, the interest was very high. Belimo always brings new and innovative products to the market such as the Energy Valve or now the new PR actuator. Particularly interesting for us is the BACnet connectivity in butterfly valve actuator that will be released soon. We will be glad to test it as the entire automation is based on BACnet”, replied the Project Manager & Field Controls Representative of Trane to a question about the risk of using a product that is not yet officially available on the market. "When I have questions, I always get a quick and professional response from the Belimo employees, mainly from customer service specialist Alfred Dietsche. Or when we need something, the fast delivery times from Belimo is a big advantage. This facilitates collaboration immensely", he describes the support of Belimo.

Customer benefits
- Easy installation thanks to lower overall height and reduced weight of the actuator
- Easy commissioning, parameterising and maintenance through Near Field Communication (NFC)
- Guaranteed reliable operation through intelligent self-adjusting valve design
- 80% energy saving as the contact surface between valve seal and valve disk is reduced