

Vienna University of Veterinary Medicine invests in automation solution of the future

The campus of the Vienna University of Veterinary Medicine has 47 buildings spread over 15 hectares. SAUTER is installing a modular automation solution at the 250-year-old education and research institute. This means that the many animals and 3,700 or so staff members and students will benefit from the best possible conditions in future.

In the 18th Century, there were devastating outbreaks of cattle diseases across Europe. In an attempt to gain control of the problem, the Austrian monarch Maria Theresa opened the school of veterinary medicine in Vienna in 1765. This was the first such institution in a German-speaking country and has since undergone massive development. Today, the campus has 47 buildings, five university clinics and a state-of-the-art research infrastructure.

As the client, the Bundesimmobiliengesellschaft (Federal real-estate company) has been modernising the technical systems on the campus since mid-2016. SAUTER had already equipped the buildings, constructed in the 1990s, with innovative automation systems. In 2014, the building automation specialists installed SAUTER novaPro Open as a BACnet Advanced Workstation. This replaced the two existing SAUTER EY2400 systems with the LZ10 command centre. The university wanted to keep this tried-and-tested technology and SAUTER was therefore tasked with updating the entire building automation.

Modular solution for a large campus

SAUTER is gradually upgrading all the technology on the university campus to state-of-the-art level. It is particularly challenging as the systems must be replaced whilst still in operation. The engineers, for example, have to swap 500 ageing automation stations with units from the modular system family SAUTER EY-modulo 5. The future-proof technology used is based entirely on the open communication protocol BACnet/IP. This will also allow the university to seamlessly connect third-party systems in the future.

SAUTER has fitted the rooms with modern pressure sensors and humidity sensors. Every building therefore has ideal conditions for studying. Furthermore, the new SAUTER ASV115CF VAV compact controllers ensure the correct supply of air to all rooms and labs, as well as optimising energy consumption intelligently.



Checking systems can become a real physical challenge if the buildings are spread out over a 15-hectare campus. SAUTER has thus set up a clever network of touchscreen PCs enabling everything – from the heating to the lighting – to be monitored and controlled remotely. All the connected systems can be operated without having to walk across the whole campus. This is possible due to 74 networked displays and the SAUTER novaPro Open flexible visualization and building management solution – a BACnet Advanced Workstation.

Accurate planning to keep the animals safe

SAUTER is replacing all existing DDC elements in the 47 buildings on the campus. The downtimes of the HVAC systems, however, must be kept to a minimum. The systems have to be exchanged within these narrow time constraints. The planners therefore made intensive preparations before the work began. They simplified and streamlined certain work steps and even partially assembled the automation stations beforehand. After a few hours the actual conversion work was complete and the downtime amounted to just minutes.

There were good reasons for quickly getting the systems operational again. Hygiene requirements mean, for example, that positive and negative pressures in the operating theatres and animal laboratories must be reliably maintained. For the operating theatres this was not a major problem. They could just be temporarily closed. But for the isolation laboratories there was no such option. SAUTER, however, performed meticulous preparations before replacing the automation stations. The supply of air remained virtually uninterrupted, thereby ensuring the safety of the animals.

A game-changing automation solution

Work is scheduled for completion by the end of 2018. The modern automation technology from SAUTER in the 47 buildings not only provides the basis for future education and research in veterinary medicine. It also guarantees the well-being of the animals on the campus while, at the same time, maximising energy efficiency.



Oldest university of veterinary medicine in German-speaking world

The Vienna University of Veterinary Medicine is the only academic veterinary medicine education and research institute in Austria and also the oldest in German-speaking countries. It currently employs around 1,400 employees and has over 2,300 students.

<http://www.vetmeduni.ac.at/>