

High tech behind the scenes at Switzerland's oldest baroque theatre

Solothurn city theatre has been returned to its former glory with a thorough overhaul. The aged building and its infrastructure were the reason for the general reconstruction. Since the theatre was reopened, SAUTER's cutting-edge solution has improved energy efficiency and provided music and theatre lovers – and the ensemble itself – with enhanced safety, improved air quality and comfort.

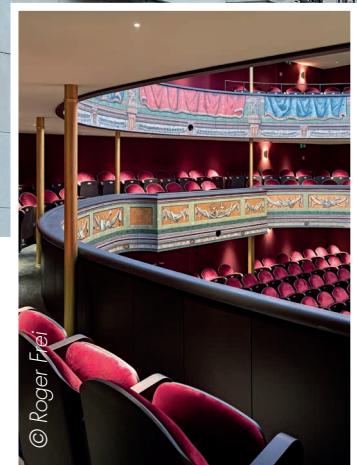


Obsolete stage technology, poor air, inefficient heating and even inadequate fire protection – these are just a few of the shortcomings that plagued the time-honoured theatre in the centre of Solothurn's old town. Solving these problems and recapturing the prestige of this beloved baroque theatre was not an easy task. Extensive changes were needed to the building and infrastructure which were, in places, in a very bad state. SAUTER was commissioned with upgrading the outdated building automation system, using an economical solution tailored to the operator's requirements.

SAUTER software – a well-practised ensemble

The interior of the theatre is extensive, across numerous storeys and building sections. The city of Solothurn wanted a simple overall solution that monitored and controlled the heating and ventilation centrally. Built around the BACnet/IP open communication protocol and compatible with many components and systems, the SAUTER EY-modulo 5 system range was perfect for the task.

STADTTHEATER



SAUTER installed its web-based management software, SAUTER moduWeb Vision. Providing optimum visualisation and operation, it allows the theatre's facility management to monitor and control the building automation installations efficiently and from a central point. To match the package precisely to the situation on the ground, the project team turned to the extensive features of the SAUTER CASE Suite function library.

Directing everything via touchscreen

SAUTER's visualisation solution – moduWeb Vision – uses BACnet/IP to link all the SAUTER EY-modulo 5 components in one precisely coordinated system. Should any malfunctions occur, the software notifies the person on duty thus enabling them to take immediate action. SAUTER moduWeb Vision can be accessed from a touch panel on the top floor to regulate the heating and ventilation in the whole auditorium. The technical room has a PC for operating the building management software over a web browser. The automation system can also be accessed anywhere using a remote connection.

SAUTER's trusted automation products from the EY-modulo 5 range are located in five cabinets in different storeys and sections of the building. From there they regulate the energy flows to the heating, cooling and interior air systems.

An effective performance

To ensure a constant supply of fresh air to audiences – even when the house is full and temperatures are high – the theatre employs CO₂-based ventilation. In addition, as part of the upgrade, underfloor heating was installed. This is also controlled by SAUTER automation stations. A heat supply network and demand-led regulation through SAUTER components mean far fewer resources are used for the heating. And last but not least, the solution has improved the fire protection in the building. In the event of a fire, the building automation system will activate the smoke extraction system, increasing the safety of the audience.

By renovating the theatre and using SAUTER's modern building management solution, Solothurn city theatre fulfilled a number of goals – more comfort for its patrons, improved energy efficiency for the operator and greater safety for the audience and theatre staff.

Refurbishment with historical encore

The renovation of Switzerland's oldest baroque theatre also brought to light a treasure from the past: hidden beneath many layers of paint were valuable frescos depicting historical motifs from the theatrical world.