

From share prices to language courses

The “Neue Börse” building in Zurich has been completely refurbished and gained a whole new purpose – with the SAUTER automation solution ensuring an efficient, comfortable climate inside.

Share prices, bond prices and currency rates: Huge quantities of numbers passed day in, day out through the “Neue Börse” building in Zurich. From 1991 to late June 2017, it was the headquarters of the SIX Swiss Exchange and then all operations moved to the “Hard Turm Park” in Zurich West.

The “Neue Börse” was built by the Suter + Suter architecture and planning office. The impressive solid concrete construction evokes terms like stability and permanence. Visitors and passers-by notice the generous, portal-like entrance area immediately. Its curved glass front opens the corner to the River Sihl and, symbolically, the world.

Building automation for enhanced comfort

The SAUTER building automation system (EY2400) was selected at the time of construction. By optimising the HVAC installation settings in particular, it controlled and regulated the building technology for the well-being of users. The automation was later refurbished and migrated to EY3600. Further improvements were made, such as introducing the novaPro Open management system. This ensured that, with its open structure, the installation would meet the increasing requirements.

The new client: EF Education First

The building has a new raison d'être. Gone are the shares and bonds, replaced by languages and education. After lengthy uncertainty, EF Education First assumed, in November 2015, the complete leasehold of the building complex. According to EF itself, it is the biggest private education institution in the world. The success of this language school stems from the combination of language training and cultural exchange, academic performance and educational travel – aiming to open up vast new horizons to its course participants.

The new location in Zurich is not a school for the public. This is where administrative tasks are carried out.

The building had to undergo a massive overhaul to provide the 1'000 or so employees with optimum working conditions. New ceilings were installed in the building's storeys, for example. Remarkably, not only office spaces were created during the conversion but also apartments. These feature smart operation and control.

Fit for the future with new building automation

The SAUTER consulting team followed the new client closely along the way, meaning that only the adjustments needed to the building automation were made. This included replacing the field devices for the enhanced HVAC installation on the primary level. The existing field modules (BACnet standard-based) continue to ensure energy-efficient operation of the systems, namely in the modulo 5 environment with modu590. Building operators will value the functionalities of the SAUTER Vision Center management solution, the efficient, user-friendly energy management tools in particular. The clear display of important trends and alerts will allow system operation to be optimised and thus save valuable energy and costs. What is more, continuous monitoring is possible through availability of HVAC plant schematics and room images.

Stage set early for energy optimisation

During the planning phase, the building was split into 15 different energy zones. Decisions were made early on, ensuring maximum user comfort and minimum energy consumption. Indeed, all the offices in these areas have intelligent unitary control communicating through BACnet/IP. The zones' controllers are installed in a storey distributor, connected to which are 120 room boxes via ready-to-operate system distributors. It is from here that the chilled ceilings, VAVs and radiators are controlled.



Multilingual and open

In a building for language courses, what could be more fitting than multilingual automation? Along with the BACnet/IP backbone, a whole host of equipment communicates with each other: 4,500 DALI participants, 300 SMI motors for the blinds, countless KNX devices for integrating the weather stations and control buttons in the apartments.

A little imagination is all that is needed to picture the following dialogue between devices:

Management level: *"Sonne scheint, leichter Wind,
Solltemperatur im Raum 21°C."*

Blinds: *"OK, shutter down, position daylight."*

Chilled ceiling: *"Message parfaitement reçu, ouverture
des vannes pour réglage 21°C."*

Using these standards means that open communication is ensured between installations and that this communication is presented as a unit in the visualisation.

Room operation made to order

The automation controls the important stuff and users can adjust the room climate at will with just a few simple commands. This is where the ecoUnit365 touch room operating units come in, providing optimum room climates, lighting and sunshading through intuitive, local operation. Users also receive round-the-clock information on room conditions and energy efficiency data.

The "Neue Börse" building now has state-of-the-art automation and the means to optimise operation and provide it with maximum sustainability for the future.



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<https://www.ef.com/wen/aboutus/>

