

A fortress for France's banknotes

For the Banque de France, maximum security and a functional workplace go hand in hand. In the north of France, a new hermetically-sealed building has been built. This is the "Centre Fiduciaire du Nord de France" and specialises in managing banknotes. Throughout the building, SAUTER building automation ensures optimum climate conditions while minimising energy consumption. Productivity is therefore high and occupants work in comfortable surroundings.

The new premises of the Banque de France in Sainghin-en-Mélantois, near Lille, has robots which handle, sort and check banknotes. As you would expect, considerable demands are placed on security. The architects of the "Centre Fiduciaire du Nord de France" therefore designed an enormous building with stringent security measures. The outer façade is without windows. Instead, daylight enters through a courtyard at the building's centre, ensuring lighting is evenly distributed.

The site is the first fully automatic money management centre in the Eurosystem. It has a floor space of approximately 6,000 m², making it roughly the same size as a football pitch. Despite its spaciousness, most rooms in this €10 million-euro building are controlled completely by artificial intelligence. Robots take delivery of incoming banknotes, bring them to sorting machines and storage areas and then finally place them onto security vans – the process is fully automated from start to finish.

Smart remote control

The Banque de France required a building automation system that was simple to operate. Not only did it need to provide optimum temperature, air and lighting conditions for employees, energy consumption also had to be kept as efficient as possible. With SAUTER offering its EY-modulo 5 range – an entirely BACnet/IP-capable system – and its extensive know-how in the field, the SAUTER solution was given the green light by planners.

Due to restricted access to the rooms, the Banque de France also sought a facility for remote monitoring and control of the whole installation – a central system for technical management on location, situated outside of the secure areas. The answer was SAUTER Vision Center. This is a web-based building management system which shows, at a glance, all the HVAC installations in a building. This means that on-site service technicians, no matter where they are, can use their smartphones, tablets or PCs to keep room conditions under control.

Rooms individually regulated for comfortable working

To provide an environment to suit each of the building's users, SAUTER room automation stations – ecos500 and ecos504 – were installed. These control the temperature and lighting in a room. ecoUnit 1



room operating units, featuring EnOcean wireless technology, are also fitted. They display an overview of current room conditions and allow the heating or cooling to be easily adjusted. Both artificial light and daylight is used to create a pleasant climate in every work area.

Automation for high energy efficiency

Low energy consumption is a requirement for becoming HQE-certified and helps minimise operating costs. This is hugely important to the Banque de France and so it has opted for a comprehensive solution which monitors and controls resource consumption. An energy module is installed, allowing the on-site facility manager to check freely the energy consumption of each system. The EMM directly integrated in SAUTER Vision Center relays consumption values in real

time and records them. The user-friendly energy dashboard – showing the various key performance indicators – enables corrections to be made as required.

High performance and energy efficiency in perfect harmony

The intelligent, all-round solution from SAUTER not only creates ideal climate conditions for employees in this high-security building, it also maintains low energy demand. So low in fact, that the bank expects, in the very near future, to gain HQE and AFILOG certification from CERTIVEA. This building therefore demonstrates, quite clearly, how security, comfort and energy efficiency can all be fulfilled without compromise.

