



SPORT CENTER "JANE SANDANSKI"



"Jane Sandanski" Sports Center is a multifunctional facility which contains a large sports arena with a capacity of 6.500 visitors, a small sports hall with a capacity of 1.000 visitors, a conference room, tennis courts, fitness and aerobics center, a playground and sports equipment storage and a fans shop HUMMEL Vardar.

The Sports Arena has a capacity of 6.500 visitors, made according to the standards for any international competition in basketball and handball. The Sports Arena is the first arena with three children's areas with 40 seats, four fans zones, and seven VIP rooms.

Within the sports center there is a smaller gym, which is mainly used for trainings and sport activities for basketball, volleyball, handball, indoor football, etc ... with a capacity of 1.000 seats.

S.C. "Jane Sandanski" has a conference room where press conferences and different events of this type are held.

CHALLENGES

- ▶ To integrate disparate HVAC control systems into a centralized facility management system;
- ▶ To begin a process of building integration into the facility management system;
- ▶ To design & Build a control system with a maximum efficiency thus to reduce energy costs;
- ▶ To standardize on a common platform;
- ▶ Policy for using open standards to achieve competitive price;
- ▶ Flexibility for incremental retrofits.

PRODUCTS AND SERVICES

- ▶ SAUTER Intelligent Control of machinery control board:
 - On/Off controllers (Thermostats, Frost monitors, Pressure switches)
 - Sensors and transducers (Temperature, Flow, VAV, Differential pressure, Air quality)
 - Electric drives, control valves, butterfly valves
 - Distribution boards for the logic
 - Management level software (novaPro Open Suite)
 - System integration (communication module with M-Bus and EIA – 232 interfaces)

WHY KABTEL?

KABTEL with SAUTER building automation links all systems and optimizes their interaction with a maximum energy efficiency. It automatically determines (for example, using presence detectors and sensors) the real requirements for heating, cooling, fresh air and provides the right amount of energy, at the right time, and on the right location. This type of needs-based building automation system prevents energy waste and results in a noticeable and worthwhile reduction in operating costs with swift repayment.

Modular components complete SAUTER's building automation for integrated solutions enable special applications:

- ▶ MODBUS: machinery plant
- ▶ M-Bus: meters (heat, electricity, gas, water, etc.)
- ▶ BACNet: Building Automation and Control Networks
- ▶ VFC Voltage Free Contact, signalization with other systems (fire protection, ventilation, ...)



BENEFITS

TECHNICAL

The contract was offered to SAUTER due to its extensive know-how in the technical building management sector, as well as its proven experience in other, similar projects. SAUTER has been responsible for the management of the Jane Sandanski arena since 30.08.2014.

The services provided by SAUTER for the premises include, in particular, the technical building management, maintenance, inspection and servicing of the building, also the monitoring of the warranties. They also cover fire protection and safety technology. In case of a fire emergency all ventilation systems prevent the fire to be spread inside the space of the arena.

There are a lot of technical benefits which make this system easy and efficient.

- ▶ This system is one of the most energy efficient systems in the country. It manages to produce and accumulate energy in the water-thermal accumulators, during the low cost tariff from the grid, and supplies with energy all consumers systems whenever needed, which contributes to a high level of reduction of costs per kWh.
- ▶ The SAUTER building management system incorporates 21 BAC-Net controllers monitoring and/or controlling more than 1.400 spots, which helps SC Jane Sandanski staff to be more proactive and efficient.
- ▶ The WEBs system is accessible anyplace where authorized staff has the use of a computer with Internet access.
- ▶ It also helps the staff to quickly determine the status of all systems and to react accordingly.
- ▶ The automation of the HVAC system helps to sustain the air quality needed inside the arena, making it more pleasant for the audience during any kind of event.
- ▶ In case of a fire emergency it reacts automatically closing the protection lids in ventilation systems preventing smoke spreading. It also starts the fans which draw the smoke out.

FINANCIAL

As a benefit of the integration of the new BMS system, the global costs of SC Jane Sandanski have largely been reduced. The electrical bills are at minimum using the supply from the grid at night when the electricity tariff fee is at low cost.

USER EXPERIENCE

The employees are indeed an important success factor for a smooth operation of the Jane Sandanski arena. Because the arena accommodates, in a tightly scheduled succession, many events of various types and different requirements, it continuously needs adequate staff for the facility management. This requires a high availability more or less around the clock – a challenge that KABTEL can master owing to its extensive experience and intelligent planning.