COFACE ARENA Project MAINZ

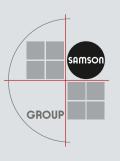












Intelligent system solutions



SAMSOMATIC pitched and won the contract for the building automation of the stadium. Decisive factors included security of investment, low energy consumption and cost-effectiveness. The challenging task involved planning, programming and installing the systems as well as starting them up on schedule. A highly motivated team of SAMSOMATIC employees developed a technically and economically viable solution for the future based on the extensive SAMSON product portfolio.

SAMSOMATIC controls

The BACnet-capable TROVIS 6600 Automation System is at the heart of the control system drawn up by SAMSOMATIC: it processes data from the heating, ventilation, electrical and sanitary installations.

Data are transmitted to a server-based control station, which provides remote desktop access from any workplace. Custom process visualization with animated plant schemes makes it easy for operators to run and monitor the systems. In addition, special functions in different building sections can be conveniently operated and monitored using three web terminals with touch screen input.

Reliable operation is ensured by an extensive alarm management system, which reliably processes error messages by other, non-SAMSOMATIC systems, such as the emergency power system, the intrusion and fire alarms systems, the sound and public address system, emergency lighting, sprinklers as well as drainage and lifting installations.

Building automation for tomorrow

A reliable heat supply is indispensable to the operation of Coface Arena. Heat distribution is controlled by a manifold and adapted to the consumption by electric control valves as needed.

Energy-saving air-conditioning in the grandstand is ensured by 14 main ventilation systems with heat recovery. Additionally, five exhaust fans on the roof properly ventilate the kitchen and sanitary facilities. Hot water for the catering facilities as well as the team and locker rooms is provided by five water tanks that are filled as needed.

A sophisticated smoke extraction scheme has also been implemented to ensure fire safety. The control system is designed for four ventilation zones; when a fire occurs,



Building automation by SAMSOMATIC at Coface Arena, Mainz, Germany

The Coface Arena at Mainz is the new home of the German Bundesliga team FSV Mainz 05, a side with a long tradition, and provides the club's fans with room for emotion.

Its pitch measures 105×68 meters, its covered stands provide standing and seating room for 34,000 avid supporters.

The prominent main grandstand building serves as the entrance to an exclusive 3,000 m² multi-purpose center with spacious indoor and outdoor facilities, which can be used for sporting events as well as other events, meetings and conferences.

The five-story grandstand also contains the representative VIP entrance, team and locker rooms, offices, business seats and the catering area. 27 individually designed executive boxes and two luxurious hospitality suites treat guests to an extraordinary view into the arena.



400 fire dampers and two exhaust fans on the roof effectively ventilate the grandstand facilities.

Illumination of the parking areas, access roads as well as the lighted signage and logos is controlled by brightness sensors, different schedules or by hand.

The undersoil heating system is controlled by twelve temperature sensors spread across the pitch so that the roots are protected against frost and kept at a constant temperature of 11 °C. This ensures that football can also be played throughout the winter.

Services

- Planning
- Design of process control
- Sizing the measuring and control equipment
- Assembly and installation
- Start-up
- 2.300 data points
- 12 TROVIS 6610 CPU Modules
- 138 TROVIS 6620/6625 I/O Modules
- 3 TROVIS 6615 Web Terminals





