



Coca Cola headquarters Madrid, Spain

Description

The new headquarters of the multinational company Coca Cola, is in Madrid, located close to the M-40. The building was designed by architects from the office Asensio Lapuerta + Architects (LD + A) and built by Ferrovial. It counts for a total area of 7,500 m² in four floors. The building has a gym, a restaurant, a cafeteria, a library, and a parking place for cars and another one for bikes.

In the building process 20% recycled and environmentally friendly materials has been used. An example is the wood used in both interior woodwork and the furniture. This wood is certified FSC (Forest Stewardship Council), which certifies the sustainable origin of wood. Also noteworthy is the double skin facade which also creates a permanent sun awning, the use of solar thermal panels to supply 70% of the hot water consumption and the 140 photovoltaic solar panels that generate electricity from the sun's energy.

Objective

The design and construction of this new building has been made in order to gain the certification Ledd (leader in energy efficiency and sustainable design). An underfloor system of fan-coils controlled by a centralized management system has been used for the air conditioning and ventilation system. To achieve the objective it was essential to maintain the hygrometric comfort conditions and to have a precise control of temperature.

Solution

Nearly 500 Frese OPTIMA valves, pressure independent control and balancing valves motorized with an electromechanical actuator to 3 points, were installed. The compact solution that combines in a single body, a pressure control, a flow balancing and a modulating control, allowed to obtain the hydraulic balance and precise control of temperature.



Frese OPTIMA

- Max diff. pressure: 400 kPa
- Temperature: 0 to 120°C
- Dimensions: DN15-DN50
- Material: DZR brass
- Static pressure: PN25
- For cooling and heating

