

References

BMW World



Uponor involvement



5000

BMW World

Barrier-free climate control technology for exceptional architecture

Project Facts:

Location

München, Germany

Completion

2007

Building Type

Commercial Applications

Product systems

Radiant Heating & Cooling

Address

Am Olympiapark 1

Website

<http://www.bmw-welt.com/>

Project Type

New building

Partners

enduser

BMW AG

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The opening of the BMW World in Munich - an important step for BMW. After all the new BMW World means more to the company than an exclusive dispatch centre for its vehicles: with the BMW World, the company is offering its visitors an experience which appeals to all of the senses, allowing them to experience the fascination of mobility. Vehicles from all of the current series are presented at the BMW World. And the architecture is also fascinating - a double cone, manufactured from glass and steel, stands at the forefront of the new building, enhancing its stylistic characteristics.

The double cone is accompanied by a further, remarkable building characteristic: the gallery. A large curved bridge which connects the BMW World with the BMW museum (itself constructed in 1973), runs right through the centre of the BMW World to the functions forum. The functions forum, which is equipped with leading edge technology, plays host to every kind of event, including concerts, exhibitions, conferences, live transmissions, as well as receptions and seminars.

The BMW World has been built on a plot of approx. 25,000 m². The building stretches over 180 m at its longest point and has a height of approx. 28 m. The total floor space of the building's two storeys amounts to around 73,000 m². The roof of the avant-guard style structure spans a total area of 15,500 m². The architectural features of the BMW World with its vast, airy and light spaces invited the selection of a panel heating and cooling system which would cover the basic loads.

The aim was to achieve an even room temperature throughout the BMW World, thus the basic loads were covered with 5,000 m€² Uponor industrial panel heating and cooling. In addition to the 25 x 2.3 mm PE-Xa-pipes selected for use with the industrial panel heating system, the installation team also fitted underfloor collectors and air-curtains for extreme climate zones within the building. These additions provide a guarantee of even and comfortable temperatures throughout the building and at all times of the year.

During the cooler months, the panel temperature regulation system, integrated into the floor of the BMW World, generates a comfortable and mild radiated warmth without air turbulence, with an energy-saving supply temperature of 34 °C. On hotter days, the system runs at the supply temperature of 17 °C, to transport heat from the light and airy, spacious areas of the BMW World, leaving the floor comfortably cool. The heat generation, used for heating the BMW World in Munich, is provided by the city's utilities district heating distribution network.

The distribution of the heat itself takes place via an internal district heating network from BMW's 1.1 Works. The district heat is fed to the BMW World via a secondary network, which runs indirectly through a plate heat exchanger with hydraulic separation. The use of this system also enables an indirect feed to the panel temperature regulation system for under floor heating and cooling in the BMW World.

BMW World



