20 - ISSF STAINLESS STEEL IN ARCHITECTURAL APPLICATIONS
BUSINESS

BMW Welt

Munich, Germany

The realization of the technical building facilities for this Event Exhibition and Automobile Delivery Center led to a planning model with five thematic blocks: Hall, Car Delivery (Premiere), Forum, Gastronomy and Double Cone.

The main element of the building is a large, permeable Hall with a sculptural roof and a double cone figure which emerges in relation to the existing headquarters complex. The hall is a marketplace for differentiated and changing uses and an unmistakable sign for the BMW Group. The interior topography creates differentiated spatial densities and fluid subspaces.

Sustainability is an essential aim of this concept. The entire building makes use of natural resources in its operation. Consequently, the building can operate with the lowest possible energy consumption and the natural resources are used directly and indirectly to meet all requirements.

Since the view onto the roof of BMW Welt as the fifth façade plays just as important a role in the communicative impact of the building's outer skin as the four walls, a traditional fan-like raised arrangement of solar cells facing south was out of the question.

In conventional systems the output of south-facing cells in a reference year was about 16% higher than

that of cells that were placed horizontally. However, the choice of special high-quality black glass-foil solar panels helped to almost balance out this difference. The installed solar power system has a nominal output of 810 kWp with 3,660 solar panels and an area of approx. 8,000 square meters. The solar panels were integrated flush with the surface of a stainless steel cover that fits over the actual roof drainage level. In this way, visible penetrations through the roof and visible exhaust structures were avoided.

The interiors are a composition of monumental stairways, curved bridges and balconies that are held in the air. All spaces have protections of perforated stainless steel panels, which slow UV ingress.



Environment: urban

Material: 316L (exterior) and 304

(interior) stainless steel, glass bead blasted and

perforated with a thickness of

3.0 mm

Manufacturer: Lummel GmbH & Co. KG
Architects: Coop Himmelb(L) AU
Photographs: 2007 Ari Marcopoulos and

Duccio Malagamba

More information: coop-himmelblau.at



