

ETFE Film Roof for the "Meilenwerk" Düsseldorf

In September this year the so-called Meilenwerk which has been established successfully in Berlin for several years will also be opened in Düsseldorf: On a surface of 19,000 m², a fascinating forum will be offered to all vintage car enthusiasts in North-Rhine Westphalia. Apart from restaurants, events and shopping areas, there will be large exhibition and workshop areas for vintage car and other enthusiasts of vehicles of all epochs on the listed premises of the former engine shed. Visitors will be able to see selected classical vehicles in museum-like areas as well as a vivid trading centre for vintage cars. Thanks to its roof structure, this area will also be an architectural attraction since an area of approx. 2,500 m² will be protected by an exceptional, transparent air cushion roof of ETFE films.

Thus, visitors can enjoy the exhibition in a light and pleasant atmosphere without being blinded by direct sunlight. The light passage amounts to approximately 25% including a large proportion of diffused light. Altogether, approximately 10,500 m² ETFE film was used in the Greven factory for the multi-layer cushions. In case of snowfall, the permanent cushion pressure will be increased automatically from 300 Pa to 800 Pa. Thus, the construction can bear a snow pressure of 0.75kN/m².



The following is a quotation from a press release from the Meilenwerk: "The air-filled chambers lie like a cushion between the steel braces transforming the former track yard into an elegant platform. When you look up you will be amazed by the impressive perspective: The run of the steel braces is bundled in the centre of the former turntable, where the restaurant is now situated. The incomparable architecture of the building is specially highlighted by the radial layout of the lines". Due to the translucent, air-filled film cushions, the individual roof construction made of steel trelliswork girders easily attracts the observers' attention. Each cushion consists of 4 film layers each layer being printed in a different way in order to enable an only diffuse light passage.



Project data

Auftraggeber / Client	Insignium gebaute Marken GmbH
Architekt / Architect	RKW Rhode Kellermann Wawrowsky GmbH
Statik / Statical Calculation Membrane	Form TL, Radolfzell
ÜGF / Covered Area	2500 qm
Baujahr / Year of Construction	2006

