

richard horden

micro

ltdedition micro architecture | studio + projects



industry and architecture

Our Munich-based design studio has, among other advantages, that of location. We are situated not only a short distance from the Alps but very close to the headquarters, factories and design studios for very high-profile car and aeronautics companies such as BMW, Eurocopter and Schempp-Hirth. We are also close to industries linked to the Alps, for example, those who are involved in ski production or transportation systems, such as the company Doppelmayr. Technology transfer can have a great impact on advances in architecture. So, in our studio we not only keep abreast of advances in different industries that may be useful in our own research, but we try to develop architecture that asks industry to develop special techniques for certain projects. Every year we visit these cutting-edge firms with our students to learn as much as possible, focusing on, perhaps, the unique design language of a car, a plane or a helicopter and their respective interiors. These experiences have a direct effect on the students' thinking.

this page:

Map

Munich and industries

1 Kneissl – ski

2 Klepper – boats

3 Doppelmayr

4 Schempp-Hirth

5 Eurocopter

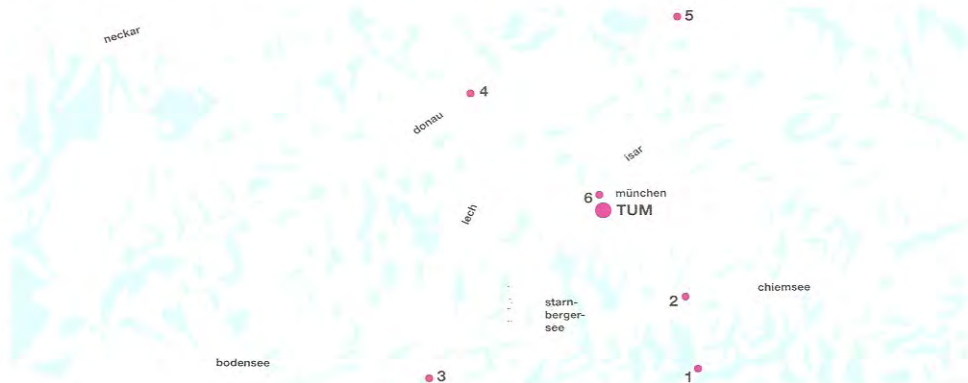
6 BMW

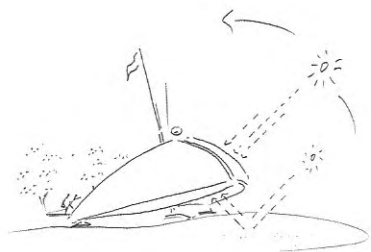
opposite page:

Design for a prefab

solar compact home

inspired by Doppelmayr





For example, students who spend more than a semester with us would never be content to choose a chair from the catalogue but would prefer to research their own unique furnishing solutions. In fact, in many cases we create fully integrated furniture for our projects rather than source ready-made types. In addition, our students also learn about colour control, composite materials, such as carbon, and, of course, lightweight structures. One result of our studies of technology transfer was the 'Solar Compact Home' (see page 262), which was developed in a logical sequence following the requirements of the project. A solar-cell manufacturer, who was invited for the final presentation, is now very interested in developing new solar cells with a high degree of efficiency which would also work as a waterproof skin for the double-curved shape of our building. When solar cells are finally so effective that they can use the energy of sunlight reflected by water, we will know that in this case we have asked the right questions.



DOPPELMAYR



sport and architecture

It is no coincidence that most of the assistants in our micro architecture studio are involved in some kind of sport. Extreme alpine sporting activities, such as ice-climbing or windsurfing for example, give us the opportunity to experience nature in extraordinary ways. 'Don't fight forces but use them' is one of Buckminster Fuller's famous sayings. An ice-climber does not fight against the frozen cliffs, he uses the strength of the frozen water to fix his tools for some seconds and pull himself upward. During our last trip with the mobile 'Ski Haus' (see page 116) next to the Kleine Matterhorn (3,883m) we chose a frozen area for the new location of our temporary micro hotel. After we dug three small holes out of the ice, the helicopter could land the 'Ski Haus' on to those points, and a few hours later the feet had been frozen firmly to the site. With the structure's three feet embedded in the ice, Richard Horden and I felt quite secure inside, even during a heavy storm in the night.

this page:
'Ski Haus' – trip 2005,
sunshine after the
storm; ice-climber in
Tyrol, nothing is left of
the ice

opposite page:
merging with the board
design project (above);
surfer in Silvaplana;
'Event Centre',
Silvaplana



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We often explain to our students that developing architecture is similar to being involved in extreme sport. In the same way that a sportsman has to practice every day, you need stern discipline to achieve a really high level of performance in your designs. When we were working on the design of the temporary event centre, Silvaplana in Switzerland, the Institute had the feeling of a sport camp. The finished design of the centre was like a very effective piece of outdoors, or sporting, equipment that helps people to experience nature almost without having any impact on it. The three-point fixing allows the structure to be adjusted to any site; the shape creates a much-reduced contact surface against wind, and the large upper skin collects solar energy. When a surfer seems to merge with his surfboard, we look at it and instantly gain inspiration. When Norman Foster came to see the final presentation of the 'Event Centre' (arriving from St. Moritz on his lightweight racing bicycle), he was instantly moved.



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