



**Philip Morris International
Research & Development Campus
Neuchâtel, Switzerland**



Sun. Light. WAREMA.

Philip Morris International Research & Development Campus Neuchâtel, Switzerland



The remarkable location of the new Philip Morris International Research & Development Campus (PMI R&D Campus), a first line shore position, awards the building with a very special quality. Directly at the entrance to the Neuchâtel municipality its neat and elegant geometry sets an urban landmark. After a three years construction period the building was official opened in May 2009.

Philip Morris International (PMI) is one of the world's leading tobacco companies. PMI employs more than 75,000 people worldwide and sells their brands in approximately 160 countries. PMI has invested over CHF 120 million (78.6 million EUR) developing the new R&D campus. On 33,420 m² usable floor area more than 400 scientists, specialists and administrative staff found in three independent laboratory and office sections their new workplace. A major focus of the project was to create world-class facilities using an environmentally sensitive design. The two key features of the building are the double skin cladding with integrated sun shading system and the natural ventilation with help of ventilation flaps controlled by LONWORKS®.

Sun shading system

The expanse of glazing results in a raised level of solar radiation entering the building. Therefore the void between the glazing of the double skin cladding was equipped with 533 WAREMA external venetian blinds with flat aluminium slats and cable guidance. This leads to effective use of daylight, ensures sun protection at the work place and optimum lighting inside. This increases the employees' feeling of

well-being at work and lowers the energy costs of artificial light and air condition. The slats of the external venetian blinds are perforated. This maintains contact with the outside world, even when the slats are closed, as the blind appears partially transparent through the perforation. Furthermore 48 back pull external venetian blind, were mounted. The specialness of these blinds is that they run from bottom to top and the slats are adjusted in a defined angle.

Control system

The sun shading systems are automatically controlled by LONWORKS® technology. The decentralised bus system comprises a weather station with LON sensors, actuators (motor control units) and operating units and provides effective sun shading with optimum lighting and temperature conditions in the office space. The slats of the external venetian blinds are automatically adjusted to follow the path of the sun in a controlled way, both as a function of the calculated position of the sun and any adjacent buildings. This prevents the sun's rays and solar heat from entering the building and, at the same time, provides the space with diffuse daylight. The sun shading control system will be adapted via remote maintenance.

Client:

Philip Morris Products SA,
Neuchâtel/Switzerland

Architect:

Burckhardt + Partner SA,
Lausanne/Switzerland

General contractor:

HRS Real Estate Ltd.,
Frauenfeld/Switzerland

Sun shading system:

External venetian blind, E60AF with cable guidance and perforated slats with eyelets as well as back pull external venetian blind

- Optimum lighting
- The perforated slats ensure visual contact with the outside world
- Lower energy costs by reducing the cooling load, artificial lighting, and air condition

Control system:

LONWORKS® technology

- Convenient control of complex sun shading systems
- Slat tracking to achieve optimum shading of rooms and buildings
- Annual shade diagram
- Quick and cost-effective adaption of the control system with help of remote maintenance

Usable floor area / floors:

33,420 m² / 4

Further information can be found at
www.warema.com



WAREMA International

Hans-Wilhelm-Renkhoff-Straße 2 · D-97828 Markttheidenfeld
www.warema.com · info@warema.com