Light for the most sophisticated demands: good visual comfort thanks to energy-efficient task area lighting

Winter is knocking on the door and the bright, sunny days are numbered. An intelligent lighting solution significantly enhances the workplace atmosphere. Good lighting quality boosts motivation and aids concentration. Zumtobel lighting solutions create working conditions in which people feel at ease, thus boosting motivation and enabling them to concentrate on tackling their work in a manner that ensures long-term job satisfaction. „The issue of sustainability is taken into account right from the outset during the concept phase of design. This includes ensuring an optimal combination of daylight and artificial lighting. Nowadays, as well as being economically efficient, successful lighting solutions also have to be flexible and enhance the work environment effectively“, stresses Hadi Teherani, one of Zumtobel’s design network partners.
Dynamic lighting solutions for an extremely wide variety of visual tasks

The changes in natural light over the course of a day and seasons have left their imprint on human beings; they act as an important internal clock for the human organism and influence people’s productivity and mood. Intelligent lighting control systems and luminaires can be used to adjust the colour temperature and intensity of light in ways that work in harmony with human biological rhythms. Light with a large blue component aids concentration and perks people up: a light spectrum with sufficient blue components suppresses the production of the sleep hormone melatonin, and has a favourable effect on alertness and activity levels in the morning and early afternoon. Warm light colours in the evening encourage relaxation.

All flexible lighting solutions are based on integration into an intelligent lighting management system. This means that individual luminaires or luminaires arranged in different groups can be switched as required in order to optimise the quantity of light and thus energy consumption. Zumtobel lighting management systems, from basic solutions through to ultra sophisticated control systems that also incorporate blinds control, allow all a building’s services to interact optimally. This is the only way to achieve genuine daylight-based control of artificial lighting.
**Tunable White – new approaches to lighting**

The Panos Infinity LED downlight range is regarded as the most efficient commercially available product line of its type. The version of this downlight with Tunable White functionality has special qualities. Users can adjust the colour temperature in the white light region flexibly to suit any particular application.

In the process, good colour rendering in a range from 2700 K to 6500 K not only improves perception, it also creates eye-catchers, highlights colours and works in harmony with human biorythms. Besides Panos Infinity, Zumtobel also offers other luminaires in its product range with Tunable White functionality. This provides a variety of ways of using artificial lighting to mimic the natural changes in daylight over the course of a day, and opens up fresh possibilities for dynamic office lighting.

**Complex lighting management for offices**

Zumtobel’s Emotion touch panel controls and regulates a large number of lighting scenes for well-balanced light that can be flexibly adjusted to suit the conditions in a particular office. People need a certain minimum amount of light in order to be able to perform a wide variety of visual tasks and recognise objects clearly. Designing lighting in modern office buildings in particular is a challenging job that involves reconciling dozens of conflicting requirements and coming up with a complete solution package: this cannot be achieved without being familiar with and understanding the various activities that take place in an office, where and when they are performed and, ultimately, providing the right lighting solution for them.

„Perfect lighting solutions must be able to adapt quickly and easily to changed requirements, e.g. reorganisation of the use of space, without incurring excessive costs, to ensure that the lighting quality perfectly matches the visual task in question as well as the special requirements of the application“ explains Nadja Frank, Zumtobel PR Manager & Content Manager.
Magic lighting moments in the offices at the Rolex Learning Center

Zumtobel has deployed a particularly impressive and intricately coordinated lighting concept for the lighting system at the Rolex Learning Center, which is the heart of the new university campus of the École Polytechnique Fédérale de Lausanne (EPFL). This concept is evident everywhere, from the custom solution for the library or the multifunctional auditorium and conference rooms, cafés and a top-class restaurant through to student workstations and offices for academic researchers. Individual functional areas are not separated by partitions - they are divided up into zones by means of different lighting scenes. The offices of postgraduate researchers are set up as meeting “bubbles”. Minimalist free-standing luminaires create an agreeable working atmosphere there when there is insufficient daylight. The Rolex Learning Center is at its most impressive just before sunset when, for one magical moment, thanks to the cumulative effect of the reflections of the setting sun, the dark blue of the sky and the pure white interior illumination radiating outwards. At this moment, this outstanding building is transformed into a unique sculpture of space and light, providing perfect lighting to relax after a tiring working day.

Zumtobel. The Light.

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Publication is free if due acknowledgement is made: Zumtobel