

**MAK DESIGN
LAB**



Before conversion

Neither the exhibition concept nor the premises of the former permanent study collection of the Museum of Applied Arts/Contemporary Art (MAK) did justice to the sheer abundance and variety of exhibits. The new concept was realised by the EOOS design studio. After conversion work that lasted 6 months, an extraordinary link has been forged between applied art, design, architecture and contemporary art.

After conversion

The new MAK DESIGN LAB is divided up into modular units that allow rapid reconfiguration to suit different themes and developments. New themes and objects are continuously being worked out in global networks with the involvement of consumers.

"Design's task is to improve our life" it says on the MAK DESIGN LAB's website. In keeping with this basic principle, the EOOS design studio opted for a spotlight whose design really shows off innovative LED technology. The DISCUS spotlight can be dimmed directly on its housing and meets all the requisite requirements in respect of superb visual quality and maximum energy efficiency thanks to its excellent colour rendering index ($Ra > 90$), replaceable lenses and two different colour temperatures. In order to deliver a solution that would save operating costs across the board, the emergency lighting was refurbished as well as the ambient lighting and accent lighting.

Museum of Applied Arts - MAK DESIGN LAB, Vienna / AT

Design: EOOS, Vienna / AT

Lighting solution: DISCUS evolution LED spotlights, ONLITE central CPS emergency lighting system with central power supply, ONLITE CROSSIGN

escape sign luminaires, ONLITE RESCLITE emergency luminaires

Photo of legacy system: MAK, Vienna 2013 ©Josef Herfert/Zumtobel

Photo of new system: MAK, Vienna 2013 ©Bruno Klomfar/Zumtobel





Visual quality Light is design

With its precise light distribution and outstanding colour rendering, the DISCUS LED spotlight underscores the exquisite design of the exhibits. That's not all: this lighting tool is a design object in its own right. The spotlight's universal, contemporary stylistic idiom enables it to blend seamlessly into this design-oriented setting.

Lighting solution



DISCUS evolution LED spotlight





Flexibility and versatility

A spotlight system for all areas

The MAK DESIGN LAB is meant to be constantly mutable and always offer something new. Variety and change are what it is all about. The MAK FORUM plays a pivotal role when it comes to directly integrating consumers into this process. This space can be flexibly re-arranged and is used for activities and debates involving people who work in areas such as design, research, art and economics.

The flexible DISCUS spotlight system provides the lighting variety needed to accomplish this and it has a consistently uniform design. The spotlight adapts to cope with the space's changing photometric requirements thanks to a wide choice of light distribution characteristics, colour temperatures and mounting options. Light distribution can be varied by using replaceable lenses and illuminance levels can be adjusted directly on the spotlight or by using a lighting control system.



Conservational aspects

Lighting exhibits gently

This virtually UV and IR-free LED light source has established itself as the gentle way of lighting museums and galleries. The DISCUS LED spotlight range provides ideal light for all objects in any exhibition area – even in situations where conservational aspects have to be taken into account.

Web app for comparing two lighting solutions The app compares various light sources with respect to the potential risk they pose to sensitive materials. Professional background knowledge makes lighting design based on scientific methods straightforward and easily understandable.



zumtobel.com/culturewebapp

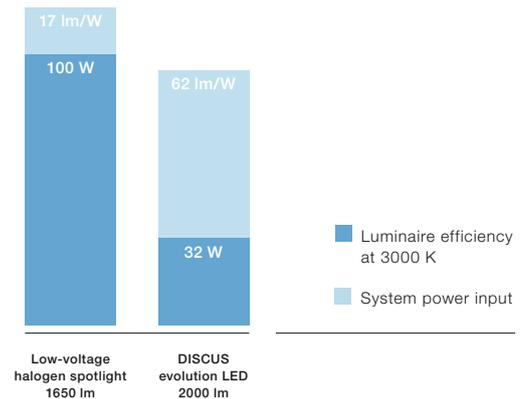


Energy efficiency and service life

Cutting operating costs

The importance of sustainable products and systems is one of the most important messages conveyed by the exhibition and it is also enshrined in the lighting solution. This high-efficiency LED product portfolio for museum lighting is three times as energy efficient as conventional museum lighting using halogen incandescent lamps and fluorescent lamps. The DISCUS evolution LED spotlight exploits potential energy savings to the full thanks to its unique passive cooling and direct dimmability on the luminaire or by using a lighting control system. Energy cost savings mean that these LED luminaires pay for themselves within 3 to 5 years. An additional feature comes to the fore in some of the exhibition spaces where there are high ceilings: the long service life of Zumtobel's LED products, combined with its 5-year guarantee, means the operator is spared the expense of having to replace faulty light sources.

Efficiency and power input of low-voltage halogen spotlights compared with DISCUS evolution LED





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