



Langbein Museum



In den früheren Wunderkammern waren die Objekte nebeneinander aufgestellt. Auch wir haben uns an solchen Vorbildern orientiert. Dabei haben wir die Ausstellung so gebaut, dass die einzelnen Objekte nicht umgestellt werden können und so einen anderen Sinn ergeben.

Sie können durch diese Sammlung bummeln wie einst Mark Twain durch Europa.

Oder lassen Sie sich von unserem Audio-Guide führen, der Ihnen verschiedene Wege durch die Ausstellung anbietet.

Das Schlüsselbrett am Ende der Ausstellung enthält Empfehlungen von Besuchern, die einen eigenen spannenden Weg durch die Ausstellung gefunden haben.

Ein paar Vitrinen haben wir reserviert und gekennzeichnet: hier haben Sie als Besucher die Gelegenheit, mit einem eigenen Sammlerstück die Ausstellung zu bereichern.

Before conversion

Before the museum was given a facelift, the way in which the antiquities and natural history specimens collected by Carl Langbein in the 19th century were presented was dull and boring. The many exhibits were arranged in no recognisable order. Because of unstructured, uniform lighting, objects seemed to simply disappear in the crowd. It was hard to discern the outlines and dimensions of exhibits amidst a sea of light. The display cabinets, lit by fluorescent lamps, appeared to overwhelm exhibits in diffuse light. The large spotlights were visually extraneous and intrusive; their wasteful use of power was completely out of step with modern lighting technology. The six rooms were lit by thirty 60 W spotlights.

After conversion

The exhibition spaces were redesigned by architects Museumsreif and now work on the same principle as cabinets of curiosities. Rather than history, they now recount vivid stories that relate to specific objects. Lighting is an important aspect of this kind of informative, exciting presentation. The modular SUPERSYSTEM LED lighting system shows the exhibits off in the right light but remains unobtrusively in the wings. The lighting modules, each with three lighting heads and replaceable lens technology, can be individually aligned and pointed at any object. Three-dimensionality heightens the visual tension. Five individual SUPERSYSTEM recessed spotlights show objects in display cabinets off to maximum effect – with a power input of only 4.5 W per spot.





Visual quality

Illuminating objects

The redesigned Langbein Museum is not a local history museum of the conventional kind. Thanks to refurbishment, this small museum has witnessed a miracle: when it reopened, the cabinet of curiosities actually looked older than it did before. The collection amassed by naturalist Carl Langbein has regained all its original 19th century charm. The contribution made by the SUPERSYSTEM accent lighting includes precise light distribution with tightly focused beam angles, an extremely high colour rendering index, good glare control and warm colour temperatures ranging from 2700 K to 3000 K. This lighting shows off both the exhibits and details of the traditional wood furnishings to splendid effect.



Flexibility and versatility

A spotlight system that can handle various tasks

The museum designers insisted that the lighting solution must provide maximum design freedom and flexibility and be aesthetically attractive and functional. Thanks to its compact size, the modular LED lighting system offered the necessary variety of lighting tools even in places where the ceilings were low. The beam patterns of the LED lighting heads can be adjusted to suit the size of the relevant paintings and objects by using replaceable lens optics. LED wallwashers round out this contrast-rich accent lighting by illuminating vertical surfaces uniformly. This inviting ambience is finished off superbly with indirect, linear light.

Conservational aspects

Lighting exhibits gently

The exhibition spaces, designed as cabinets of curiosities, are themed under concepts such as "Collector", "Creatura", "Relicta" and "Theatrum naturae". Gentle lighting was required for the "Collector" exhibits in particular. Light from the small SUPERSYSTEM LED lighting heads met this requirement perfectly. Precise in-situ adjustments were made using a meter specially developed by Zumtobel. Warm colour temperatures were used for conservational reasons. A study conducted in collaboration with Darmstadt University confirms that a lighting solution with a colour temperature of 2700 to 3500 K poses significantly less risk of potential damage than cool lighting.

The Langbein Museum invites visitors to embark on a journey through time by passing through a narrow corridor: precise, flexible light on vertical surfaces brings a fresh dimension to these areas.

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

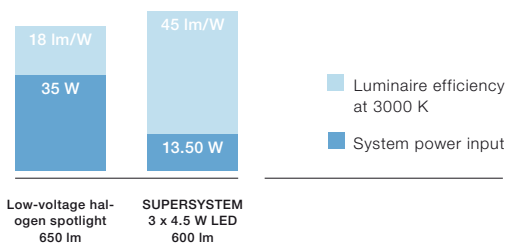


Energy efficiency and service life

Cutting operating costs

The Langbein Museum's operating costs are set to drop significantly. New LED technology is clearly superior to conventional lighting solutions that use incandescent lamps and fluorescent lamps. A SUPERSYSTEM LED module with three lighting heads produces a total luminous flux of 600 lm but gets by with a power input of only 3 x 4.5 W. Luminaires with a total wattage of 13.5 W thus replace spotlights using 35 W halogen lamps as well as 60 W incandescent lamps, while also delivering greater flexibility. And regular relamping is now a thing of the past.

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



Lighting solution



SUPERSYSTEM LED spotlight module 3 x 4.5 W LED



SUPERSYSTEM LED spotlight 1 x 4.5 W LED



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Order no. 04946467-EN 01/15 © Zumtobel Lighting GmbH
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