ZUMTOBEL



Alpla Werke

Light that improves performance: innovative LED systems deliver the quality and efficiency needed to achieve optimum and superlative performance.

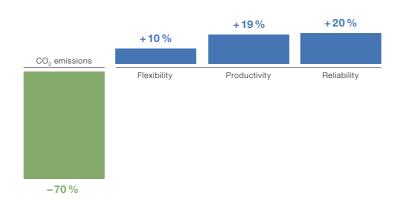


Light as a quality factor

The tools used in the production plant of plastic packaging manufacturer Alpla are manufactured at the company's HQ in a 5 m high shop floor covering a floor space of 600 m². This is where Alpla's internationally successful high-quality products start their life, and the demands that this plastics specialist places on a bright and clean environment are correspondingly exacting. As Alpla has been relying on cool white lighting for 20 years now, they wanted to stick to this concept for the new LED lighting solution as well. As well as a colour temperature of 6,500 K designed to boost productivity, the TECTON LED continuous-row system boasts other convincing features: improved energy efficiency, higher levels of flexibility and additional reliability.

zumtobel.com/Industriallighting





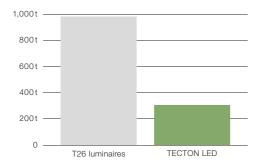
1. CO₂ efficiency and cost efficiency

-70 % co₂

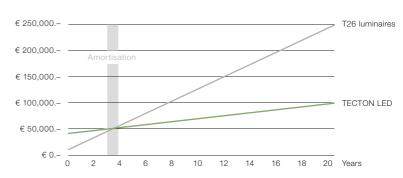
LEDs allow maximum efficiency

Annual energy consumption of the lighting installation after renovation is only 52.6 kWh per m², as opposed to 176.0 kWh per m² before. Compared to the T26 fluorescent lamps previously installed, power consumption is now significantly reduced so that the $\rm CO_2$ reduction specifications required to obtain environmental certification are met. Simply switching over to an innovative LED solution will cut $\rm CO_2$ emissions by 700 tonnes over the next 20 years. This means the lighting will pay for itself within 3.4 years thanks to reduced power consumption and maintenance work.

CO₂emissions over service life (20 years)



Payback period: 3.4 years (total cost)



2. Flexibility

+10%

Flexible thanks to plug&play system with dimmable luminaires

TECTON luminaires are simply suspended from the trunking. One click is enough to make both mechanical and electrical connections. This means that the LED lighting modules can be relocated or rearranged quickly and easily at any time. If the layout of machinery changes, TECTON can therefore adapt quickly to suit the new requirements. Most of the activities currently carried out in Alpla's manufacturing workshop involve general visual tasks. 400 lx is the correct illuminance level for such tasks. With a maintenance illuminance level of 600 lx, this lighting solution is capable of coping with more demanding visual tasks. The fact that the luminaires are (DALI) dimmable makes the lighting solution more flexible. This includes the facility to integrate the luminaires into a lighting control system so that the lighting level can be reduced to a minimum at given times and in selected locations.

Clicks in anywhere as required: TECTON LED module









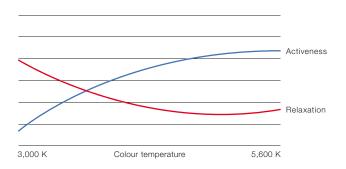
3. Productivity



Cool white light, uniform and with good glare control

A lighting solution that produces a cool white light colour is subtly perceived as being brighter. This explains why plastics processor Alpla with a workforce of approximately 14,000 in 149 branches uses luminaires with a colour temperature of 6,500 K. When it became time to refurbish toolmaking in Hard, a luminaire that boosted employee productivity with a highly uniform, cool white light colour was the only option that could be entertained. Zumtobel was able to demonstrate in advance the system's benefits in terms of quality by providing sample luminaires: despite LED and high illuminance levels, the TECTON LED continuous-row luminaire features good glare control.

Cool white light is stimulating



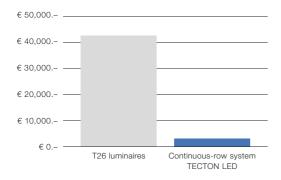
4. Reliability



Maintenance-free lighting

By switching over to a TECTON LED continuous-row system, the customer is saving a considerable portion of its operating costs. Thanks to a service life of 50,000 hours (with a decrease in luminous flux down to 70 percent), frequent lamp failures and the associated maintenance work and lamp costs are now a thing of the past. Another benefit: the TECTON LED lighting system's luminaire design is compact and has a relatively small surface area on which dirt can deposit, which means it is easier to clean and needs less frequent cleaning.

Maintenance costs over service life (20 years)





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Top quality - with a five-year quarantee.

As a globally leading luminaire manufacturer, Zumtobel provides a five year manufacturer's guarantee on all Zumtobel branded products subject to registration within 90 days from the invoice date and in accordance with the terms of guarantee at zumtobel.com/guarantee.

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