

New LED light tunnel improves surface inspection of bodies

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For the first time, Eisenmann enters the market of LED products that have been in great demand, introducing the self-developed LED light tunnel. The new E-LED light tunnel supports quality control in paint shops featuring an elaborate design: The open construction creates a pleasant working atmosphere and offers improved ergonomics.

The smallest irregularities in the coated surface of a body are deemed to be faults and are unacceptable, both for customers and automobile manufacturers. While automation is continuing to progress, the human eye cannot be replaced in matters of quality assurance, meaning that ergonomically well-equipped workstations are essential for maximum quality demands.

The new E-LED light tunnel design wins with its improved ergonomics and efficiency. The open construction creates a pleasant working atmosphere and, at the same time, improves the acoustics for the worker. All of the key media, such as water, electricity and compressed air, are integrated in the self-supporting aluminum portals. Furthermore, a new type of LED lighting is used that Eisenmann has developed in cooperation with reputable partners and research institutes.

The unique LED lights can be regulated infinitely from warm white to cold white and adjusted to all process requirements, such as paint color and the gloss level of the body. This lighting environment creates ideal conditions for optimum surface inspection. In addition, the illumination is supported by the option of controlling each thread of light individually.

The vertical arrangement of the light elements ensures that the faults automatically pass through the vertical reflected image thanks to the conveyor movement. Furthermore, the continuous light paths generate a uniform light intensity and facilitate fault detection thanks to the elimination of shadow formation. The low levels of heat generated by the LED lights also have a positive impact on the working environment.

Moreover, the ongoing operating costs of the E-LED are reduced thanks to the low energy consumption and the long useful life of the LED lights.