# LED Lighting for the Industry - Tool Storage

**BuR**®



### Challenge
The shelves had to be rearranged in the tool store. This led to insufficient lighting. The conventional lighting did not take into account the uniform illumination of the vertical surfaces, the storage media and their contents.

### LED Lighting Concept
The personal consultation took place on site. BuR Lighting supplied 60x 40W DALI LED Linear Trunk system luminaires in combination with DALI lighting control technology. Individual luminaires were installed in 10 continuous rows. The optical cover of the LED modules is optimally matched to the narrow beam light distribution. The luminaire modules are prepared for 3-phase operation. In this building, the luminaires can be individually controlled via DALI for each continuous row.

### BuR Lighting Lighting Design
BuR Lighting designs with DIALux evo are based on:

**EN 12464-1 Norm**
Illumination of Indoor Workplaces

**ASR A3.4 Workplaces Guideline**
Technical rules for the illumination of workplaces

### Lighting Quality
- Smooth LED illumination
- Narrow beam illumination of the narrow aisles and shelving areas
- Average illuminance: $E_m$=237 Lux
- High uniformity of vertical illuminance on the shelving surfaces
- Pleasant light colour: 4.000 Kelvin
- Very good colour rendering: Ra>80
- High visual comfort

### BuR Lighting Luminaires
- Article: LED Linear Trunk System
- Art.-No.: 4811040P06040DN
- Housing: Aluminum - superslim
- LED Driver Input Voltage: 220V-240V
- LEDs: Nichia Chips
- Wattage: 40W
- Beam Angle: 60°
- Installation: Suspension-/Ceiling-Mounting
- Intelligent Lighting Control: DALI

### Savings and Benefits
- LED System Luminaires - superslim
- Electronic LED Drivers
- High-Frequency Control of LEDs
- LED Life Span: 50.000 h
- Luminous Efficacy: 130 lm/W
- High Energy Savings p.a.: 63%
- High $CO_2$-Reduction p.a.: 58%
- Reduction of Maintenance Costs p.a.: 71%
- Long-Lasting Operation of the Luminaires