



### Challenge

Special visual tests are carried out on the products in the test hall. The existing lighting had become inadequate for the special visual tasks. Conventional 2xT8 58W continuous-row luminaires were installed. Maintenance costs were negatively affected by frequent lamp changes. The energy costs were far too high.

### LED Lighting Concept

The personal consultation took place on site. BuR Lighting supplied 65W LED Linear Trunk system luminaires. Single luminaires were installed in rows. The optical cover of the LED modules is optimally matched to the deep-wide-beam light distribution. The energy-efficient new lighting resulted in very uniform illumination of all test areas. The luminaire modules are prepared for 3-phase operation. 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
- Wide beam illumination of the workplaces and areas
- Average illuminance:  $E_m=586$  Lux
- High uniformity of vertical illuminance on the surfaces  $E_{min}/E_m=0,45$
- 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.: 4811065P08040DN / 4811065P12040DN
- Housing: Aluminum - superslim
- LED Driver Input Voltage: 220V-240V
- LEDs: Nichia Chips
- Wattage: 65W
- Beam Angle: 80° and 120°
- 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: 120 lm/W
- High Energy Savings p.a.: 31.105 kWh
- High CO<sub>2</sub>-Reduction p.a.: 16.641 kg
- Reduction of Maintenance Costs p.a.: 51%
- Long-Lasting Operation of the Luminaires