



Challenge

The hall for CNC processing required new lighting solutions. The lighting requirements were no longer met. The illuminance in the working plane and at the workplaces was much too low and made working on the machines and the machining parts more difficult. The lighting costs were too high.

LED Lighting Concept

The personal consultation took place on site. The large hall was newly illuminated by BuR Lighting with 16x wide-angle 120W ZigBee LED High Bay luminaires in high protection class IP65 (dustproof and protected against water jets). ZigBee Control supports the permanent alignment of daylight and artificial light with radio-controlled data and signal transmission. ZigBee® is a registered trademark of the ZigBee® Alliance.

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

- High quality controllable LED illumination
- Deep-wide-beam illumination of the working plane and the workplaces
- Average illuminance: $E_m=550$ Lux
- High uniformity of illuminance:
 $E_{min}/E_m = 0,50$
- Pleasant light colour: 4.000 Kelvin
- Very good colour rendering: $R_a > 80$
- High visual comfort

BuR Lighting Luminaires

- Article: LED High Bay ZigBee
- Art.-No.: 4111120P09040VZ
- Housing: Aluminum Die-Cast
- LED Driver Input Voltage: 100V-240V
- LEDs: Nichia Chip
- Wattage: 120W
- Beam Angle: 90°
- Protection Rating: IP65
- Intelligent Lighting Control: ZigBee

Savings and Benefits

- ZigBee LED Luminaires
- Sealed Wide Voltage LED Drivers
- Lighting Control according to Daylight
- LED Life Span: 50.000 h
- Luminous Efficacy: 130 lm/W
- High Energy- and CO₂-Savings p.a
- Lowest Maintenance Costs
- Less Installation Work due to the special Cable Length