



### Challenge

The machine room was earlier equipped with a 70W halogen machine and workplace luminaire. The lighting resulted in high energy costs, frequent replacement of the lamps and high maintenance costs. Due to the use of classic transformers with high internal consumption and strong heat generation, the light was not stable and made the required visual performance difficult.

### LED Lighting Concept

The conventional lighting was replaced by a BuR Lighting 3W LED machine luminaire, which is versatile due to its flexible arm with magnetic base and the very slim luminaire head. The installation effort was minimal. The result was a very energy-efficient lighting system for the machine room that meets the standards. The LED-lighting led to a significant increase of the light quality.

### BuR Lighting Lighting Design

BuR Lighting designs for the illumination of machine workplaces 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
- Precise illumination of the machine room
- Spot illuminance:  $E_m > 1.000$  Lux
- High uniformity of illuminance
- Pleasant light colour: 4.000 Kelvin
- Very good colour rendering:  $R_a > 80$
- High visual comfort

### BuR Lighting Luminaires

- Article: LED-Maschine Luminaire
- Art.-No.: 2817003M00540NN
- Index of Protection: IP65
- Magnetic Base: Aluminum
- Very Slim Luminaire Head
- Wattage: 3W
- Input Voltage: 24V
- LEDs: SMD-Placement
- Beam Angle: 5°

### Savings and Benefits

- Flexibly applicable LED luminaire
- Easy installation with 700mm cable length
- Optical cover made of PMMA
- Electronic LED driver
- High-frequency Control of LEDs
- LED Life Span: 50.000 h
- Luminous Efficacy: 50 lm/W
- High Energy- and CO<sub>2</sub> Savings p.a.