

# Siemens Electronic Drive Workshop - Tianjin

## Reduce the energy costs without compromising on safety



### Project snapshot

- Global company wanting to switch to LED lighting
- 7 workshops - 65,000m<sup>2</sup>
- 55% reduction in energy consumption
- Increased light output and improved CRI
- Minimal disruption during installation
- One month deadline: from lighting analysis to on-site commissioning

The Siemens Electronic Drive factory, located in Tianjin High-Tech Industrial Park, manufactures digitally controlled AC and DC drives and motors as well as wind generators for domestic and overseas customers. The factory, which was built in 1995, covers a total surface area of 180,000m<sup>2</sup> with 65,000m<sup>2</sup> of workshops.

The company aims to be the benchmark in its business field guided by lean principle, with the health and safety of its employees a priority.



## The Challenge

In 2015, the company decided to renovate the lighting for 7 workshops to cut energy costs and improve the lighting levels. They wanted an LED new lighting solution that would provide many financial, operational and environmental benefits while ensuring maximum safety and comfort for all employees.

They asked Schröder to deliver a solution that would meet all their objectives, including compliance with the China Compulsory Certification (CCC) scheme within a tight deadline - one month!



## The Solution

Schröder analysed the different workshops to assess the situation and provide an adapted solution. With the luminaires to be installed at a height of 20m, we delivered a solution that would increase the lighting levels on the floor to ensure excellent visibility with minimal energy consumption and maintenance operations.

A total of 1,000 GL2 Compact luminaires were installed throughout the 7 workshops. They provide excellent colour rendition for visual accuracy, improving the working conditions for the employees. They have also cut energy consumption by 55%.

## The Results

The company is delighted with the solution that has significantly cut energy consumption while achieving high quality productivity gains. As the factory operates 24 hours a day, installation work was kept to a minimum to guarantee a minimal impact on day-to-day operations.

The switch to LED lighting within the required timeframe would not have been possible without the end-to-end approach and quality products from Schröder.

✓ **55% energy savings**

✓ **0.95W/m<sup>2</sup>/100 lux**

✓ **78% uniformity**