

Case study Asklepios Clinic St. Georg

Location Philips Lighting Hamburg, Germany CitySpirit LED, CitySoul LED, SpeedStar







"As part of the Green Hospital program, we have succeeded, in cooperation with our official partner Philips, in bringing about a significant ecological and economic improvement. Thanks to the extremely efficient LED solutions provided by Philips, we were nominated as an environment partner for the city of Hamburg."

Volker Müller, Head of Facility Management, Asklepios Clinic St. Georg



Energy-saving outdoor lighting creates a pleasant and safe environment



Project info

Customer

Asklepios Clinic St. Georg Location Hamburg, Germany Head of Facility Management, Asklepios Clinic St. Georg Volker Müller Philips products CitySpirit LED, CitySoul LED, SpeedStar Philips consultancy and planning Günter Hohensee, Rene Richter Philips consultants Paul Küchenmeister, Moritz von Appen

Results

- Safe, consistent lighting with high light levels and good color rendering
- Extreme energy savings of 55% on average
- Long life-span with low maintenance

Background

The Asklepios Clinic in St. Georg is a highly specialized hospital with a nationwide reputation for providing high-quality medical services. Around 25,000 inpatients and 50,000 outpatients are treated here each year.

The challenge

As part of the comprehensive refurbishment of the entire property, 140,000 m², the clinic also wanted to replace the outdated mercury-vapor lamps with modern energy-efficient LED solutions. The real challenge here was to implement a highly-specific adaptation to meet the building characteristics while utilizing light fittings and lamp posts in their current locations, in what turned out to be a very complex installation.

The solution

The modern LED lighting solution Philips supplied required the conversion of 175 lighting points. In the reception areas, which include the visitor entrance on Lohmühlenstrasse and the central emergency department on Philipsstrasse, 12 modular LED SpeedStar streetlamps were installed. These are extremely energy-efficient in their operation and provide a high level of lighting comfort. Lohmühlenstrasse, which is shaded by tall trees, benefited from this in particular, as a number of the parking spaces previously received insufficient illumination due to the shadows cast by the trees. Modular CitySpirit LEDs replaced the old lamps on 9 lamp posts along the pavement. This lighting provides decorative accents and consistent illumination, which explains why they were also selected for the grounds of the clinic and Kirschbaumallee, the hospital's central thoroughfare. The CitySoul LED, with its ellipsoidal form that blends discretely into the surroundings, creating an elegant light-point, was selected to provide safe illumination for the various building entrances. In total, 85 CitySpirit LEDs, 58 CitySoul LEDs and 12 SpeedStar lights were installed.

Benefits

Since the renovation with LED lighting in 2011, the Asklepios Clinic St. Georg has saved a total of 52,800kWh per annum. This is approximately 55% of the former consumption of 95,900kWh per annum. The turnaround in the Kirschbaumallee has delivered an energy saving of 90%! These results are in line with the objectives of the Asklepios Green Hospital Program, which strives for the efficient and sustainable running of hospitals. The constant improvement of the quality of light is also a relevant factor. The significantly improved color rendering contributes to improved well-being. The feeling of safety for personnel and visitors has been increased with the raised levels of lighting. Using LED lighting reaps rewards in other ways too: in 2011 the Asklepios Clinic St. Georg received the 'Hamburg Environmental Partnership – Enterprising Resource Protection' certificate; in recognition of green efforts.





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