

Case Study

ENERGY SAVING at SCHIPHOL AIRPORT

CLIENT PROFILE

Schiphol is an important European airport, ranking as Europe's 4th busiest airport by total passenger and cargo traffic. Over 52 million passengers and more than 1,520,000 tons of cargo pass through the airport annually. Schiphol operates six runways servicing half a million general flights per year. The airport occupies a large area of 13 square kilometers with a main passenger terminal, cargo and logistic warehouses, KLM maintenance hangars and many kilometers of roads and pedestrian pathways.

SOLUTION

The first approach for implementing PowerSines Lighting Energy Controllers (LEC) started back in 2006. After successful pilot that exhibited over 20% electricity saving on outdoor High Pressure Sodium fixtures, the Schiphol management decided to deploy the PowerSines technology on all roads and pathway lighting systems in the airport area. The LEC devices were mounted into fiberglass enclosures, back-to-back to existing outdoor distribution cabinets installed on the streets. 27 LEC devices in the range of 3x30 - 3x80A were installed and operated 150W - 400W HPS luminaries, saving total of over 20% electricity. The deployment of all the LEC systems was completed in 2007. The solution paid for itself in three years.

After proven operation of LEC devices for more than four years in the airport's outdoor lighting, KLM took the decision to extend PowerSines solution for their facilities including administration buildings, warehouses and airplane maintenance hangars. 68 LEC systems in the range of 3x50A - 3x160A had been installed on lighting circuits having fluorescent, CFL and high-bay metal halide 400W - 1000W fixtures. The installation of LEC systems was completed within a short time, without changing the existing lighting infrastructure and with minimum disturbance of on-going operation. The system is fully operational since 2012.

**Proven Return on Investments
ROI of 3 years**

**Consistent saving results of
over 20%**

**Long term customer
relationships**

**Total of 95 LEC systems in
Schiphol Airport outdoor
lighting and KLM facilities**

