

## Best Practice

### Production Hall - Equipment Manufacturer

A manufacturer of industrial equipment and robots requested an energy savings analysis for the lighting in one of its production halls as part of the company's internal corporate energy savings program. The results of the analysis showed that the existing high-bay lighting in the hall were giving off much less light than the latest new lighting technologies, even though they use the same amount of energy.

This could be achieved because of intelligent LED high-bay luminaires, which could be mounted on the existing installation fixtures at a height of 8 meters, and offer an anti-glare technology with guaranteed maximum energy efficiency. Additionally, the client is able to monitor and custom-adjust each individual luminaire via a very simple software solution.

**saved 89%**

#### geff Modules applied in this project

|                 |  |
|-----------------|--|
| visualization + | Audit of the existing lighting system, including analysis of the nominal/actual values   |
|                 | Comparison of different technical solutions and brands, followed by a demonstration installation and evaluation.   |
| lighting+       | Deinstallation and removal of the existing lighting  |
|                 | Installation of 77 intelligent LED luminaires (240W)   |
| control +       | Evaluation of the new software and follow-up commissioning to set up the various lighting scenarios for availability of daylight and the presence of employees |

#### Results

|  |                |                     |
|--|----------------|---------------------|
| Power demand <b>before geff</b> (per year)   | 374,374        | kWh/a               |
| Power demand <b>after geff</b> (per year)  | 40,841         | kWh/a               |
| <b>Savings</b>   | <b>333,533</b> | <b>kWh per year</b> |
| <small>calculated at 0.18 Euro per kWh and converted to USD at the 2013 yearly IRS exchange rate of \$1 = 0.783 Euro</small> | <b>76,674</b>  | <b>\$ per year</b>  |



**geff L.P.**

ask@geff.us  
www.geff.us

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visualization+

lighting+

control+

