



AL TSA

Leading with LED

LED Lighting Replacement Project
at ASPEN Pharmacare

Port Elizabeth

CASE STUDY



A healthy dose of light.
ALTSA helps ASPEN Pharmacare improve the health of the planet.

Introduction

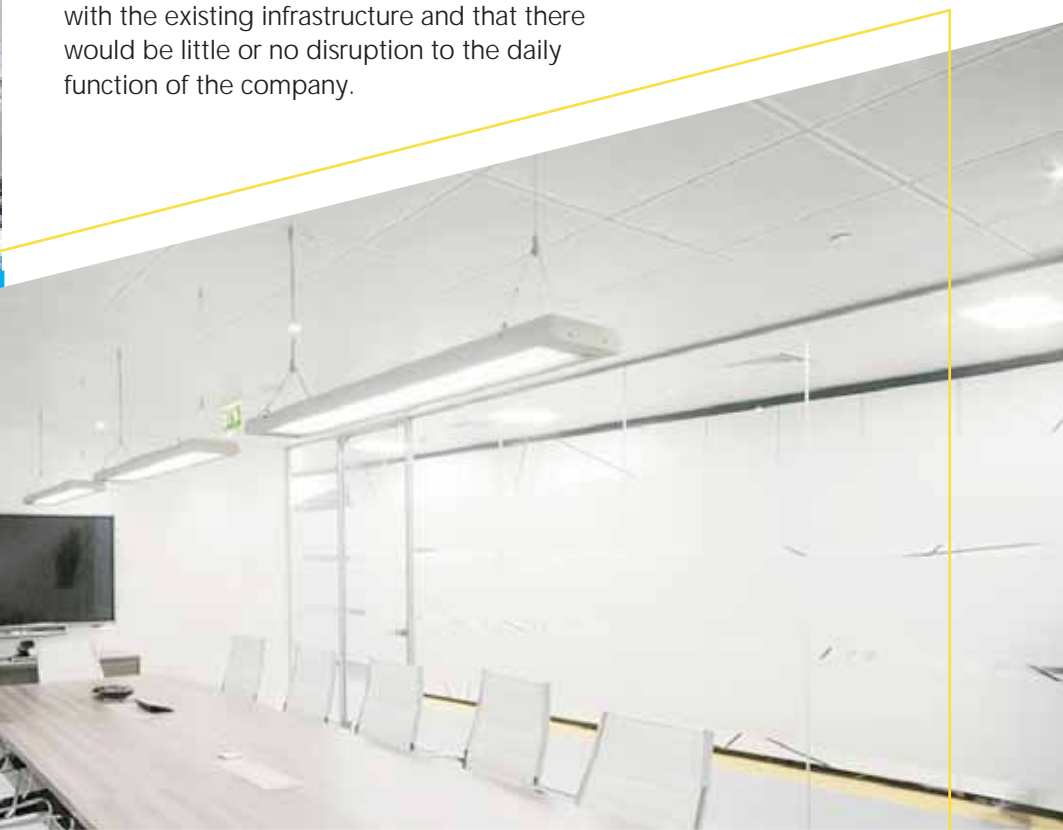
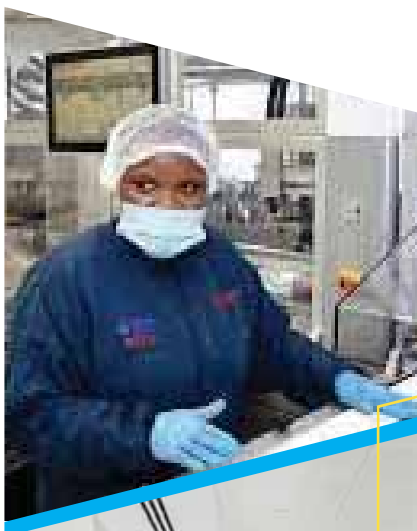
ASPEN Pharmacare is a global speciality and branded pharmaceutical company, committed to promoting access to medicines and improving the health of patients across the world through their high quality, affordable products.

In line with their environmental stewardship goals, ASPEN wanted to minimize any negative impact their operations have on the environment. Old and inefficient lighting had to go. So, ASPEN called on ALTSA's expertise to help them upgrade their existing lighting to a more effective and energy efficient system.

Project Objectives

A laboratory environment requires a very specific type of lighting, which is different from other working areas, such as offices, meeting rooms and packaging and distribution facilities. ALTSA was tasked with enhancing the quality of lighting across all areas to improve visual effectiveness for pharmaceutical professionals as well as office staff and other employees.

It was also important to comply with all lighting standards and regulations. ASPEN's aim was to improve the overall sustainability of their facilities while, at the same time, reducing their energy consumption and operating costs and limiting their environmental impact. Critical to the success of the project was that new installations had to integrate seamlessly with the existing infrastructure and that there would be little or no disruption to the daily function of the company.



PROJECT

CHALLENGES

Challenges

Staff safety. ASPEN would remain fully functional throughout the installation and testing phase. Therefore it was critical to ensure the safety of their staff while the work was in progress.

Complex lighting requirements. Pharmaceutical facilities have very specific lighting needs in various specialised areas, such as laboratories and drug manufacturing areas. The challenge was to select the best fixtures and design to ensure optimal lighting while adhering strictly to safety standards and regulations.

Multiple stakeholders. There are many different departments in a pharmaceutical company, including administrative and pharmaceutical specialities, each with their own requirements. Therefore, to ensure a smooth implementation of the planned lighting changes throughout the company's premises, it was critical to coordinate between all the various stakeholders to address their concerns and manage expectations.



Planning Phase

Overcoming challenges and ensuring a smooth, professional implementation always requires careful planning.

ALTSA's planning included the following:

Assessment and audit. ALTSA began by conducting a comprehensive audit of Aspen's existing lighting. This included an evaluation of the current fixtures, lighting levels, energy consumption and maintenance requirements. Once completed, the assessment provided clear insights into the areas that needed improvement. This gave ALTSA a solid baseline from which to plan improvements.

Stakeholder engagement. To ensure an optimal lighting outcome, key stakeholders, such as Aspen's management, pharmaceutical professionals and administrative staff were all involved in the planning process. Each department was consulted and encouraged to provide input regarding their specific needs. This gave ALTSA the opportunity to gather valuable information about their requirements, address any concerns and gain support for the project.

Budgeting and financing. A detailed budget was developed, which covered the costs of various LED fixtures, installation, infrastructure upgrades and the disposal of old fixtures. Potential financing options were included. The budget also covered available incentives, such as government grants. Energy-efficiency programs were explored to optimize the project's financial feasibility.

Implementation Phase

Fixture selection and design. LED fixtures were carefully selected based on lighting requirements specified by each of Aspen's various departments. The selection was based on energy efficiency, color rendering, and compatibility with pharmaceutical industry standards. Special consideration was given to laboratory testing areas, offices, boardrooms and general interior areas. Exterior perimeter lighting was also included.

Installation. The project team collaborated with qualified and experienced electricians, contractors and lighting specialists to develop a comprehensive installation plan. The plan included timelines, phasing strategies, and contingency measures to ensure little or no disruption to critical pharmaceutical operations. ALTSA conducted frequent oversight visits at every step of the installation process to ensure that the work was done correctly and according to specification.

Commissioning and testing. After installation, rigorous testing and commissioning processes were performed to verify the functionality, lighting levels and color consistency of all fixtures. Checks were carried out to ensure that the entire installation complied with all safety regulations and standards.



Outcomes and Benefits

Enhanced lighting quality. The LED lighting replacement significantly improved lighting quality throughout the facility. The LED replacement also created a better color rendering, reduced glare, and improved uniformity. This resulted in a considerable improvement in visibility and staff satisfaction across all departments.

Energy and cost savings. The project achieved substantial energy savings, reducing Aspen's electricity consumption and operational costs. LED fixtures have a longer lifespan. This results in considerably reduced maintenance, which leads to additional cost savings over time.

Environmental impact. The reduced energy consumption and dramatically lowered carbon footprint aligned with Aspen's sustainability goals and environmental responsibilities.

Compliance with standards. The LED lighting system met all lighting standards and regulations specific to pharmaceutical facilities, thereby ensuring staff safety, as well as regulatory compliance.

Improved staff experience. The upgraded lighting system positively impacted the overall staff experience by providing a more effective work environment across all the various departments.

AL TSA LED Lighting Solutions

The following superior quality, energy efficient, LED Lighting Solutions were used to transform Aspen's manufacturing facilities.

1.



AL TSA Lamps & Tubes

2.



AL TSA Bulkhead

3.



AL TSA Rhino Floodlight

4.



AL TSA Downlights

21 756

LUMINAIRES

INSTALLED FROM OUR INDOOR AND OUTDOOR COMMERCIAL RANGE

888hrs

INSTALLATION

AN EFFICIENT PROJECT PLAN ENSURED OUR TEAMS INSTALLED ON SCHEDULE

100%

COMPLIANCE

WITH STRICT INDUSTRY REGULATIONS AND REGULATORY REQUIREMENTS

PORT ELIZABETH RESULTS:

655

Maximum Power Saving (W)

433,911

Monthly Energy Saving (kWh)

R 560,763

Monthly Electricity Saving

R 578,400

Annual Maintenance Saving

R 13.54

Costs per kW (average)

5,155 tonnes

Annual Environmental Saving CO²

R 6,456,522

Total Project Cost

ROI 8.6

Average Payback Period (mnths)



RESULT

Lux Levels

PRE-INSTALLATION

Light levels were taken at various points within the main building, and the exterior

Current average light level: 51.9 Lux

Measurements taken by: Clint Davidson
Instrument: Mastech MS6612T

POST-INSTALLATION

Light levels were taken at same points within the main building, and the exterior

Improved average light level: 203.9 Lux

Measurements taken by: David Arendse
Instrument: Mastech MS6612T



Guarantee

We have the utmost confidence in our quality and expertise ensuring we deliver every time and our 5 Year Guarantee comes standard on:

- Our LED Lighting Solutions
- Compliant Lux Levels
- Our Installations



AL TSA
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Contact us

We look forward to partnering with your business as we lead the way with LED.

AL TSA Representatives

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