

Port Entry Light (PEL) 10° Sectored

Sealite's Sectored Port Entry Light provides safe harbour access for vessels serving UK, Europe, Scandinavia, and the Baltic State markets.

Lowestoft, Suffolk, United Kingdom



Sealite[®]
www.sealite.com



Sealite, international designer
& manufacturer of complete
Aids to Navigation systems

Project Overview

Application:

Guide vessels and crew safely into harbour

Product:

10° Sectored Port Entry Light (PEL) with GSM monitoring

Date:

March, 2016

Location:

Lowestoft, Suffolk, United Kingdom



Photo courtesy of Mike Page
www.mike-page.co.uk

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Background

The Port of Lowestoft, one of the many Associated British Ports, is located on the North Sea. It is situated directly opposite major Continental ports, and is serviced by rail links and a nearby international airport. The port is home to many shipping functions, including support and maintenance, as well as hosting ship repair and dry dock facilities. It also serves to support the offshore renewable energy installations (offshore wind farms), construction facilities for the North Sea oil and gas fields, and offshore support vessels. The shipping volume in the port is significant, at approximately 100,000 tonnes of cargo annually.

Challenges

With a need to attract and safely deliver vessels into the harbour seven days a week, 24 hours a day, Associated British Ports (ABP) Lowestoft needed to update its infrastructure as part of a major port renovation project. Existing entry lights serving Lowestoft's port utilised an outdated filament lamp, which was both old and unreliable. The power draw from this older lighting technology resulted in high operating costs and ongoing maintenance requirements, both untimely and expensive. ABP needed to find a more reliable and economical solution that would guide vessels through the narrow channel, plus help it become a major hub for the infrastructure supporting the renewable energy markets in the North Sea.

Solution

Even with a buoyed channel, the Port of Lowestoft required a clear line of passage because of its narrow channel and constantly shifting sandbars. With the upgrade of Lowestoft's older port entry lighting to Sealite's 10° Port Entry Light with GSM Monitoring, the safety of all vessels, both commercial and leisure, have been greatly enhanced. Its high intensity light provides over 120,000cd to offer an outstanding 3NM daytime range. Power consumption is a mere 30watts, providing enormous efficiency, thus reducing utility costs.

The single-assembly and lightweight design of Sealite's PEL made quick work of replacing the older lighting system.

GSM monitoring of the Sealite 10° PEL allows maintenance and harbour personnel to conveniently monitor the lights' operating status through mobile phones or Sealite's web portal.

Results, Return on Investment and Future Plans

The Port of Lowestoft has increased the safety of vessel and crew passage into the harbour with the installation of the Sealite PEL with GSM monitoring. While realising a significant savings in utility costs, the Sealite PEL provides a more brilliant, and longer range port entry light than what was previously installed, with the convenience of remote operational and monitoring status.



ABP Lowestoft had completed a program of upgrading the in-Harbour Navigation lights to LED, to improve reliability and reduce maintenance cost of an aging system, which was making compliance with LLHA minimum performance requirements increasingly difficult. Once completed, the benefit of upgrading these lights to LED was quickly realised.

The existing PEL had been in operation since 2009, and only provided night time capability. Numerous Marine Navigational Risk Assessments conducted by the port, had reference to the upgrade of this light to daylight capability, as an additional and desired risk control measure.

When the existing light became unreliable in 2015, the decision was made to explore options to upgrade the light to LED, (in line with other Harbour Navigation lights).

Trials of PELs from 3 different suppliers were conducted to find a product which suited our requirements, and returned the best cost benefit outcome. A decision was made to progress an order with Sealite. The decision was driven by performance, design, maintenance options, and cost.

Sealite accommodated further trials to ensure light design and specification was to our requirements. These trials were conducted at the Sealite warehouse and on site.

Once established, the new light was quickly realised as an effective navigational aid, in daylight, darkness, and reduced visibility. Comments from vessel Masters and other port users have only been positive.

Gary Horton, Harbour Master/Pilot, Associated British Ports

All Sealite products are manufactured to exacting standards under strict quality control procedures. Sealite's commitment to research and development, investing in modern equipment and advanced manufacturing procedures has made us an industry leader in solar marine lighting.

By choosing Sealite you can rest assured you have chosen the very best.

Experienced & Trained Personnel

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Worldwide Distribution Team

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Agile Manufacturing

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Product Innovation

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Precision Construction

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Total Quality Management

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ISO9001:2015

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Rapid Turnaround



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