

Case Study: Rubis Terminal Rotterdam, Netherlands



Rubis Terminal Achieves Zero-Emissions Goal, Saves 100K Euros Annually with Dialight Industrial LED Lighting

French-based Rubis Group is an independent operator of downstream petroleum and chemical facilities. Its Rubis Terminal division operates 14 facilities along the North Sea, English Channel, the islands of Corsica and Sardinia in the Mediterranean Sea, and inland ports in France and Germany. With a combined storage capacity of 3 million cubic meters, it is the fifth largest independent operator in Europe.



Dialight Stainless Steel Linears at Rubis Termina

With the development of its new terminal facility in Rotterdam, The Netherlands, Rubis aimed to bring online one of the world's most operationally and energy efficient facilities of its kind. Designed for storing and handling mineral oil products and chemicals, and accommodating marine vessel, train, truck and pipeline transportation, the zero-emissions facility has been held to the absolute highest standard for low energy consumption and minimal environment impact.

Project Snapshot:

- New petrochem terminal in Rotterdam
- Zero-emissions facility
- Sought alternative to failure-prone fluorescent fixtures
- Installed over 270 ATEX certified and non-certified fixtures
- Reduced energy consumption 60 percent

100,000 euros annual maintenance savings

World-class Lighting Required

At Rubis' other terminals, the combination of fluorescent linear and flood lights is not only inefficient and unacceptable for the new zero-emissions facility at Rotterdam, but they also make it difficult for staff to perform their work without the use of supplemental, temporary, portable lights. In addition, ongoing maintenance is a challenge. Workers must build scaffolding and work at high elevation, in teams of two, with portable lighting. Vibration from equipment takes a heavy toll on the fixtures, causing frequent failures, so maintenance is an ongoing process.

With the new Rotterdam location, designers were looking for a better solution, aiming to light the new facility with the latest-generation LED fixtures to provide the most energyefficient, safe and reliable illumination. The goals for these impeccable standards: to reduce total energy consumption, maximize lighting efficiency, improve sustainability and safety, reduce maintenance demand and lower total operating cost. In addition, because of its harbor location, reducing light pollution for the benefit and well-being of both humans and wildlife was also a priority, making Dark Sky-compliant lighting a must.

Dialight

Dialight Industrial LED Lighting Fits the Bill

Seeking suppliers for its new construction project, Rubis' Arthur Wrana, E/I & A Supervisor, attended the Tank Storage Expedition in LOCATION. There, he met Marcel van Gemst, CTO at Unique Light, and the two discussed lighting options for the new facility. Working together, they reviewed quotes from three different suppliers.

The duo settled in on Dialight, the world leader in highefficiency LED lighting for industrial applications. With over 1



Dialight LED lighting at Rubis Terminal.

million fixtures installed, and a substantial market foothold in petrochem and terminal applications, Dialight fixtures have become the lighting solution of choice for some of the biggest industry players around the world. To bolster their decision, van Gemst consulted five colleagues for their review of the Dialight product, and each one gave a glowing recommendation.

"Dialight's product outshone the competition for its rugged but appealing look, reliability and light efficacy," Wrana said. "The outstanding warranty made this the smartest investment for our new state-of-the-art terminal."

Based on Rubis' stringent requirements, Unique Light began designing a lighting plan to fit the bill using 3D modeling to determine and illustrate specific placement of the lights for maximum efficiency and efficacy.

To guarantee reliable performance and longevity, each fixture is backed by Dialight's exclusive 5-, 7- or 10-year warranty, covering the entire fixture. This assured Rubis that the fixtures would be virtually maintenance-free for many years to come, eliminating this costly, ongoing chore.

Dialight Delivers Zero Emissions & Big Savings

Thanks to opting for Dialight's next-generation LED fixtures, Rubis expects to reduce energy lighting consumption, along with the greenhouse gases produced as a result, at the new facility by 60 percent compared to conventional lighting. Based on maintenance expenditures at other similar facilities, the company also expects save an impressive 100,000 euros per year on maintenance, for lights that are guaranteed to last, multiplying the annual savings accordingly.

Because the Dialight fixtures are highly resistant to salt-spray corrosion, they'll hold up much better to the harsh environment along the North Sea. And, because they provide a much higher CRI and quality of light compared to conventional fixtures, coupled with strategic light placement to ensure clarity and visibility for workers, the Dialight fixtures create a safe, comfortable and welcoming environment for everyone at the site.

The powerful combination of energy and maintenance savings is expected to generate a payback period of less than four years, creating a substantial ROI for Rubis at this new facility. The outstanding efficiency and sustainability of the LED fixtures also allows the company to more easily meet annual governmental energy audit requirements, and achieve its goal of operating a zero-emissions facility.

"We've been extremely pleased with the Dialight products," Wrana said. "They not only give us the high efficiency and low emissions we needed to meet our specifications, but they also give our facility a modern, safe and vibrant look, which our staff and customers both appreciate."

The project has been so successful, the company plans to expand the project to retrofit existing terminals with new, stateof-the-art Dialight LED fixtures.

To learn more about Dialight's leading-edge industrial LED lighting solutions for terminal and petrochemical applications, visit www.dialight.com.

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