



**SLAM FIXED** 



ATEXOR Case Study

BOREALIS PLANT

**ATEX certified SLAM FIXED® 1LED & 2LED luminaires**

ATEXOR luminaires improves the quality and energy efficiency of lighting at the Borealis production plants in Kilpilahti, Finland. Naturally, it also fulfils the strict ATEX safety requirements set for the particular conditions of petrochemical production.

 **ATEXOR**



SLAM FIXED® 1LED with pole fitting. Code: MZ2268



Borealis is a leading provider of innovative solutions in the fields of polyolefins, base chemicals and fertilizers. The company's production plants in Kilpilahti, Porvoo are a petrochemical concentration of about 900 employees, producing polyethylene and polypropylene plastics that are used in piping and cabling products, steel pipe covering and packaging. The core expertise of the active innovation centre in Porvoo includes catalyst and process research and development.

As a working environment, a petrochemical production plant must meet extremely strict safety standards. The lighting solution, Ex-certified according to the latest standards, plays a key role in promoting the safety of each employee at the plant. Luminaires used in these latitudes must also be particularly resistant of subzero conditions and wind.

The long service life of LED is a definite advantage in EX-hazardous areas where maintenance breaks of electrical equipment always require special arrangements. Thanks to its superb lighting efficiency, LED lighting only consumes small amounts of energy. Consequently, the low life cycle costs of the lighting played a significant role in the selection of the ATEXOR luminaires. Reliable delivery and extremely fast deliveries of Atexor's Ex luminaires as well as the company's more than 35 years of experience in lighting solutions for explosion hazardous areas also influenced the decision.



SLAM FIXED® 2LED with wall/ceiling fitting. Code: MZ2271

The above-ground pumping station of the new underground gas storage along with its equipment were comprehensively lit with new 1LED and 2LED luminaires. In the future, the lighting renewal project of the Borealis production plant in Kilpilahti will include the replacement of the old luminaires with modern ATEXOR lights that has a positive impact on safety, service costs and the environment.

Borealis already knew and trusted Atexor products and the quality of its operations as the MICA® hand lamps of Atexor, designed for explosion hazardous areas, have been used for 20 years in the temporary lighting of maintenance and inspection work at the Kilpilahti production plants. The excellent experiences of other, similar plants with Atexor's lighting also promoted the selection of Atexor as the lighting supplier.

The Borealis production plants in Kilpilahti include areas with extremely strict occupational safety requirements due to the presence of potentially explosive gas mixtures and harsh weather conditions.

Thanks to the modern LED technology, the service needs of the SLAM FIXED® luminaires are minor. The “op is” safety marking in the certifications indicates that they contain appropriate protection against optical radiation (IEC60079-28). The steady light of the luminaires ensures excellent visibility in any conditions and the SafeEye® feature utilised by Atexor protects its users from being dazzled by the light. The SLAM FIXED® luminaires are also extremely lightweight, making installation work easier.

The SLAM FIXED® product family is encased in exceptionally shock-resistant plastic. Thanks to the shock-resistance, which considerably exceeds the Ex certification requirements of luminaires, the products are able to withstand rough use. The luminaires have been designed and certified down to -40 degrees Celsius, making them ideal for northern conditions. In the selection process, Borealis found the translucent plastic component (lens) of the SLAM FIXED® luminaires a particularly important safety factor due to its antistaticity.

### *Details finished in cooperation*

Borealis valued Atexor’s abilities and willingness to create a lighting solution perfectly suited to the conditions and systems of Borealis. The luminaires were pre-fitted at the factory with special cables chosen by Borealis, and Atexor also designed mounting to make the installation of the luminaires easier in the specific operating environment.

*“We were extremely pleased with Atexor’s working methods. They genuinely listened to the special needs of our demanding conditions and we were able to work together to build a lighting solution that suits us best. The philosophy of Atexor works.”*

**Jouko Mäkelä Maintenance Manager, Borealis Porvoo. Borealis Polymers Oy.**



*The luminaires were pre-fitted at the factory with special cables chosen by Borealis.*



SLAM FIXED® WS series is ideal for northern conditions.

- Long life cycle with a reduced need for maintenance
- Safe, sufficiently strong but glare-free LED light with the SafeEye® feature
- Exceptionally light-weight for easy installation
- Shock resistance that clearly exceeds test standards
- Strong light tube made from antistatic polycarbonate.
- Pre-prepared, adaptable installation kit – easy to install
- Optimal cold and heat properties in the northern climate
- ATEX certified
- The certificates comply with IEC 60079-28 (“op is”)
- Replaceable protective film (accessory)



## ATEXOR

Atexor Oy has 35 years of experience in designing and developing ATEX & IECEx lighting and power supply solutions. In cooperation with the customer, Atexor finds the most economical solution, without compromising any safety elements. We are known for our ability to solve customers' hazardous area challenges in demanding time schedules.

Atexor is part of Teknower Group. The group has subsidiaries and offices in Sweden, Russia, United Kingdom, Poland, United Arab Emirates, India, Malaysia and United States of America.