

Fire Prevention and Monitoring for Customers



Goods are secure — added value for customers and the business

Agencia Marítima Portillo is the parent company of a group of family owned businesses with over 100 years of experience in the maritime sector. With facilities in Seville and Cadiz for the storage of bulk goods, the company is responsible for a total area of 110,000 m². The nature of the bulk goods and the local weather conditions—with very high temperatures in summertime and significant disparity between night and daytime temperatures—mean that temperature monitoring to prevent damage to goods and to prevent fires on ships is critical to providing optimal customer service, smooth operation and business profitability.

Solutions and Benefits

Sixteen M16 thermographic cameras were initially installed in a staggered project to optimize and protect resources. Given the excellent results, dozens more have now been installed. With MOBOTIX cameras and real-time temperature monitoring, workers obtain the information that they need to clearly identify areas that may be experiencing high temperatures in order to take action to prevent the breakout of fires and damage to goods.

By ensuring the early detection of possible temperature fluctuations in the goods, the MOBOTIX system means that it is possible to take corrective measures efficiently and far enough in advance to, where possible, minimize the deterioration of the goods in order to safeguard their quality and condition.

Meanwhile, with the central alarm system working over the MxMessageSystem, the MOBOTIX thermographic cameras not only serve as a temperature monitoring system by tracking changes in temperature 24/7, but they also form part of the fire-fighting system by serving as active detection elements, activating fire alarm notification appliances in case of fire.

Basic Information

Sector

Industry/Maritime

Customer

Agencia Maritima Portillo SL

Partner

Niceware

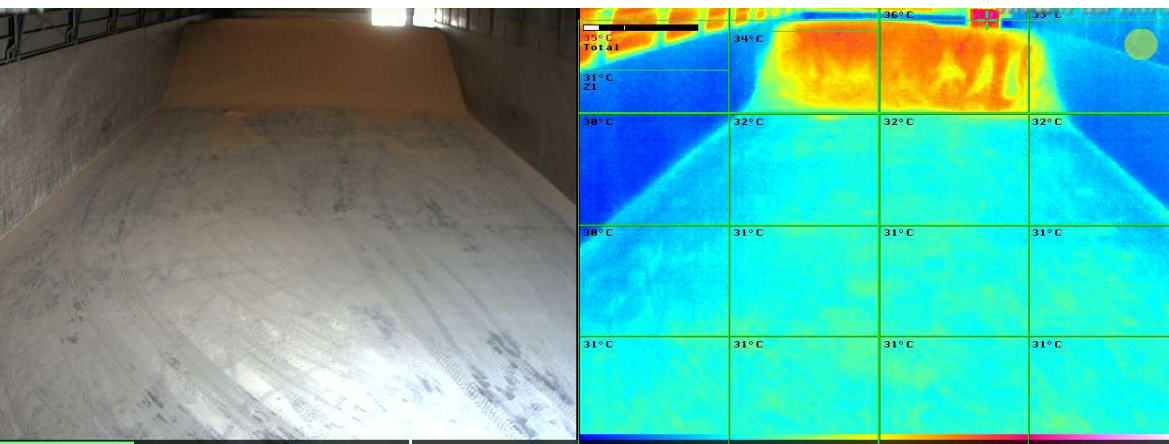
Time Period

2016/2020

Products

M16 Thermal TR

MxMessageSystem



With this advanced solution, Agencia Marítima Portillo has not only reduced costs, but it has also added differential value to its business, expanding its portfolio with an additional service: Customers who lease space in a warehouse with thermal imaging technology are able to monitor their own goods remotely. In other words, the customer can sign in online with their username and password to see the location and status of their goods in real time, 24/7.

Risks and Challenges

Preventing the overheating of goods; the intelligent M16 Thermal video system with an integrated high-performance thermal image sensor, two directly adjacent lenses and thermal overlay function with thermal and optical image overlay to pinpoint the exact location of hotspots like smoldering fires in a visible image for early detection of risks or damage to goods. The thermographic sensor is able to isolate temperature measurements on any pixel to pinpoint the exact location of hotspots.

Firefighting system; in terms of generating alarm events, the fact that areas of the engine and exhaust of the grain loading equipment reach temperatures of between 110°C and 135°C was a major obstacle to overcome as this made it difficult to establish the temperature anomaly threshold at which to activate the alarms. After carrying out a series of fire alarm activation tests that showed that, indeed, the M16 camera was able to detect when temperatures were approaching 200°C and that, in an empty ship measuring 2,500 m², burning small 20x20 cm scraps of cardboard was enough to activate the alarm signal — a clear indication of its impressive sensitivity. Finally, it was decided to establish a threshold of 160°C in order to single out the temperature of the equipment, among other measures.

Summary

The 24/7, reliable and intelligent system for monitoring the entire storage surface area using MOBOTIX M16 thermographic cameras facilitated a more efficient conservation of goods, with the resulting savings in costs and bringing great differential value to the company. Lastly, the quality and reliability of the product, even in conditions with severe airborne dust and extreme weather, as well as the friendly customer service, have fostered the loyalty of Agencia Marítima Portillo — a company that has been a MOBOTIX customer since 2006 and plans to continue implementing new solutions to cover as much space as possible.

