

Reno-Nord in Northern Jutland, Denmark



Waste management company Reno-Nord

Documentation of the incineration process

Reno-Nord is a Danish waste management company in Northern Jutland that operates one of Europe's most modern and efficient incineration plants. The company's primary activity is the processing and incineration of waste in an environmentally friendly manner that minimises the volume of waste and utilises the energy contained in the waste. To make this possible, Reno-Nord has chosen to monitor large parts of the incineration process, in order to have a better opportunity to document the correct processing of the 250 loads of waste that pass through the system every day.

From analogue to digital solution

Reno-Nord has been using analogue surveillance for both the waste disposal site and the incineration plant for several years, but it was the desire to be able to store surveillance images of the incineration plant that made them think about investing in a new surveillance system.

"During our deliberations on how to resolve the storage problem, our IT supplier, MRC Computer

A/S, stepped up and suggested a digital installation using MOBOTIX cameras, which closely matched our needs and the requirements and wishes that we already had for the installation," says Thomas Lyngholm, Environmental Manager at Reno-Nord.

MRC Computer A/S is a turnkey IT supplier to both large and small companies. Jesper Tommerup of MRC Computer A/S says that the company sees a great market potential in the surveillance market as demand for IP monitoring increases. MRC Computer A/S has purchased cameras to install at Reno-Nord from their long-term supplier of network equipment, SEC DataCom.

Tough MOBOTIX cameras

With their previous surveillance solution, Reno-Nord found that the outdoor cameras, particularly those on the waste disposal site, leaked or began to mist up in the damp environment. One of the challenges of the installation, therefore, was to find a type of camera that would be able to survive the tough environment of both the waste disposal site and the energy plant.

"We had to find a surveillance camera that would be able to work perfectly in the hot, damp, dusty and vibrating conditions of the energy plant as well as in the tough environment of the waste disposal plant, where the Limfjord deposits traces of salt water on all the material on site. With this in mind, we chose to suggest a MOBOTIX solution to Reno-Nord, which in our experience is hard-wearing enough for the harsh environment that they would have to work in at the energy plant," says Jesper Tommerup of MRC Computer A/S.

Incineration can be documented

The cameras are used for a variety of purposes at Reno-Nord's site. A large proportion of the cameras monitor the plant's operating processes, so that the employees can sit in the control room and have an overview of what is happening at all the different parts of the plant. There are another two cameras set up as access control for the two sites, so that it is possible to monitor any irregularities, such as non-compliance with workplace regulations.

The surveillance solution also has a third vital



Digital Solution was the right choice

function. Cameras have been installed to monitor a section of the waste that is delivered to the plant. This enables special waste that is delivered to be checked and its handling to be documented. Particular attention is paid to waste that could damage the incineration plant, such as long beams, hazardous waste such as batteries and chemical waste or recyclable waste such as metal, paper and glass.

“The Aalborg municipality in particular wanted to be able to document what kind of waste was delivered to the waste incinerator and with this surveillance they are now better able to document whether recycling requirements are complied with, for example. Our weigh station is visited by consultants from Aalborg municipality and they use our surveillance system to collect data and documentation to use in their preventive work,” says Thomas Lyngholm and continues:

“The surveillance of the incineration plant also means that the police and customs authorities do not have to turn up with seven people every time they need to destroy seized goods. They now only need to send one person, who can enter the control room and follow the waste throughout the entire process and take away documentation that the waste has gone into the furnace.”

Four screws and a PoE plug

In the new solution, Reno-Nord chose to keep some of the cameras that they already had, as it was possible to convert them so that they worked in conjunction with the new IP surveillance solution. The solution at Reno-Nord is controlled using Milestone software, which is able to manage the combination of different camera types and the new MOBOTIX cameras were easy to incorporate in the existing network.

Reno-Nord’s own electricians installed the cameras and Thomas Lyngholm is very pleased with how easy it was to set them up:

“It was little more than screwing them in and giving them a power supply and then they were up and running. It was very simple and not technically complicated, unlike my experience of other solutions. Normally you have to think about housing and heating elements and wires, but with MOBOTIX it’s just up with the camera and a PoE plug and you’re up and running.”

A digital solution was the right choice

Reno-Nord had not had their new solution long before they realised they had made the right choice in switching from analogue to digital surveillance.



“We can see the difference in many ways in our everyday operations, but we are particularly pleased with how easy it is to connect new units to our surveillance system now. Before we had to convert signals to optical fibre, send them and then convert them back to analogue signals, which meant installing new wires all the time. But now everything is really easy as it’s all on the network. At the same time, we have also found that the improved image quality gives us a much better overview, particularly when we use the built-in digital zoom function.”

The range of new possibilities will also make it easier for Reno-Nord to extend its surveillance solution in the future as the site expands and new possible uses are discovered.

MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.


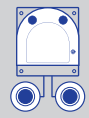



MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.





MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.





The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.





The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-5 watts.





An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

Outdoor Dual Lens			Thermal	
M15/16 AllroundDual	S15/16 FlexMount	D15/16 DualDome	M15/16 Thermal	S15/16 DualThermal
				
Robust for extreme conditions	Flexible dual camera	Modular dual camera	Thermal dual	Thermal dual

Outdoor Single Lens			
M25/26 Allround	S15M/26 FlexMount	Q25/26 Hemispheric	D25/26 Dome
			
Robust for extreme conditions	Discreet, video analysis	Discreet, video analysis	Modular Fix dome

Indoor			
i25/26 Panorama	c25/26 Hemispheric	p25/26 Allround	v25/26 MiniDome
			
180° hemispheric	Discreet, video analysis	Modular ceiling camera	Vandalism camera

Door Modules			MxDisplay+
Camera	BellRFID	Keypad	Remote Station
			

Door Sets			
Double Frame		Triple Frame	
			

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