

## ZAK – Zentrale Abfallwirtschaft Kaiserslautern



## ZAK – Safe, Ecological, Efficient MOBOTIX Cameras Ensure Safe Operations

The average German consumer generates nearly 213 kilos of packaging waste every year. ZAK – Zentrale Abfallwirtschaft Kaiserslautern, the municipal waste management company of Kaiserslautern, treats, recycles and disposes of this and other types of waste for the more than 250,000 residents of the city and district of Kaiserslautern, Germany. ZAK relies on MOBOTIX video systems to ensure that operations run smoothly and that the 88-hectare premises of the modern waste management facility remain safe.

### Modern Waste Treatment

The landfill was closed in 1999 due to changes in the law. Since then, the waste from the city and district of Kaiserslautern has undergone mechanical biological treatment and been disposed of externally, or it has been thermally treated by an external company. For this reason, the waste collection and treatment facilities are therefore a priority, as well. All facilities are subjected to continuous improvement processes to remain state-of-the-art. The same applies to MOBOTIX camera solutions.

“Initially we were using analog video systems to keep an eye on the gate and facilities. Now there are 65 modern MOBOTIX video IP solutions

ensuring smooth operations on the premises,” explains Michael Hentz, IT and telecommunications manager at ZAK.

### Camera For Fire Prevention And Detection

There are two M15D thermal cameras in use to monitor the temperature of the timber shelter in general and more specifically, the temperature of the fuel. The video systems can automatically detect events within a range from -40 to 550 °C (-40 to 1022 °F) thanks to a thermal sensor technology and thermal radiometry. For this reason, the technology is well suited to operate as an automatic alarm when paired with temperature thresholds or ranges.

One of the thermal cameras has been suspended in the timber shelter where it monitors the entire area for high temperatures. A fire can break out quickly during the fermentation process. This way, it can be detected whether materials with excessive temperatures are being added to the facilities when brought by truck. The second video solution has been installed in a location where the material is transported by crane so it can be fed into the incineration process. Mr. Hentz explains: “We can know exactly how

high the temperature is in the timber shelter and can take countermeasures, if necessary.”

### Video Solution Replaces Rearview Camera

In addition to the thermal cameras, 90 % of the cameras that ZAK uses are M25 video systems, which are distributed over the premises, especially in areas where people are not present. The M25 camera is a compact, affordable and powerful allround system that uses 6MP Moonlight technology. “These cameras are particularly excellent because they are robust, low-maintenance and weatherproof,” adds Mr. Hentz. “These features play a very critical role because dirt is omnipresent at the waste management facility. And of course, this dirt collects on the cameras, as well. But the MOBOTIX models continue to perform well. They’ve really proven themselves.”

Video systems have also been installed on buildings where there is little leeway. Drivers of the two trucks, which are constantly moving back and forth on the premises, use a tablet computer to view the images provided by these cameras. It gives the drivers a good vantage of things when they are maneuvering their vehicles,



and it prevents accidents. “Rearview cameras are of little use, as they become dirty quickly,” concedes Mr. Hentz. “Which is what gave us the idea to provide tablets to our drivers, so they can use the images generated by the cameras.”

#### Door Station At The Main Gate

Two T25 IP Video Door Stations have been installed on the exterior and interior area near the main gate. They are used for door communication and access control. Additionally, they make it possible to use RFID and keypad solutions to time-control and log access to the premises as well as create photo-documentation. Employees work around the clock at the biomass power plant. It means that the chances are there will be someone on the premises who would like to leave after ZAK closes for the day. A person

can ring a bell and then an employee will open the gate.

#### Quality Stands Out

Mr. Hentz is very pleased with the MOBOTIX solutions. “I’ve been working for a long time with these video systems. They are both exceptionally robust and maintenance-free. What’s more, it’s also easy to manage the network cameras. Furthermore, they score points because data can be stored directly in the camera. I am also convinced because over the years, you can tell that the features are continually being tweaked. Yet, all cameras work on the same basic principle, which is a tremendous advantage when it comes to using them. The range of possible applications is still

very diverse, thanks to the high image quality and the option to use various lenses.”

#### MOBOTIX System In Use

**Cameras:** 65 (c25, p25, T25, M25, M15D Thermal)



#### Highlights:

**Software:** MxManagementCenter



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