Total Solution Provider of Certified Fixed Fire Fighting Systems

DLA Agro

Installation of pump-based water mist system

DLA Agro (Den Lokale Andel) is an association that produces dry feed. The production process requires heat treatment of feeds for domestic animals. Consequently there is a risk of overtemperature and therefore the fire hazard is increased.

A fire in the cooling tower has the potential of spreading to the entire heating facility and, in worst case, to the surrounding buildings. A fire in a cooling tower that spread to the buildings at a facility in the Aarhus region brought to light the full implication for insurance companies in connection with fire damages in processing plants. The total compensation for the damages was about EUR 10 million.

Topdanmark, DLA Agro's insurance company requires precautions against fire to be installed in all processing plants.

Topdanmark

Case Story

SEM-SAFE®
WATER MIST SYSTEM

SEM-SAFE®

High-Pressure Water Mist System

Why water mist

After having evaluated the fire scenario, Topdanmark's own fire technicians concluded that it was necessary to use a water-based system in case of a fire in the cooling lines, partly due to the risk of deeply sunken smouldering fire and partly to the inability of the facilities to keep a gas concentration long enough for the fire to be put out. At an earlier stage, a sprinkler system had been tested but abandoned due to an inconveniently large amount of water used.

Authorities

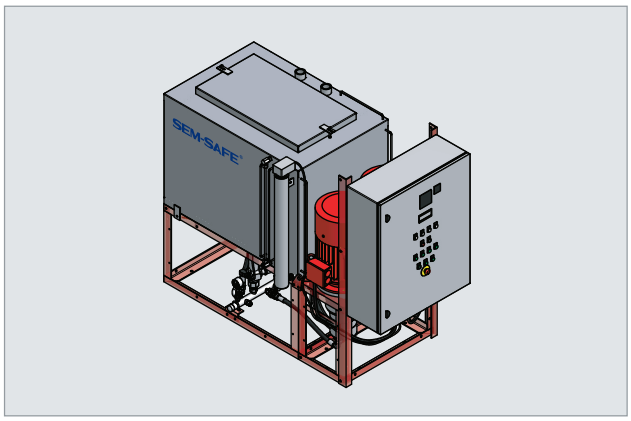
There were no specific regulatory requirements, so Topdanmark defined the specifications for the construction and function, and the systems were specified as concentrated fire units.

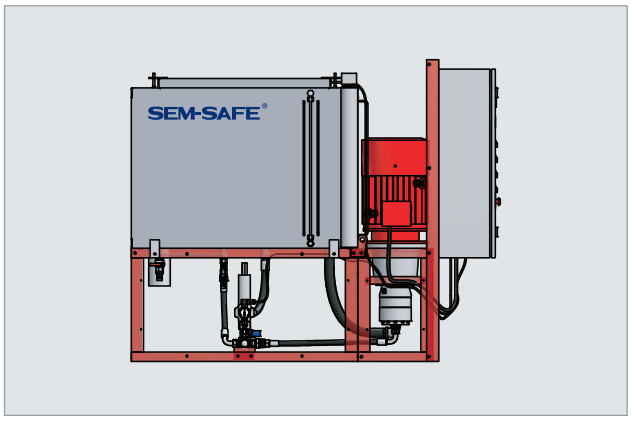
Solution

To fulfill the specifications, a pump-based water mist system with thermal monitoring of cooling and mill lines was developed.

Due to the sectionalized system, each line constituted an independent unit, which was automatically activated in case of a fire. The system was supplied from a safe voltage supply, either a ring-connected transformer or two separate transformers.

The SEM-SAFE® water mist system was activated six times during the first year of operation. In all six cases, a real fire was established to have caused the activation, but damage was limited to one case.





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