

TALL, COLD & DARK

Primary fire detection solution for a flagship fully-automated frozen storage facility

SUMMARY

A specialist frozen storage and distribution company was seeking a fire detection solution for their new 45,000 pallet facility. The fully-automated frozen storage area covers 9000m², is 35m high, and operates at -27°C. The Ciqurix CORE system is effective in this environment and overcomes multiple challenges.



CHALLENGE

The standard method of fire detection in chilled/frozen warehouses is aspirating detection. Existing facilities had historically used this method (of various makes), but had found that they did not perform reliably. Frozen pipework, blockages, and failed control equipment were all causing constant issues. Additionally, because the racking system itself forms the structure of the building there would be severe access constraints for both installation and maintenance. The team responsible for the new building therefore instructed their electrical consultants to come up with an alternative fire detection methodology offering similar performance and compliance, but without the disadvantages.



DETECT MULTIPLE FIRES IN SECONDS



ALL LIGHT LEVELS - DAY & NIGHT



BOTH INDOORS & OUTDOORS



SEE FIRE AT UP TO 180 METRES

SOLUTION

The electrical consultants for the project worked with Ciqurix to design a suitable video fire detection solution for the frozen storage areas using our CORE system. This was paired with an analogue addressable fire system providing audible warning, manual call points, and cover for ambient areas. The CORE system consists of 16 video detectors located at high level at the end of each aisle, each mounted to a gantry walkway for ease of maintenance access, plus 2 detectors protecting an open area at one end of the warehouse. The CORE system is linked to the fire panel via loop interfaces, pinpointing the location of any fire to a specific aisle.

RESULTS

Since the commissioning of the Ciqurix CORE system there have been no reported faults, and it has passed all routine maintenance tests. The installer, developer and end user are all delighted with the performance of the system and are in discussions to replace existing aspiration systems at their other frozen and chilled sites. The Ciqurix CORE system is now the specified fire detection for all future frozen storage facilities within the group.

FULLY COMPLIANT TO BS5839-1 WITH NO VARIATIONS

RESPONSE TIME OF 8 SECONDS TO TEST FIRE AT 120M

ZERO FALSE ALARMS SINCE INSTALLATION

INSURANCE COMPANY SATISFIED

