



The benefits of installing **FireClass into a Warehouse**

Overview:

The Requirements for installing a suitable fire detection and alarm system within a warehouse facility in the UK is described within the BS5839-1:2013 Code of practice. A category M (manual) system usually satisfies the requirements of legislation. This system is often combined with a category P (property) 1 or 2 system, usually at the request of the insurers. Warehousing can vary enormously in size and process, some being fully automated. Height is also a factor when planning fire detection and warehouses can be very challenging for the designer. Alternatives to the standard point detection systems are sometimes the answer with smoke beams, and aspirating systems within storage racking often providing the solution for a sensitive yet stable fire detection solution.

The **FireClass** fire detection and alarm offers a wide range of systems that either connect directly or interface to the addressable digital loop, offering a broad spectrum of solutions to meet these challenges. Some of the systems key features are highlighted below.

A new class of Fire Detection

Risk: Distribution warehouses are difficult places in which to work, require specialist platforms for working at height and present on-going problems for maintenance and repair.

During the initial install period these problems are more easily overcome, as the building, usually under construction, is unoccupied and not a functioning warehouse. Once up and running however access is restricted not least because of the height and narrow aisles created by the storage racks. Reliability is therefore key to systems installed in such buildings as remedial works to replace or relocate equipment is difficult, time consuming and costly.

Solution:

By specifying and installing a FireClass system we offer reliability in all of our components. The **FC460 addressable point detectors** have added protection applied to printed circuits and vital components to enable them to survive in environments that are more difficult.

Threshold compensation overcomes the effects of dirt and dust and prolongs the life of the detector reducing lifetime costs. The **Fire Ray 5000 Smoke beam and FC410 Beam detector Module** allows direct connection to the addressable loop, saving wiring and associated costs. The beam detector is motorised so if the beam alignment shifts due to building movement, it realigns itself automatically. The **ICAM AS 460 and 461** single or dual air sampling system combines the best of the **FireClass 460 PC mutisensor** with proven air sampling techniques. This form of detection is ideal within racking where plastic pipes are all that exist and can easily be protected against the risk of mechanical damage. All of this to ensure a long and trouble free life with a low cost factor.

Risk: What happens if by accident the system is activated. This is still referred to as an unwanted alarm, which could be caused by accidentally operating a manual call point, or some unusual occurrence close to a sensor.

The incident, whilst not really being a malfunction, still causes the same amount of disruption with the same consequences, as that of a genuine alarm.

Solution:

When configuring the system cause and effect, (what happens when a device goes into alarm), the **FireClass configuration software** allows devices to be configured to work individually and instantly, individually and after a delay, or in conjunction with another device. This enables the designer to programme out some of the high risk unwanted alarm causes by introducing, delays or confirmation from a second device before the system goes into full alarm.

Risk: One of the most common causes of unwanted alarms within a warehouse is cause by exhaust from diesel operated fork lifts.

Do you compromise the detection system in order to avoid this problem. Any compromise doesn't just reduce the sensitivity for that period when the forklifts are operating.

Solution:

All FireClass Control Panels incorporate Day/Night Mode. The **DAY MODE** function can be initiated in various ways, manually or automatically, to introduce a short delay allowing an investigation of the incident and the option to isolate the offending device before a full alarm occurs. The **FC460 PH and PC** Addressable mutisensor detectors can be programmed in such a way that at certain times of the day, when the building is fully occupied and the risk of fire going undetected is low, the smoke elements can be turned to low sensitivity and then turned back up to their normal sensitivity during unoccupied periods. **FireClass configuration software** is simple to use whilst being extensive and flexible.

Risk: When a problem occurs, swift action is required. There is no time to wait for an alarm engineer to be despatched as this might incur delays of up to several hours.

During this time if the staff are evacuated or stood down, as a precaution, the job stops and costs soon escalate. Modern warehouses usually have an onsite engineer who is available to provide first line cover and perhaps fix the problem permanently, or instigate a temporary solution. Either way he would need to be competent in his knowledge of the system and have a level of access to allow him to perform the duties of an engineer.

Solution:

FireClass offers a range of controllers from the compact **FireClass Lite**, through 32, 64 and 240 zone networkable control panels. All Panels offer the same operator functionality with access through one of three password levels. The **User** level is that afforded to carry out the normal day to day functions.

The **Supervisor** levels allows further access into menus allowing more advanced tasks such as isolations, whilst the Engineer level would allow a competent person to change a faulty sensor, add or delete devices, change text and numerous other functions which might occasionally or in an emergency be required. Additionally **FireClass** are able to provide training to all levels, either at our own training centre or if necessary at others premises, in order to ensure competency for installers, maintainers and users, in addition to a providing a full set of manuals with each system.