

Minimize Your Exposure to Loss from Fire with VESDA

What Every Insurer
Needs to Know



VESDA[®]
by  **xtralis**[™]

Are you vulnerable to total loss from poor fire system performance?

The partial or total loss of a property due to fire can mean significant expense for your business and can even risk your very survival. If your clients have inadequate or questionable fire protection, this means increased exposure to claims for:

- Loss and damage to building, equipment stock and contents
- Business interruption
- Liability, personal injury and wrongful death

Code compliance is not always enough

Building codes and regulatory authorities typically dictate only the minimum levels of fire protection. This means that many fire systems may not adequately protect you or your insured against partial or total loss. So the key question for insurers today must be, **“Does the level of fire protection adequately mitigate the underwriting risks and meet my insurance management loss criteria?”**

Every building is unique and has its own characteristics. And while regulatory code compliance sets the minimum criteria for fire protection, it may not always be enough to ensure the best level of protection to mitigate your risk.

Code compliance may not protect a facility due to the **challenges in reliably detecting fire in:**

- **Atrium and high ceiling/roof areas** where smoke tends to stratify below ceiling level and may never reach some types of smoke detectors until too late
- **Warehousing and logistics areas** with densely stored, potentially flammable goods that can smolder undetected and quickly produce a major fire due to high fuel loads
- **Manufacturing, industrial and processing applications** where machinery can create background pollution or airborne contaminants that will impact reliable smoke detection
- **Unstable and high airflow environments** where identifying smoke can be hampered by the rapid movement of air from drafts and air conditioning systems

Traditional fire protection systems cannot always safeguard against total loss

Many insurers assume that their interests and insured properties are well protected by traditional fire protection systems, such as point or spot detectors, beam detectors and suppression systems. However, in many instances, the performance of these systems has been proven to be inadequate.

- Point detection systems
 - » Are passive and wait for smoke to enter the detection chamber before responding
 - » Often have a low sensitivity and are ineffective when smoke is diluted in large open spaces or by air movement
 - » Can be prone to nuisance alarms when applied incorrectly
 - » Require intensive maintenance, creating risks of neglect
- Beam detectors
 - » Have a low sensitivity, causing delayed response
 - » Are prone to nuisance alarms from obstructions or subtle building movement due to temperature change, creating risks from potential disablement
 - » Require increased maintenance of reflectors and detector surfaces due to dust contamination
- Suppression systems
 - » May be disregarded to save money if not mandated by local code
 - » Can become overtaxed in the event of fast-growing fire or large fuel loads... particularly in high roof applications
 - » Stratification and air movement can affect heat plume
 - » Can cause avoidable risks of injury, large stock losses and business interruption if falsely actuated... especially in occupied facilities, buildings with delicate or precious contents and businesses with complex operations

Is the fire protection system adequately maintained to ensure its operation in the event of a fire?

Most building codes reference standards for fire protection and detection system maintenance to ensure reliable and trouble-free operation in the event of fire. Unfortunately, insurers cannot always count on this maintenance being conducted as thoroughly and effectively as it should be.

Maintenance can be intensive and a significant challenge in those applications where access to detectors is difficult and costly:

- Hazardous and dirty environments where detectors are prone to contamination
- High ceilings and roof structures, including atriums, warehouses, cathedrals and shopping centers
- Special applications where work is difficult or restricted, such as freezers, power stations and correctional facilities
- Production, manufacturing and processing applications where detector access and testing is hampered by machinery and equipment placement



VESDA - #1 ASD solution for “absolute” detection

Only very early warning protects you against total loss

VESDA very early warning fire detection provides TIME to mitigate your risks from fire. TIME to respond, TIME to investigate and take remedial action to minimize damage and reduce your exposure.

Our detection solutions go beyond just code compliance to provide an outstanding, performance-based approach to detection:

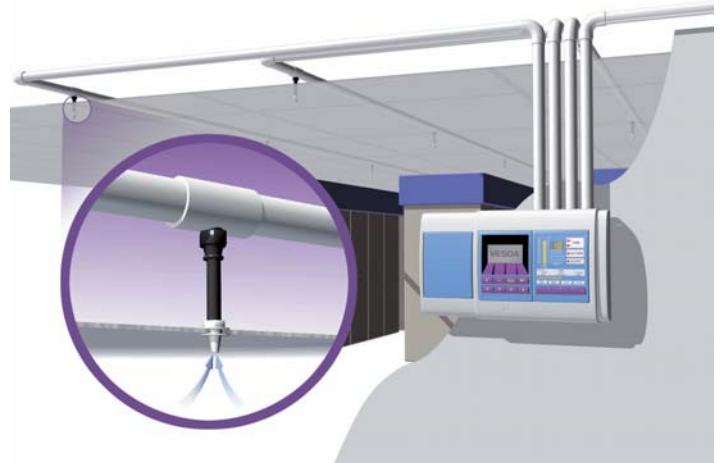
- When smoke is difficult to detect
- When environmental conditions are harsh or difficult
- Where nuisance alarms become a problem
- Where maintenance access is difficult

VESDA provides reliable detection in a wide array of challenging environments where traditional detection systems often fail - from clean rooms to coal mines, from warehouses to historic buildings, from power generation plants to telecommunications facilities and substations. And VESDA early warning can even enhance suppression system performance through timely notification and intelligent suppression activation.

Unlike passive detection systems, VESDA ASD (aspirating smoke detection) systems are “ACTIVE” and continually sample the air looking for incipient fires throughout a building, often delivering many hours of early warning.

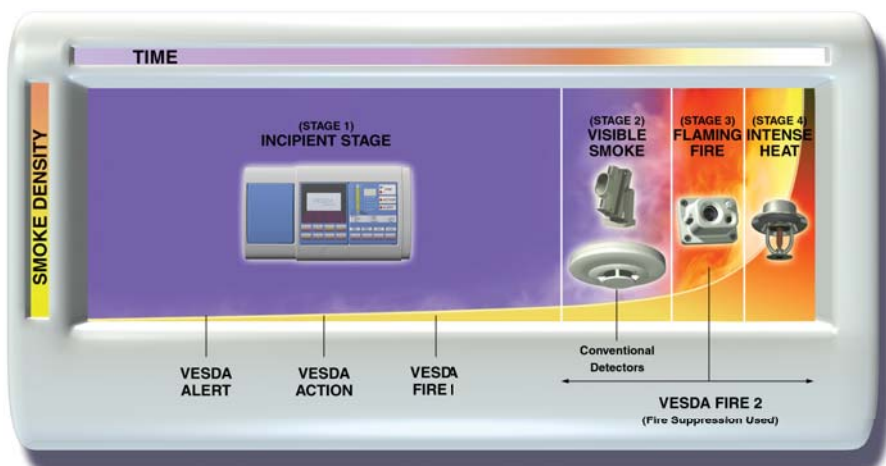
A typical VESDA system comprises a number of small bore pipes with a matrix of holes (sampling points), providing an even distribution across a ceiling, roof or other application. Air is drawn into the pipe using an aspirator (fan) within the central detector mounted nearby. The detector analyzes for the presence of smoke and reports to fire and/or building management systems.

VESDA is highly sensitive and provides early warning by detecting smoke at its earliest appearance using light scattering technology. Unique patented features prevent detector contamination and maximize operational life, ensuring “absolute” detection in all environments. Unlike point detection systems, VESDA detectors can be centrally located and positioned for easy access, making regular maintenance and testing fast, convenient and cost effective.



What Every Insurer Should Know

- When was the last fire risk assessment conducted at the premises?
- Is the current fire detection system adequately suited to the application and risk?
- Are the current detection systems able to reliably detect smoke diluted by air movement?
- Will “passive” point detection or beam detection systems perform effectively in large open spaces or in high ceiling areas?
- What loss to building or assets may occur before activation of suppression systems?
- Will the cleanliness of the environment impact the reliable performance of the detection system?
- Does the installed fire detection system have a regular service maintenance program?
- Has a simulated smoke test been undertaken at the premises since the original installation/commissioning to verify detector performance capability?



VESDA ASD is the best solution to protect you against liability and total loss and safeguards the continuity of your business.

Learn more about how Xtralis can help you

VESDA detection specialists are working closely with insurance industry professionals to help insurers understand the overwhelming benefits of very early warning fire detection systems.

To learn more, for specific project support or for a free early warning readiness assessment, visit our **Insurance Information Center** at www.xtralis.com/insurance.

With VESDA, both you and your insured can realize fewer and smaller claims, minimize business interruption, and significantly safeguard against asset and property losses.

VESDA – the insurance industry’s choice for early warning fire protection.



Approvals



CCCF



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