xtralis®

VESDA

ASPIRATING SMOKE DETECTION FOR INDUSTRIAL AND HARSH ENVIRONMENTS

SELECTING THE MOST SUITABLE FORM OF SMOKE DETECTION FOR AN INDUSTRIAL APPLICATION AND ENVIRONMENT IS THE FIRST STEP TOWARDS ENSURING A REDUCED FIRE RISK

The fire industry often places too much reliance on generic fire detection solutions for use in the industrial sector. Many of these solutions are often unfit for purpose, resulting in inadequate fire detection nuisance alarms and a considerable increase in the total cost of ownership.

There are a myriad of detectors purporting to be suitable for harsh and difficult environments, unfortunately not all these claims are reliable. Ongoing poor performance and increased maintenance and service costs for an incorrectly chosen or specified solution are a reality in the industry and only serve to instil in the end-user a lack of confidence in the smoke detection system forcing the end user to use industrial heat, flame or other detectors that only response after a fire as occurred.

The consequence of loss due to a fire event is inversely proportional to how well the detection system can detect smoke. That is, the higher the sensitivity and performance reliability of the detection system the lower the risk and losses will be. Equally important, the detection system needs to be able to survive the environment where it's installed without false alarming, offering longevity with minimal service and maintenance.

Although there are a multitude of areas or applications within industrial sites that warrant good reliable very early warning detection, perhaps the most critical are those which essentially underpin many business operations, and where fire is always a constant threat and have been successfully protected for over 20 years with ASD.

At the very least, suitable and adequate very early warning fire detection (ASD) should be considered for critical areas – **Electrical Switch and Plant Rooms**.

VESDA Aspirating smoke detection is well suited and has a proven 20+ year performance history in these areas, detecting fires and preventing significant loss and business interruption.

CRITICAL AREAS WITHIN INDUSTRIAL APPLICATIONS

Electrical Switch Areas and Equipment

Power is the fundamental backbone of any Industrial facility and operation, without power business stops. No company can operate without electricity, electrical sources and equipment must fulfil the highest requirements in terms of availability.

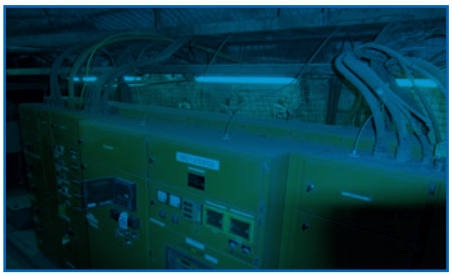
Fire is the most significant element that occurs within Electrical Switch rooms, Substations and other electrical equipment areas. According to common insurance industry statistics, approximately 30% of all fires are caused by defects on electrical systems, devices or equipment.

The main ignition source is defective, incorrectly installed or insufficiently dimensioned equipment, which results in a thermal overload due to the electric current.

In the event of an incident fire may spread via cable trays or other means thus creating significant damage and delays in business operations.

Whether large or small, above or below ground, demountable or fixed, electrical switching equipment presents a risk to any business operation.

VESDA Very Early Warning Fire Detection offers significant advantages over other forms of fire detection equipment in industrial facilities providing active detection, peace of mind and always ready to notify in the event of a problem.



Mechanical, Plant, Pump, and Boiler Rooms

Mechanical, plant, pump and boiler rooms, typically known as a “Plant Room” or “Mechanical Room”, is a room or space in a complex that is dedicated to mechanical equipment and another application in which ASD has proven itself as a reliable incipient smoke detection system. Plant Rooms also house a degree of electrical equipment and are generally not occupied, however are frequented when service or maintenance checks require.

Fire risks associated with these areas can vary depending upon the type of operation, area and the amount of equipment therein. Standby generators, pumps, electrical cable trays, cabinet’s, boilers, gas pipes, etc. all of which, pose a risk of fire.

Plant, rooms typically house mechanical equipment such as:

- Generators
- Water pumps
- Boilers
- HVAC equipment
- Heat exchangers
- Water heaters
- Piping and valves
- Sprinkler system pumps
- Electrical equipment and Cable trays

Background smoke particle are often present in these environments a factor that prevents many traditional type detectors from being effective. Unwanted alarms also create issues for the owner involving increase service /maintenance cost and unnecessary system callouts.

VESDA VLI has been designed with these environments in mind providing effective reliable detection where many others fail.

With over 35 years proven market leadership, VESDA was created to provide an effective and reliable Very Early Warning Smoke Detector designed to meet the specific and unique challenges of Industrial applications and harsh environments.

Can your business survive with less than suitable Fire Detection?

ABOUT XTRALIS

Xtralis is a leading global provider of powerful solutions for very early & reliable detection of smoke, fire, and gas threats. Our technologies prevent disasters by giving users time to respond before life, critical infrastructure or business continuity is compromised.

We protect highly valuable and irreplaceable assets and infrastructure belonging to the world's top governments and businesses.

To learn more, please visit us at www.xtralis.com