CUSTOMER SUCCESS STORY

TEXTILE MANUFACTURING CREATES GLOBAL SUCCESSES FOR INDUSTRIAL **VESDA VLI**

Leading textile manufacturing companies in Mexico, Latin America and India are selecting Industrial VESDA VLI to protect their textile production areas and warehouse facilities.

The Challenge

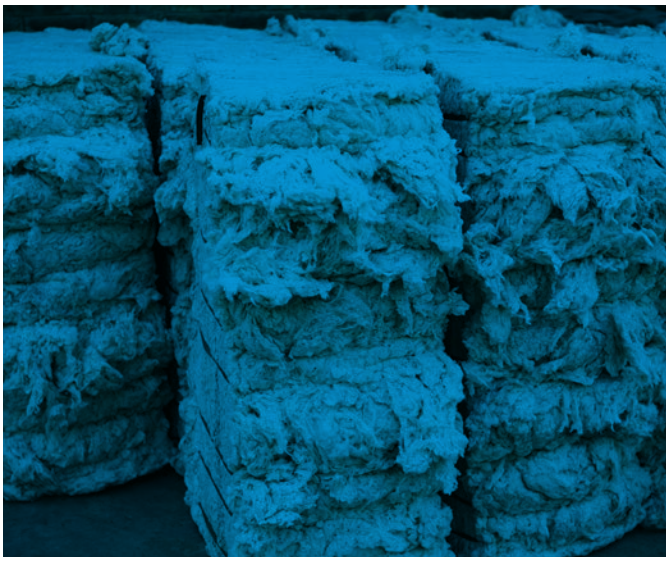
The inherent risk that all textile companies face is the processing, handling, and storing of large quantities of highly flammable materials that can lead to devastating fires resulting in tragic loss of life and facilities. Large amounts of cotton and textile dust and fibers are created throughout the facilities. These environments are so harsh that conventional point detectors could not survive the environment without generating frequent false alarm and prematurely failing due to contamination. Heat detectors could survive the environment but have such slow response that a fire would escalate to uncontrollable levels before detection would occur.

Warehouses store both finished goods and cotton bales that are brought in directly from farms. The risk come from high levels of cotton fibers in the air as well as bulk storage of highly flammable materials. Ignition sources include equipment failures, frictional heating source such as conveyor belt or bearing failures or electrical short circuits or static electric charging of the fibers can also be an ignition source.

The Solution

Industrial VESDA VLI is able to overcome all of these limitations and provides reliable very early warning smoke detection in these environments enabling detection and suppression of a fire before the fire escalates, doing all of this without false or nuisance alarms.

One manufacturer is currently using forty (40) VESDA VLI smoke detectors to protect 12 production plants



PROJECT:
Industrial / Manufacturing

END USER/LOCATION:
Mexico, Latin America and India

INDUSTRY:
Textile manufacturing and warehouse facilities

SOLUTION:
VESDA VLI

“It is critical to select a smoke detection system that would provide very early warning to prompt intervention and verification to prevent damage or loss or to provide advanced warning giving workers more time to safely evacuate the facility in the event that a fire would occur”

Plant Safety Engineer

that manufacture and store cotton and synthetic materials. Another manufacturer is operating over 40 facilities and previously protected their facilities using VESDA VLPs with external filters, that is, until VLI was presented to them.

VLI’s enhanced filtering technology makes external filters unnecessary. Extended sample pipe run capabilities of the VLI, along with increased dust and water ingress protection were key factors in VLI being selected to protect the facilities. Counter-sinking of sampling pipe holes was used to minimize potential sample point contamination due to dust and fiber build up. Steps were also required during the installation process to ensure that proper pressure balancing techniques were used in all exhaust and duct applications.

Installers Perspective

Once our clients realized that conventional point detectors were not a viable solution for their facilities, we had to convince them that VLI aspirating smoke detection was the right choice. In order to do that, we performed live demonstrations of VLI and a competing detection system. Seeing the VLI operate in an environment that replicated theirs provided the customer the confidence that VLI was the best technology for their plant protection. Additionally, the customer also received a recommendation from a customer operating a footwear warehouse also using VLI in their facility.

The Outcome

One production area required protection over large drying ovens. The ceilings were 11 meters (36 ft.) high. The VESDA pipe network was mounted at 10 meters (33 ft.) to survive the heat being emitted from ovens. VLI’s extended pipe network capacity enabled protection of these high ceiling areas with fewer detectors. Spinning mill production areas have continuous air movement and exhaust to remove airborne fibers. These fibers can generate a static charge and can be a source of ignition when making contact with machines, in ducts, or in the collection bag rooms where the fibers are collected for disposal.

About VESDA VLI

The VESDA VLI is the first very early warning aspirating smoke detector built specifically for the protection of harsh industrial applications based on experience gained over 25 years protecting a diverse range of applications. Key features include: coverage of up to 2,000 m2 (21,520 sq. ft.), 360 meters (1,181 ft.) aggregate pipe length, IP 54 ruggedized industrial enclosure and incorporating an industry first patented long-life, fail-safe filter technology. VLI sets a new benchmark for the protection of industrial applications. These features deliver the following best in class capabilities:

- Increase confidence and easy in protecting harsh environments
- Longest detector life
- Consistent sensitivity over the life of the detector providing best in class performance
- Provide a lower Total Cost of Ownership