

SUCCESS STORY

PICK N PAY INSTALLS VESDA ASD TO PROTECT ITS COLD STORAGE FACILITIES

Pick n Pay is the quintessential family supermarket with a strong customer focus. As a major retailer in Africa, the Group strives to address socio-economic challenges through the supply of high-quality, affordable food for all customers, while providing significant employment and economic opportunities across its value chain.

THE CHALLENGE

Pick n Pay has enhanced its customer centric focus with significant investment in central distribution capabilities. This enhancement allows their store staff to focus more on customer service, better quality, fresher produce due to better cold chain management and more frequent deliveries.

The ability to deliver fresh produce without interruption no matter the cause is paramount. The consequence of fire in a freezer or coldstore is significant and can be catastrophic. The combustible nature of materials normally stored in refrigerated environments, where very dry high airflow conditions exist, creates a significant fire risk. Fires will spread rapidly between cardboard or plastics packaging, impregnated materials, foodstuffs and wooden pallets. The earlier a fire can be detected the better. Both the building and particularly its contents therefore represent a large fuel load which can readily burn out of control without early intervention.

THE SOLUTION

Pick n Pay required a reliable method of providing Early Warning Smoke Detection in their new freezer/coldstore distribution centre in Philippi, Cape Town. The solution had to meet prescriptive codes but also allow for a performance based approach to meet specific design and performance objectives.

Conventional detector types were quickly discounted because they are unable to cope with extremely low ambient temperatures, high airflows which dilute smoke making it difficult to detect, high ceilings, complex racking, changing operational conditions and high storage density which all impose great challenges to the performance of any smoke detection systems. Further, the deficiencies of conventional smoke detection systems in low temperatures are recognised by many international codes and standards, such that they regulate against their use in environments where the ambient temperature is less than 0°C (32°F).

VESDA Aspirating Smoke Detection (ASD) was selected for its ability to meet Pick n Pay's exacting requirements. The system can be commissioned to meet specific environmental needs yet still provide early warning while at the same time being far more immune to unwanted or nuisance alarms than other smoke detection systems.

ABOUT VESDA

- Coverage up to 2,000 m² (21,520 sq. ft) per detector, providing cost-effective smoke detection, regardless of the size, configuration and storage requirement
- Flexibility in design of pipe networks such as vertical pipe runs and in-rack protection, ensuring a cost-effective and fit for purpose fire engineering solution
- Detects the incipient (precombustion) stage of a fire which drastically reduces business disruption, asset damage and the potential risks to the safety of personnel
- Customisable to address the unique environmental characteristics of individual facilities, such as the external pollution and airflow from the dispatch and delivery areas

VESDA®



- Add-on Analytics, with VESDA-E VEU/VEP, can identify the presence of unwanted diesel smoke from truck exhausts as well as higher than normal levels of dust that may contaminate stock
- Simple installation, verified performance at commissioning and low maintenance, saving both time and expense
- The Xtralis Refrigerated Storage Sampling Kit allows sampling from outside the cold environment providing reliable operation, and cost-effective and convenient installation and on-going maintenance

WHY IDtek

IDtek is a complete fire and security solutions provider able to engineer and manage both security and fire protection projects from concept to completion. IDtek focuses on engineered, rather than deemed to comply fire solutions making for an ideal partner to deliver projects that are measured and made to meet our customers' business needs. Utilising our experienced and well trained technical staff we are able to deliver advanced, dependable and integrated smoke detection systems like VESDA Very Early Warning ASD system. With its ability to operate reliably in difficult environments such as cold storage rooms and freezers, Vesda systems are for us, the obvious choice.

Craig Adendorff
IDtek

“The ultimate smoke detection solution in coldstore and freezer environments where normal detection systems are simply unable to operate reliably. VESDA overcomes all the limitations of conventional fire detection methods.”

Craig Adendorff
Key Account Manager – IDtek Solutions
Pick n Pay

“A fire in the facility could have far reaching consequences as this is Pick n Pay's primary cold storage distribution centre in the Western Cape Province of South Africa. VESDA meets our exacting need to have a smoke detection system that can both operate reliably in relatively harsh environments and provide a very early warning of a potential fire. This very early warning minimises the likelihood of product contamination, facility and asset damage, as well as distribution downtime. Maintenance is simple and low cost with fewer devices to manage and easy access that doesn't interfere with Pick n Pay's day to day operations.”

Richard van der Byl
Solution Station Consulting Engineers

Project:

Cold Stores & Freezers
Pick 'n Pay

End User/Location:

Cape Town, South Africa
[Nationwide South Africa]

Industry:

Supermarket chain - Logistics
Services

Installation Partners:

IDtek

Solution:

VESDA VLI
VESDA VLC
VESDA VLP

Benefits:

- Reliable detection in Freezer environment (-40°C to -15°C (-40°F to 5°F))
- Early warning of fire conditions
- Lower installation and maintenance costs
- Reliable technology with very low probability of nuisance alarm
- Commissioned to suit the environment