



VESDA SENSEPOINT XCL - LARGE BORE ASD SYSTEM

PROTECTS RAIL / METRO TUNNELS AND
INFRASTRUCTURE FROM INVISIBLE DANGERS



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CONSEQUENCES OF SMOKE OR GAS IN RAIL / METRO TUNNELS

Fires within rail/metro facilities can occur for several reasons, originating from high-density equipment rooms, electrical faults, hydrogen gas in battery rooms, gas leaks, arson and cigarette smoking. Some of the hazards in rail / metro tunnels are due to:

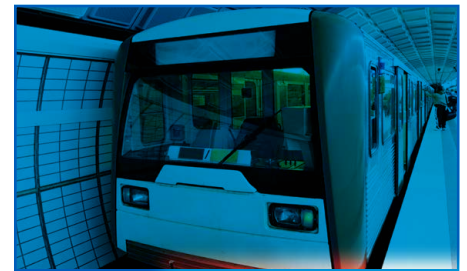
- Methane (CH₄) (flammable) leakage from utility gas lines
- Hydrogen Sulphide (H₂S) (flammable and toxic) leakage from local sewerage system and nearby landfill sites,

- Oxygen (O₂) deficiency
- Carbon Monoxide (CO) and Nitrogen Dioxide (NO₂) from underground car parks

34% of fire caused in rail and metro tunnels are due to electrical faults generated from the large amount of equipment and cabling located along the track. The overheating of PVC, PE or rubber electrical wires release toxic gases Carbon Monoxide (CO), Carbon Dioxide (CO₂) and Hydrogen Sulphide (H₂S) during electrical faults. Potential

explosion can also occur from the electrochemical reaction from charging the lead-acid batteries (in battery room), that generates highly flammable hydrogen gas (off-gassing).

Providing an environmental solution with ability to early detect both smoke and gas throughout the tunnel (rail / metro), safe guarding lives and assets forms therefore, an essential part of the total safety infrastructure for rail / metro tunnels.



INTRODUCING VESDA SENSEPOINT XCL – LARGE BORE ASD SYSTEM

Extending its world-renowned VESDA aspirating smoke detection (ASD) technology, Xtralis has introduced the VESDA Sensepoint XCL – Large Bore gas detector that connects to the Xtralis VESDA smoke detector to deliver a combined smoke detection and environmental monitoring solution.

The benefits of VESDA Sensepoint XCL – Large Bore gas detectors are:

- Seamless incorporation onto Xtralis ASD pipe networks without complex system redesign, electrical cabling or tubing
- 24/7 active sampling of gas threats through multiple sampling holes on pipe network
- Compact in size with robust housing, suitable where space is a premium
- Capable of remote sampling – no need to enter restricted / secure areas, or use special access equipment
- Can be located at a central location allowing easy and safe access for inspection, service and maintenance
- Easily configured, commissioned and maintained through embedded Bluetooth wireless connection to smart device



COMBINED SMOKE AND GAS DETECTION

RELIABLE PERFORMANCE

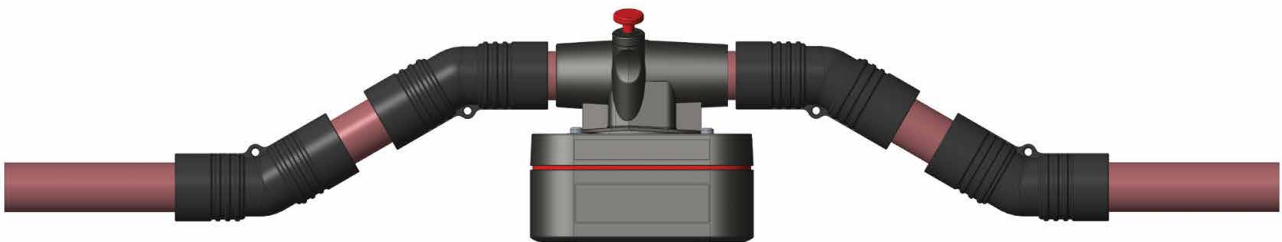
- The flow of smoke and gas in large bore pipes is monitored by the Xtralis ASD detector
- Absolute smoke measurement is provided with the industry's only optical clean-air bleed that guarantees reliable performance throughout operational life

FLEXIBLE SYSTEM INTEGRATION

- Real-time smoke and gas data can be sent to a number of control points through the use of a wide range of high- and low-level interfaces including FACP, BMS, PLCs and HVAC systems, simple audio/visual notification appliances

BENEFITS

- 24/7 active monitoring of smoke and gas threats
 - The same ASD air sampling pipe network is used for the transportation of smoke and gas
 - Remote sampling allows the mounting of detectors at a central location
 - Flexible deployment of sampling holes at different heights and locations appropriate to the density of the target gas (i.e. ceiling detection for H₂, head height detection for CO)
- Lower total cost of ownership when compared to installing and maintaining conventional smoke and gas detectors:
 - Detectors' central mounting location enables easy access for service and maintenance
 - No need to access detection zone
 - Modular design allows parts to be replaced in the field



VESDA Sensepoint XCL – Large Bore Connect to Xtralis ASD Pipe Network

ABOUT XTRALIS



Xtralis is the leading global provider of powerful solutions for the very early and 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 valued and irreplaceable assets and infrastructure belonging to the world's top governments and businesses.

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