



A CLOSER LOOK AT ASPIRATING SMOKE DETECTION SYSTEMS

Protecting spaces with properly designed Aspirating Smoke Detection Systems can solve many problems!

What is an Aspirating Smoke Detector?

An aspirating smoke detector (ASD), also referred to as air sampling smoke detector, draws in air from a protected space through sampling tubes. Tubes in the protected space have multiple inlets that air is sampled from. These inlets replace traditional spot detectors. A single ASD can replace all the traditional spot detectors for a protected space.

Nationwide Security Corporation's ASD detectors have a programable sensitivity range. These advanced detectors have a significantly wider range of sensitivity than traditional smoke detectors. This unique design can have many advantages over traditional smoke detectors in many applications.

What are some of the advantages of Aspirating Smoke Detection Systems?

Early Detection – Traditional smoke detectors rely on the smoke propagation to get the smoke into the detector. For slow burning and small fires this takes time. ASD draws smoke in from the protected space using a fan, reducing the time it takes for smoke to reach the detector. This along with the ability to detect smaller amounts of smoke allows for the ASD to have the earliest detection.

Reliability – The air entering the ASD goes through a chamber that removes contaminants before entering the detection chamber. This allows the ASD to be significantly less susceptible to nuisance alarms. The detection chamber has a programmable sensitivity range that is configured for your protected space. The advanced electronics in the detector can be reliably set for extreme sensitivity. The system also accurately measures the airflow into the detector. This monitors the amount of air flowing through the system and will notify service personnel if a sampling inlet is blocked or broken.

Serviceability – Because a single ASD can replace multiple traditional smoke detectors and is located at a serviceable location, maintenance is reduced. This detector can easily be cleaned and can be used in environments where contamination would make traditional detectors impractical. Cost of annual testing of the system can be greatly reduced. Since the system monitors airflow smoke, smoke entry testing is only required in one location for a protected space. This will allow for easier and less disruptive testing.

Tamper Resistance – The air flow is continuously monitored by the ASD and it will notify you if the system is damaged or if someone intentionally blocks a sampling tube inlet. Traditional smoke detectors can be covered or blocked without notice until inspected or tested. The ASD detector can be placed in a secure location and air can be sampled from a location that may be subject to vandalism.

Application – Because of the many advantages listed, ASD may be the best choice to protect a space. In applications where you want the fastest, earliest detection, with minimal smoke, ASD is the best choice. In many places where traditional smoke detectors are a problem because of the environment, maintenance, security, or nuisance alarms an ASD may be the best solutions. ASD detectors can be used to protect many spaces where traditional detectors cannot be used.

NATIONWIDE SECURITY CORPORATION – PROTECTION YOU CAN TRUST!

NATIONWIDE SECURITY CORPORATION CAN DESIGN AND
INSTALL ASPIRATION SMOKE DETECTOR SYSTEMS TO
PROTECT YOUR SPACE, MEET YOUR NEEDS, AND REDUCE
COST OF OWNERSHIP.

Our ASD systems have multiple programable sensitivity levels that can be used for alert or fire with a sensitivity range from 0.008-6.25% obscuration per foot. Many traditional smoke detectors have a fixed sensitivity between 3.0% and 3.5 % obscuration per foot. Traditional detectors with programable sensitivity have a typical range of .5% to 4.0% obscuration per foot.

Some Aspiration Smoke Detection Applications

Data Centers | Clean Rooms | Correctional Facilities
Cold Storage | Seasonal Buildings | Athletic Facilities
Stadiums | Warehouses | Indoor Large Open Spaces
Storage Facilities | Barns



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