

# ANTIDET BARRIER

## Explosion Isolation System

The ANTIDET BARRIER Explosion Isolation System delivers fast, reliable explosion isolation across industrial piping, ductwork, and conveying systems. Capable of stopping propagation in both directions, ANTIDET keeps your people and equipment safe.

The ANTIDET BARRIER System is a state-of-the-art explosion isolation system designed to prevent the propagation of explosions between pieces of connected industrial equipment.

Initiated by an optical (flame) or pressure sensor, the isolation cannisters discharge a suppressant that fills the interconnecting vessel creating a barrier that stops the explosion from traveling to connected equipment. Since there are no mechanical devices to be damaged by impact from the pressure wave, all that is required to go back to normal operation is to replace the bottle(s) and reset the system. These systems are ATEX certified and NFPA compliant for dust explosion classes St1 and St2 (including metal dusts).

These systems can be used with passive explosion protection devices (venting) but work most effectively when integrated with the ANTIDET SUPPRESSOR Explosion Suppression System.

## CONTACT US

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**EARLY DETECTION.  
INSTANT ISOLATION.  
TOTAL PROTECTION.**

The ANTIDET BARRIER System instantly discharges an extinguishing agent into the inlet/outlet of the protected equipment, actively interrupting the combustion process and stopping explosion transfer.



**VST ENGINEERING**

Hallam-ICS is proud to partner with VST Engineering who designs and manufactures the ANTIDET BARRIER Explosion Isolation Systems.

VST Engineering has been providing explosion prevention and protection equipment to Europe since 1997, and to other regions of the world in the following years. Their extensive experience and proven technology are now available in the U.S. through Hallam-ICS.



**Hallam ICS**  
AN EMPLOYEE OWNED COMPANY

**KEEPING YOUR FACILITY AND EMPLOYEES SAFE  
FROM THE HAZARDS OF COMBUSTIBLE DUST**

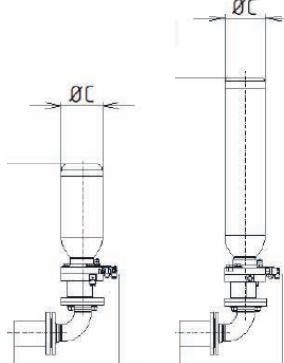


COMBUSTIBLE DUST SAFETY  
Protect Lives. Reduce Risks of Explosions.

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## Explosion Isolation System

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## HOW IT WORKS

1. DETECTION
2. CONTROL
3. SUPPRESSION

SENSES AN EXPLOSION IN THE PROTECTED EQUIPMENT.  
TRIGGERS RAPID RESPONSE TO PROTECT CONNECTED EQUIPMENT.  
INSTANTLY RELEASES EXTINGUISHING AGENT TO PREVENT PROPAGATION.

## APPLICATIONS

The ANTIDET BARRIER System provides deflagration isolation in applications where typical passive devices have limitations, including where:

- High dust concentrations are present
- Bidirectional explosion propagation must be prevented
- Nonstandard geometries prevent the use of mechanical devices
- Protecting large ducts requires extensive structural support of passive devices

It is most often used on interconnecting ducts, pipes, and chutes, but can also be applied to equipment (like conveyors) which might serve to transmit a deflagration between pieces of protected process equipment.

## ADVANTAGES

- Suitable for any geometry, including oddly shaped chutes
- No limit on duct/pipe elbows or proximity to them
- Works with high dust concentrations
- Simple, noninvasive installation
- Minimal downtime after an event
- No damage to protected equipment

## KEY FEATURES

- High suppression efficiency
- Advanced control algorithm
- Real-time data logging (operation + events)
- Easy integration with process control systems
- Suitable for indoor or outdoor installation
- Certified for classes St1 & St2 (including metal dusts)

## TECHNICAL SPECIFICATIONS

Applicable dust classes:

St1, St2, including metal dusts

Max. dust explosion severity (Kst):

300 bar-m/s

Extinguishing agents:

Food Industry

Baking soda

General Industry

Pulvex

Metal Dusts

Furex

Driving gas:

Nitrogen (N<sub>2</sub>) at 40 bar

Surface finish:

Powder-coated, RAL 1023 (Traffic Yellow)

Operating temperature range:

-22°F (-30°C) to 176°F (80°C)



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