

# ANTIDET SUPPRESSOR

## Explosion Suppression System

**EARLY DETECTION.  
INSTANT SUPPRESSION.  
TOTAL PROTECTION.**

When milliseconds count, the ANTIDET SUPPRESSOR Explosion Suppression System delivers unbeatable protection. Designed to detect threats instantly and neutralize them before damage occurs, ANTIDET keeps your people and equipment safe.

The ANTIDET SUPPRESSOR System consists of pressure and/or optical (flame) sensors, a control unit, and extinguishing elements. These systems are ATEX certified and NFPA compliant for dust explosion classes St1 and St2 (including metal dusts).

By identifying an explosion at an early stage - before it fully develops - and actively intervening in the explosion process, the system prevents destructive pressure buildup and successfully suppresses the deflagration. As a result, the protected equipment remains undamaged, which means it can return to normal operation much faster than those protected with venting.

These systems can be used with passive isolation devices but work most effectively when integrated with the ANTIDET BARRIER Explosion Isolation System.

The ANTIDET SUPPRESSOR System detects the early signs of an explosion (pressure or flame) and immediately injects an extinguishing agent into the protected equipment.



**VST ENGINEERING**

Hallam-ICS is proud to partner with VST Engineering who designs and manufactures the ANTIDET SUPPRESSOR Explosion Suppression 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.



## CONTACT US

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**Hallam** **ICS**  
AN EMPLOYEE OWNED COMPANY

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

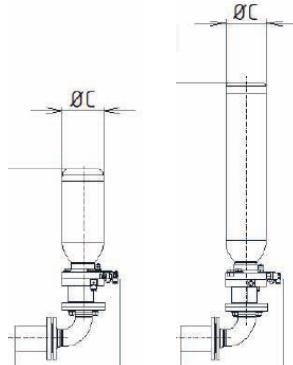


COMBUSTIBLE DUST SAFETY  
Protect Lives. Reduce Risks of Explosions.

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## HOW IT WORKS

- 1. DETECTION** SENSES AN EXPLOSION IN ITS EARLIEST STAGE.
- 2. CONTROL** TRIGGERS RAPID RESPONSE TO DISRUPT THE EXPLOSION.
- 3. SUPPRESSION** INSTANTLY RELEASES EXTINGUISHING AGENT TO STOP IT AT THE SOURCE.

## APPLICATIONS

The ANTIDET SUPPRESSOR System is often applied indoors where flameless or ducted venting is not possible or acceptable. It is also used (indoors or outdoors) on pieces of equipment that are critical to production since the system's superior protection allows equipment to be returned to service much faster. Venting still allows the explosion to happen and exposes the protected equipment to elevated pressures and fire. The ANTIDET SUPPRESSOR System prevents the explosion from fully developing, minimizes the damage to the equipment, and allows a return to production in as little as a couple hours. It is most often used on equipment like mills, shredders, conveyors, dust collectors, cyclones, elevators, and dryers.

## ADVANTAGES

- Active explosion PREVENTION
- Simple, noninvasive installation
- No safety zones required
- No risk of secondary explosions or fire
- 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

Max. concentration for metal dusts: 200 g/m<sup>3</sup>

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)

