

FIKE EXPLOSION PROTECTION

Preventative and Mitigation Solutions for Combustible Dust Hazards

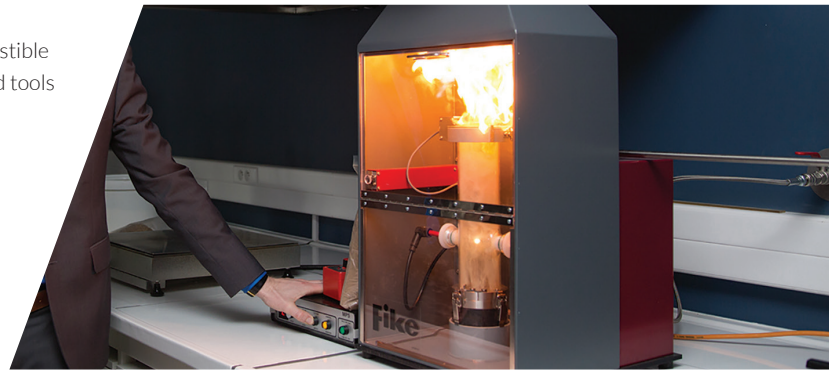
To protect your workers from combustible dust explosions, avoid fines and comply with NFPA/ATEX standards, you need a partner you can trust. Learn why, with 75 years of experience, Fike is uniquely capable of protecting your people and processes from devastating explosions.

HOW FIKE CAN SOLVE YOUR COMBUSTIBLE DUST PROBLEMS

1 Hazard Identification

Do you suspect—or know—that your facility handles combustible dust? Regardless of your industry, Fike has the expertise and tools required to identify hazards through:

- Consultative Services/Facility Walkthroughs
- Explosion Risk Assessments
- Dust Testing Services
- Dust Hazard Analysis (DHA)
- Computational Fluid Dynamics (CFD) Analysis



2 Protection Strategies

Once your hazard areas have been identified, Fike can design, manufacture and help install comprehensive protection strategies, which ensure:

- Reliability of the system for the specific application
- Proper product selection, sizing and positioning
- Compliance with ATEX/NFPA standards
- Successful testing by Fike's Remote Testing Facility
- Best-in-industry turnaround and delivery times



3 Maintenance and Service

To remain compliant with ATEX/NFPA standards, explosion protection devices must be serviced periodically. Fike's maintenance and service advantages include:

- Widespread global technician network to help minimize downtime
- Both emergency maintenance or scheduled maintenance offerings
- Training program available to certify your staff to perform internal maintenance
- All services required to maintain NFPA/ATEX compliance



TYPES OF PROTECTION STRATEGIES

Protecting the Vessel

The Hazard: If expanding pressure from a deflagration exceeds a vessel's MAWP (maximum allowable working pressure), the enclosure will begin to deform and may explode.



Passive Venting Systems

Designed to burst at a controlled pressure, providing a planned pathway for expanding gases and flames to escape. For indoor venting or in manned areas, Fike offers flameless venting that fit explosion vent panels to suit your application.



Active Suppression Systems

Detects and suppresses a deflagration with pressurized chemical suppression bottles, all within hundreds of milliseconds. Active systems are often preferred over passive systems because of the chemical suppression's ability to mitigate deflagrations in their very early stages to minimize the risk.



WORKING WITHIN YOUR BUDGET AND SCHEDULE

We understand that immediately protecting your entire facility may be challenging from budgetary and timing perspectives. That's why Fike offers a Phased Explosion Protection Strategy, where our team can work with you over months or even years to prioritize hazards to fit your budget and production schedule.

PROBLEM? SOLVED.

To learn more about Fike's explosion protection solutions please contact your local Fike representative.

Isolating Flames

The Hazard: Pressure and accompanying flames propagate through pipes or ducts, providing an ignition source into interconnected equipment with similar combustible dust conditions.



Passive Explosion Isolation Systems

Mechanically activated by the pressure wave itself, protecting upstream and downstream vessels from secondary explosions.



Active Explosion Isolation Systems

Powered by Fike's detection and control systems to close within hundreds of milliseconds of ignition, isolating interconnected vessels from the expanding deflagration. Active isolation may include mechanical and/or chemical barriers, either of which are ideal for various hazards and applications.