APPLICATION PROFILE

PROTECTING SPRAY DRYERS WITH EXPLOSION SUPPRESSION

NEED FOR PROTECTION

The powders produced from liquid feedstocks are suspended in the spray dryer at elevated temperatures presenting possible fire and explosion hazards. in the production of food or pharmaceutical products, there could also be residue solvents (hybrid mixtures), that increase explosion hazards.

BENEFITS

Protecting spray drying equipment from explosions will:

- Minimize costly replacement and/or repair of the spray dryer
- Prevent possible death or injury to personnel
- Protect profits by reducing lengthy plant shutdown and loss of product

WHY SUPPRESSION

Preventative protection techniques (inerting, fuel concentration control) can reduce the possibility of an explosion. But human error, equipment failure, and lack of maintenance practices can all render these techniques ineffective.

Explosion suppression is a responsive technique that:

- Contains the explosion, preventing the release of pressure, fire, and toxic materials
- Greatly reduces the deflagration pressure to safe levels
- Extinguishes the combustion before fire is produced
- Utilizes FM approved systems and sanitary designed components
- Interfaces with process equipment (rotary valves, blowers, etc.) to enhance protection

HOW DOES SUPPRESSION WORK

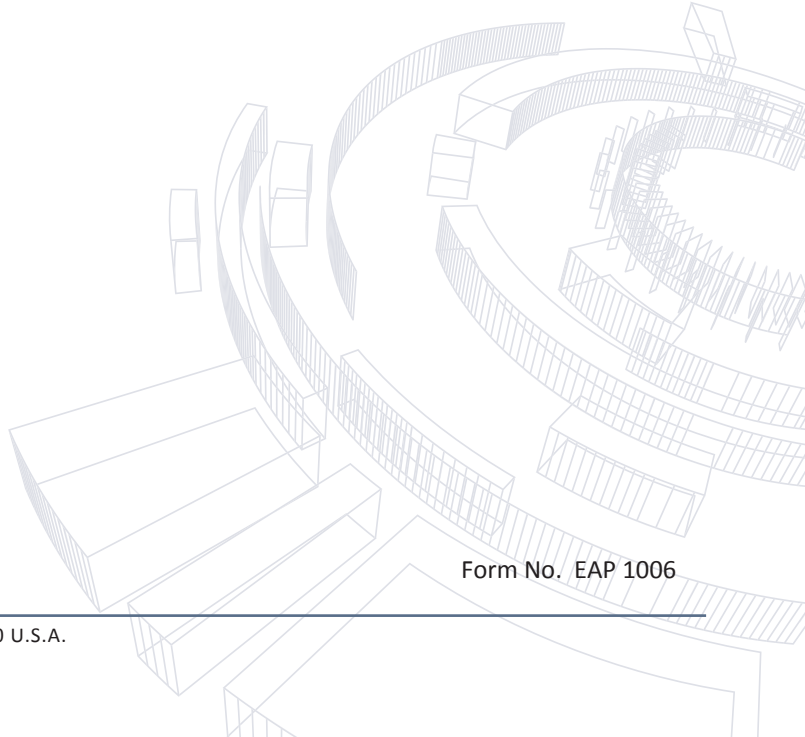
Basically, explosion suppression is accomplished in the following steps:

- Detection
- Control
- Agent Injection
- Suppression

WHY CHOOSE FIKE

Fike systems are the fastest. Due to our patented suppressant container and nozzle design, suppression agent is rapidly injected allowing for the lowest Total Suppressed Pressure (P_{red}).

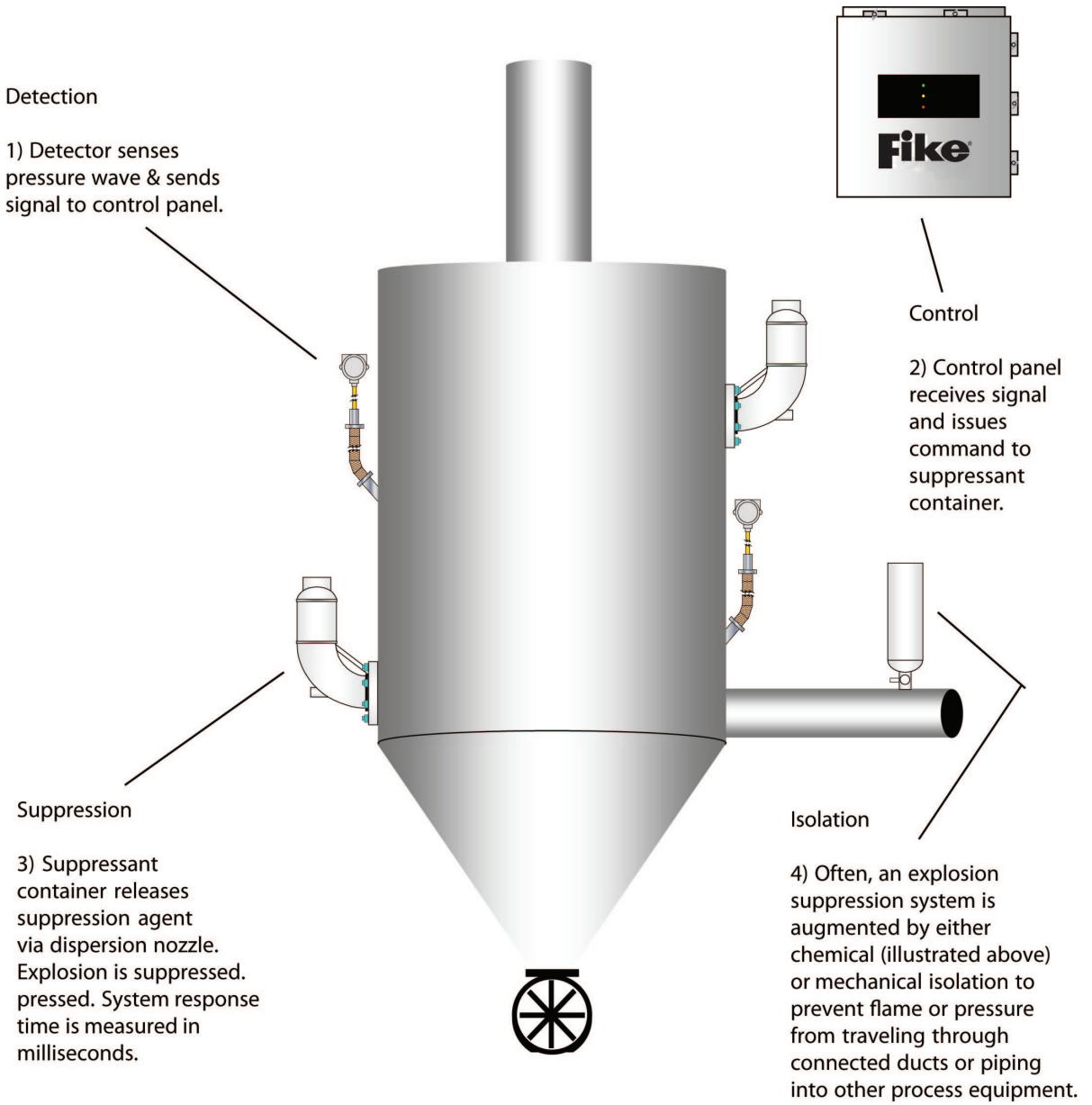
Fike systems are the most reliable. Our systems have been extensively tested by third party organizations, such as Ciba in Switzerland. Fike systems have never experienced a system failure in the field.



Form No. EAP 1006

704 SW 10th Street • P.O. Box 610 • Blue Springs, Missouri 64013-0610 U.S.A.
Phone: 816•229•3405 • www.fike.com

FOUR STEPS TO SUCCESSFUL EXPLOSION PROTECTION



Form No. EAP 1006, October 1996. Specifications are subject to change without notice.