The Solution

"Ducts conveying dry material released by equipment having a high frequency of generated sparks shall be...

(1) Equipped with a listed spark detection and extinguishing system installed downstream from the last material entry point and upstream of any collection equipment..."

- NFPA 684.2.3.3. 2017 Edition

HERE’S HOW IT WORKS

As a spark travels through the duct work of your collection system, it is instantly identified by the Flamex infrared detector flush mounted to the blow pipe. The system initiates water-flow through strategically placed nozzles to establish an instantaneous wall of water inside the duct, effectively extinguishing the sparks or embers.

A potential damage of this magnitude is best handled with preventative measures that are immediate, effective and reliable. The Flamex system detects and extinguishes a spark in an average of less than 0.025 of a second... well before it reaches a filter or collection bin. That may be the quickest pay-back you’ll ever receive on a business investment.

Each Flamex system is carefully constructed of the finest and most durable materials available. Additionally, we provide alternative detectors and extinguishing agents when necessary to tailor your system to meet the specific needs of the working environment.

Flamex infrared Detectoer Mounted to Duct Wall

The Logical Choice

Originally developed by a dedicated group of engineers who recognized the hazards created by dust collection and air filtration systems, Flamex is the world’s premier spark detection and extinguishing system. It is also the first system of its kind to earn Factory Mutual Approval. The Flamex Inc. has been at the forefront of safety technology industry since its inception and is receiving its tenth decade of proven performance and fire prevention.

Flamex Inc. is the exclusive North American distributor for the systems and has provided thousands of installations across the Western Hemisphere with safe, reliable and efficient fire prevention. Their products represent a wide variety of industries that require pneumatics conveying of dust and other contaminants.

EXCELLENCE IN MANUFACTURING

Every Flamex system is built to the nation’s highest standards by our parent company, Minimax GmbH & Co. KG. Located in Bad Oldesloe, Germany, Minimax has obtained ISO 9001 certification and maintains a rigorous quality control standard to ensure that their Flamex system is both durable and reliable.

We are a winner of the World’s 100 Best Award. We received this recognition from the Wall Street Journal, Business Week, and the United States Chamber of Commerce, which presented the award to companies that strive for excellence in all of their products and services.

EXPERIENCE WHERE IT COUNTS

Our staff of highly trained and well-seasoned professionals has taken the product through fire generation of developmental improvement and is uniquely qualified to assess your facility and consult with you on a recommended course of action. It is determined that our system is the best solution for your particular Flamex to fit comfortably into your work environment in the most unobtrusive and cost effective manner.

As your company grows, the Flamex systems can be easily modified to grow with you.

SERVICE AFTER THE SALE

Our support doesn’t stop after your Flamex system has been installed. We provide a fully staffed maintenance department with experienced technicians to assist you with any maintenance inspection, repairs or modifications that may be required. Our location in Greensboro, North Carolina boasts a large inventory of spare parts, which can be shipped to you with same day service in most cases. We also offer a complete electronic repair facility with services that are competitively priced. For more information on how a Flamex system can help provide you with a safer, more cost effective work place, please contact our service department at the address below.
**The Problem**

If combustible dusts are collected, there is a fire and explosion hazard in the collector, regardless of bag construction.”

**THE PROBLEM**

If your company utilizes pneumatic conveying and air filtration systems in the manufacturing process, you are at risk for the hazards resulting from dust fires and explosions. The industries at highest risk employ machines that can easily produce a spark. It is then picked up by the pneumatic system and transported along with finely divided particles. If that spark reaches the collector or the duct, it will have the potential to ignite combustible dusts and even fires are generated.

**IT CAN HAPPEN IN A MATTER OF SECONDS**

Even one such event can result in damages ranging from costly repairs and downtime to loss of plant facilities or even worse...an expensive price to pay for something that can be readily avoided.

**FLAMEX® Components**

![FLAMEX® CONTROL CONSOLES](image)

**FLAMEX® DETECTORS**

These highly advanced, infrared detectors are engineered for the immediate identification of sparks or flame in industrial environments. "Dedicated" spark detectors are available for applications where ambient light is present.

**OPTOELECTRONIC® FUX 3001-E**

Infrared optics in ambient light applications.

**Additional System Compatible Detectors**

The system can also utilize heat, flame, smoke and other detector technologies to provide more comprehensive facility protection.

**FMZ 4100 GAB 6**

2 zone capacity evacuation panel. 17 W x 11 H x 6 D

**FLE 3000**

Single zone evacuation panel. 12 W x 9 H x 6 D

**FMZ 5000 MOD 4**

1 zone capacity modulated control panel. 14 W x 12 H x 6 D

**FMZ 5000 MOD 12**

1 zone capacity modulated control panel. 14 W x 24 H x 9 D

**Superior Nozzle Design**

Exclusively with FLAMEX! The Flamex stainless steel, swivel nozzle monitors flow with the inside wall of your duct and produces a wall of water which effectively covers the entire cross section of the duct.

**FLAMEX® ACCESSORIES**

Select a wide variety of accessories designed to enhance monitoring and supervisory capabilities while tailoring the system to fit the individual needs of your company.

![FLAMEX® EXTINGUISHING DEVICES](image)

**FLAMEX® EXTINGUISHING DEVICES**

Our versatile extinguishing sets are engineered for immediate and reliable response. Designed to provide only the minimal amount of water for proper containment. Spray tips are available with either a swivel or interior nozzle arrangement that provide maximum effectiveness for your specific applications.

**FLAMEX® EXTINGUISHING ASSEMBLY**

Solenoid Valve

**Event Printer**

Used to direct the air flow to the monitoring station upon detection of sparks or reflective, optical patterns at the gate. May help the user comply with NFPA 664 and 654.

**Flow Monitor**

Indicates actual water flow through the Flamex stainless steel valve.

**Flashpoint Booster Pump**

Increases extinguishing water pressure in duct facilities where available pressure is insufficient.

**External Test Light System**

Simulates spray activity from an external source to allow the testing of each zone of detectors from the control panel location.

**Optional Air Purge Fittings**

Available for use with Flamex control panels to help keep the detector lens clean in particularly difficult applications.

**24 PPM Booster Pump**

Increases extinguishing water pressure in duct facilities where available pressure is insufficient.
The Solution

"Ducts conveying dry material released by equipment having a high frequency of generated sparks shall be...

(1) Equipped with a listed spark detection and extinguishing system installed downstream from the last material entry point and upstream of any collection equipment..."

- NFPA 664 9.2.2.2.2 2009 Edition

A potential threat of this magnitude is best handled with preserve means that are immediate, effective and reliable. The Flamex system detects and extinguishes a spark in an average of less than 0.2 seconds...well before it reaches a filter or collection bin. The system automatically resets itself with no downtime or messy clean-up.

Infrared detectors flush mounted to the blow pipe. The system initiates water-flow through strategically placed nozzles to establish an instantaneous wall of water inside the duct, effectively extinguishing the sparks or embers.

As a spark travels through the duct work of your collection system, it is instantly identified by the Flamex equipped with a listed spark detection and extinguishing system installed downstream.

The Logical Choice

Originally developed by a dedicated group of engineers who recognized the hazards created by duct collection and air filtration systems, Flamex is the world’s premier spark detection and extinguishing system. It is also the first system of its kind to earn Factory Mutual Approval.

Flamex has been the recipient of many industry awards and is entering its twelfth decade of proven explosion and fire prevention.

Flamex Inc. is the exclusive North American distributor for the system and has provided thousands of installations across the Western Hemisphere with safe, reliable and efficient fire prevention. These fire suppression systems require periodic conveying of dust and other combustibles.

EXCELLENCE IN MANUFACTURING

Every Flamex system is built to the industry’s highest standards by our parent company, Minimax GmbH & Co. KG. Located in Bad Oldesloe, Germany, Minimax has obtained ISO 9001 certification and maintains a rigorous quality control standard to ensure our customers that their Flamex system is both durable and reliable.

Our staff of highly trained and well-seasoned professionals has taken the product through live generation of developmental improvements and is second to none in maintaining a high quality of service in many cases. Our location in Greensboro, North Carolina boasts a large inventory of spare parts, which can be shipped to you with same day service in many cases. We also offer a complete electronic repair facility with services that are competitively priced. For more information on how a Flamex system can help provide you with a safer more cost effective work place, please contact us at the address below.

Visit our web site at www.sparkdetection.com

4365 Federal Drive  Greensboro, NC 27410-8116
ph. 336.298.2933  336.298.2948
email: flamex@sparkdetection.com

Factory Mutual Approval Numbers:

"A fire hazard shall be deemed to exist in the system wherever dry wood particulate is collected or conveyed..."


Why RISK a dust EXPLOSION?

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FLAMEX INC.
The Problem

"If combustible dusts are collected, there is a fire and explosion hazard. Be the collector, regardless of bag construction." — Factory Mutual Engineering and Research

**THE PROBLEM**

If your company utilizes pneumatic conveying and air filtration systems in the manufacturing process, you are at risk for the hazards resulting from dust fires and explosions. The industries at highest risk employ machines that can easily produce a spark. It is then picked up by the pneumatic system and transported along with filtered particles. If that spark reaches the collector or storage bin, an explosion or fire is also a certainty.

IT CAN HAPPEN IN A MATTER OF SECONDS

The normal operation of many production machines can easily produce a spark. It is then picked up by the pneumatic system and transported along with filtered particles. If that spark reaches the collector or storage bin, an explosion or fire is also a certainty.

From one such event can result in damages ranging from costly repairs and downtime to loss of plant facilities or even lives... an expensive price to pay for something that can be readily avoided.

**FLAMEX COMPONENTS**

**FLAMEX DETECTORS**

Three highly advanced infrared detectors are engineered for the immediate identification of sparks or flames in industrial environments. "Dedicated" spark detectors are available for applications where ambient light is present.

**FUX 3001 L-1**

Fiber optic probe allows the detector housing to remain in areas where high ambient temperatures are present. " barrage detection" for applications where ambient light is present.

**OPTICLAD®**

Infrared arrays are available for applications requiring immediate identification of sparks or flames in industrial environments.

**FUX 3001 E**

Fiber optic arrays are available for applications requiring immediate identification of sparks or flames in industrial environments.

**ADDITIONAL SYSTEM COMPATIBLE DETECTORS**

The system can also utilize heat, flame, smoke and other detectors to provide more comprehensive facility protection.

**FLOW MONITOR**

Indicates actual water flow through the Flamex Extinguishing System. For immediate and reliable response. Designed to provide the minimum amount of water for proper extinguishment. Fire pits are available with either a sidewall or interior nozzle arrangement that provide maximum effectiveness for your specific application.

**FLOW MONITOR**

Indicates actual water flow through the Flamex Extinguishing System. For immediate and reliable response. Designed to provide the minimum amount of water for proper extinguishment. Fire pits are available with either a sidewall or interior nozzle arrangement that provide maximum effectiveness for your specific application.

**ALARM DEVICES**

Remote alarm horns and strobe lights can be used with the Flamex to enhance system activity. Available in 24VDC and 110VAC.

**EXTERNAL TEST LIGHT SYSTEM**

Simulates actual activity from an external source to allow the testing of each zone of detectors from the control panel location.
**The Solution**

“Ducts conveying dry material released by equipment having a high frequency of generated sparks shall be...

(1) Equipped with a listed spark detection and extinguishing system installed downstream from the last material entry point and upstream of any collection equipment...” - NFPA 664 9.2.2.5. 2007 Edition

**The Logical Choice**

Originally developed by a dedicated group of engineers who recognized the hazards created by dust collection and air filtration systems, Flamex is the world’s premier spark detection and extinguishing system. It is also the first system of its kind to earn Factory Mutual Approval. The Flamex has been the recipient of woodworking industry’s prestigious Challenger Award and is entering its twelfth decade of proven explosion and fire prevention.

Flamex® Inc. is the exclusive North American distributor for the system and has provided thousands of installations across the Western Hemisphere with reliable and efficient fire protection. These facilities represent a wide variety of industries that require pneumatic conveying of dust and other combustibles.

**Flamex® Inc.**

Awar d Recipient

EXCELLENCE IN MANUFACTURING

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**Why RISK an EXPLOSION?**

SPARK DETECTION AND EXTINGUISHING SYSTEM

4005 Bolcho Drive, Greensboro, NC 27402-9126
ph. 336.299.2933 fx. 336.299.2944
email: flamex@sparkdetection.com
Visit our web site at www.sparkdetection.com

**A fire hazard shall be deemed to exist in the system wherever dry wood particulate is collected or conveyed...** - NFPA 664 9.2.1.4. 2007 Edition

Extraction Fan

**Detect and Extinguish**

**Detect and Extinguish**