THE PROBLEM
If your company utilizes pneumatic conveying and air filtration systems in the manufacturing process, you are at risk for dust explosions 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 highly combustible wood chips, dust or other finely divided particles. If that spark reaches the combustible material, an explosion or fire is almost certain.

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

**Flamex® Components**

The Problem

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

—Focused Mining and Engineering Research

The Problem

**FLAMEX® CONSOLES**

Flames control panels are engineered with the latest technological features including: audible and visual alarms, 24-hour minimum back-up power source, maintenance indicator and internal supervision for both detector and valve systems.

Additionally, every Flames control panel comes with auxiliary valves which can enhance plant safety by allowing automatic equipment shut downs as a result of smoke alarms, dampers or high-speed abort gates.

**FLAMEX® DETECTORS**

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

**OPTEC® FUX 3001-E**

Infrared optec® is a unique detection designed to provide optimum and reliable protection.

**FLAMEX® ACCESSORIES**

Includes a wide variety of accessories designed to provide comprehensive fire protection and monitoring capabilities. Either will suit the system to limit the individual needs of your company.

**ALARM DEVICES**

Remote alarm horns and strobe lights can be used with the FlameX to announce system activity. Available in 24VDC and 120VAC.

**FLAMEX® EXTINGUISHING DEVICES**

One versatile extinguishing system is engineered for immediate and reliable response. Designed to provide only the minimal amount of water for proper extinguishment. Spout kits are available with either a sidewall or interior nozzle arrangement that provide maximum effectiveness for your specific applications.

**FLAMEX® EXTINGUISHING DEVICES**

Includes a wide variety of accessories designed to provide comprehensive fire protection and monitoring capabilities.
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 8.2.2.2.5 - 2007 Edition

HERE'S HOW IT WORKS

At a spark travels through the duct work to your collection system, it is instantly identified by the Flamex infrared detection head mounted to the blow pipe. The system instantaneously shutters strategically placed nozzles to establish an instantaneous wall of water inside the duct, effectively extinguishing the sparks or embers.

The system automatically resets itself with no down time or messy clean-up.

A potential disaster 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 0.02 of a second... well before it reaches a filter or collection bin. This may be the quickest pay-back you'll ever receive on an 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.

The Flamex has been the recipient of the 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 safe, reliable and efficient fire prevention. These facilities represent a wide variety of industries that require pneumatic conveying of dust and other combustibles.

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 pioneer 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 the woodworking industry's prestigious Challenger Award and is entering its twelfth decade of proven explosion and fire prevention.

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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 both durable and reliable.

EXPERIENCE WHERE IT COUNTS

Our staff of highly trained and well-seasoned professionals has taken the product through live generation of developmental improvements and is trained to move your facility and consult with you on a recommended course of action. It is determined that our system is the best solution for your automatic Flamex to fit your work environment in the quickest possible time. As your company grows, the Flamex system 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, inspections, 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 many cases. We also offer a complete electronics repair facility with services that are competitive 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.

Awards Recipient

1978 Challenger Award Recipient

Visit our web site at www.sparkdetection.com

Why NOT a dust EXPLOSION?

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

- NFPA 664 8.2.1.4 - 2007 Edition

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**The Problem**

If combustible dusts are collected, there is a fire and explosion hazard in the collector, regardless of bag construction. - Fabricator Handbook Engineering and Research

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**FLAMEX® Components**

**FLAMEX® DETECTORS**

*Three highly sensitive, infrared detectors are engineered for the immediate identification of sparks or flames in industrial environments.* "Delicate" spark detectors are also available for applications where ambient light is present.

**FLOW MONITOR**

*Flow monitors indicate water flow in any water misting application.*

**ADDITIONAL SYSTEM COMPATIBLE DETECTORS**

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

**SUPERIOR NOZZLE DESIGN**

*Exclusive with FLAMEX! The Flameex stainless steel, nozzle-oriented flush with the inside wall of your duct and produces a weld of water which effectively covers the entire cross section of the duct.*

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**FLAMEX® ACCESSORIES**

*Includes a wide variety of accessories designed to enhance system performance and versatility.*

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**FLAMEX EXTINGUISHING DEVICES**

*Our versatile extinguishing sets are engineered for immediate and reliable response. Designed to provide the option of water or foam extinguishing. Select sets are available with either a sidemount or internal nozzle arrangement that provide maximum effectiveness for your specific applications.*

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**FLAMEX® EXTINGUISHING ASSEMBLY**

*Provides a permanent record of all system activity. A remote printer is compatible with most FLAMEX® control panels.*

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**ALARM DEVICES**

*Remote alarm horns and strobe lights can be used with the Flameex for announcement activity.* Available in 24VDC and 120VAC.
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 the woodworking industry’s prestigious Challenger Award and is entering its fourth 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 facilities represent a wide variety of industries that require pneumatic 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.

EXPERIENCE WHERE IT COUNTS
Our staff of highly trained and well-seasoned professionals has taken the product through five generations of developmental improvement and is uniquely qualified to assess your facility and consult with you on a recommended course of action. If it is determined that our system is the best solution, we will customize Flamex to fit smoothly into your work environment in the most unobtrusive and cost effective manner. As your company grows, the Flamex system 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 inspections, 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 many cases. We also offer a complete electronics 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.

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- NFPA 664 8.2.1.4 2007 Edition

The Logical Choice