Lummus Fire Detection System

Why Fire Detection?

Probably nothing in a cotton gin can cause more problems than fire. It not only damages product, but it also can damage many machines in the process. Additionally, extinguishing fires, especially when they have spread to various areas of the gin plant, creates significant safety hazards and nearly always substantial downtime, which kills profitability. The Lummus Fire Detection System allows fire sensing to be installed in as many or as few areas of the gin as the customer desires, providing for a variety of configurations. Anytime sparks or fire can be detected early, the less likelihood there will be catastrophic consequences. This, in turn, reduces downtime, creates a safer working environment, and increases productivity/profitability.
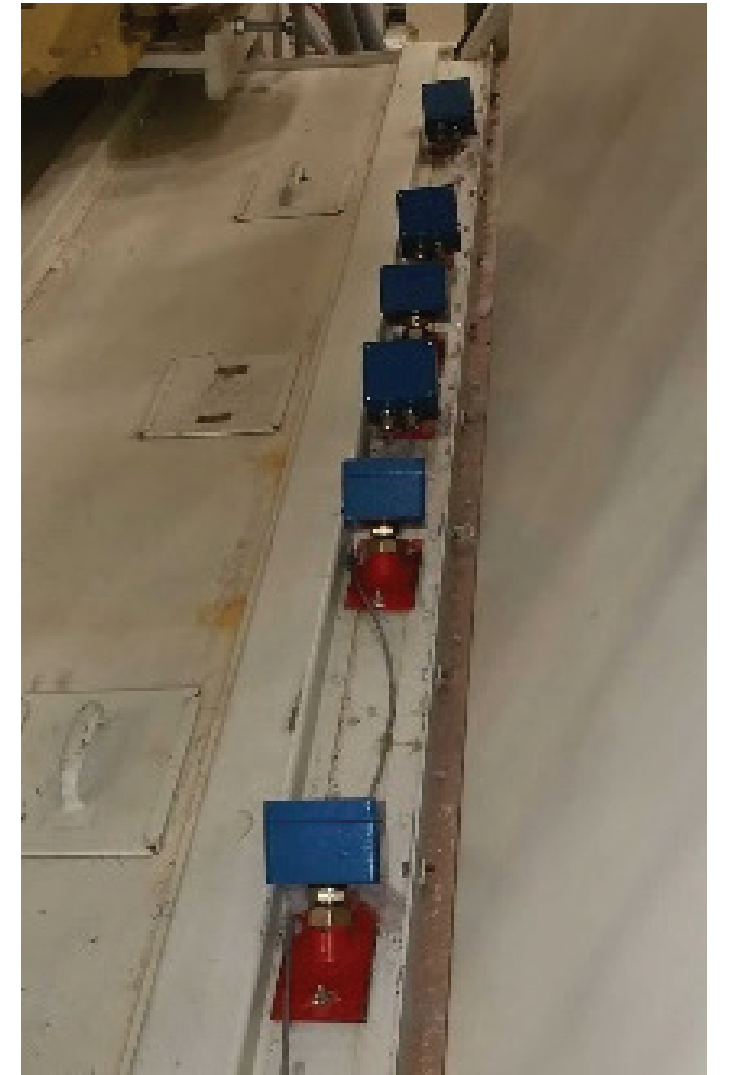
Benefits:

- Senses the infrared radiation of a spark or flame, **not** simply light, as in other systems.

- Senses sparks and fire immediately, which can result in much more rapid mitigation and reduced damage.

- Reduces downtime due to spark/fire events.

- Creates a safer working environment.

- Allows for addressing root causes of spark/fire events to eliminate future occurrences.

- Detects sparks/fire in areas that cannot be seen.

Features:

- State-of-the-art sensor technology with microprocessor-controlled control panel.

- Can be installed on any facility (Lummus or non-Lummus) and is configurable and scalable to any size of facility.

- Ultra-fast detection (sparks detected within 5 milliseconds).

- Designed to meet NFPA standards for fire protection.

- Both low temperature (<176°F) and high temperature (<392°F) sensors available.

- The number of sensors will vary with the diameter of the duct (if round) or the width/depth of the duct (if rectangular).

- Single or multi-zone protection; system provides for activation of remote transmission units for fire and fault signals.

- Detectors do not need to be reset; they will respond immediately upon detection following a previous activation.

- Unit mounted in an IP 54 (NEMA 12) dust-tight enclosure.

Fire Detection Control Panel

Sensors (6) in 120" Gin Hood

SENSORS AND QUANTITIES REQUIRED

AMBIENT TEMPERATURE SENSORS

Round Pipe Diameter	Number of Sensors	Degrees Apart
6" to 30"	2	180
31" to 48"	3	120
49" to 55"	4	90
56" to 70"	6	60
71" to 118"	8	45

HIGH TEMPERATURE SENSORS

Round Pipe Diameter	Number of Sensors	Degrees Apart
4" to 19"	2	180
20" to 35"	3	120
36" to 43"	4	90
44" to 55"	5	72
56" to 70"	6	60
71" to 118"	8	45

Gin Hood Width	Number of Sensors
94"	4
120"	6
144"	7

Lint Cleaner Ductwork	Number of Sensors
86"	4
108"	5
120"	6
144"	7

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