

CUSTOMER SUCCESS STORY

PRINTING RESEARCH INK - LEADING MANUFACTURER OF CURING AND DRYING EQUIPMENT FOR INKS AND COATINGS, IN THE CORRUGATED PRINTING INDUSTRY, PROTECTS CUSTOMERS WITH **VESDA** VERY EARLY WARNING SMOKE DETECTION SYSTEM

About End User

Printing Research Inc. (PRI) is a leading provider of inline curing and drying units for large scale corrugated printing presses. Printed corrugated materials are used to manufacture products including upscale corrugated boxes, lifesize promotional materials, standup entertainment cutouts and much more. Since 1995, PRI has developed patented drying processes, such as Super Blue "Cold" and "ZONE" UV, which uses high intensity ultraviolet lights to quickly dry inks and coatings applied to corrugated materials without smudging or discoloration, as well as, Super Blue "Air Blanket" and "Quick Dry Flexo", infrared systems, for water based inks and coatings.

The Challenge

Corrugated printing presses can be up to 60 feet in length and use precise dies, or specially shaped metal blades, to rapidly cut corrugated boards into the shape of the product being produced. These dies make clean and consistent cuts but tend to produce a very fine corrugated board dust. After ink is applied to the corrugated board, it passes under the PRI Super Blue UV or Infrared drying lamps prior to die cutting. These lamps produce temperatures in excess of 1400 degrees fahrenheit, well beyond the point of combustion of any corrugated board dust that should come in contact with them. If board dust or scrap corrugated material was to smolder and eventually catch fire it would cause catastrophic damage to the printing press and the facilities that house it.



PROJECT:

Printing Research Incorporated (One of the largest manufacturers of ink curing and drying equipment for the corrugated printing presses.)

END USER/LOCATION:

Dallas, TX
www.superblue.net

INDUSTRY:

Manufacturing - Printing Press Ink Dryers

SOLUTION:

VESDA VLF-250

“The VESDA system is extremely sensitive and very accurate. It may have helped to avoid some very serious situations for several of our customers. We encourage all of our customers to include the VESDA system with the purchase of their Printing Research Drying and Curing Systems.”

John Aylor
Print Research Inc.

PRI needed to find an advanced smoke detection system to install in its Super Blue drying units that was capable of detecting the earliest presence of smoke well before the point of combustion.

The Solution

PRI conducted extensive trials of several smoke detection systems from a variety of manufacturers. PRI used a series of high airflow tests to simulate high velocity air that moves through a corrugated press during the printing process.

After extensive testing, only the VESDA system proved capable of accurately detecting the presence of smoke in large volumes of high velocity air, without excessive “nuisance” alarms, caused by the presence of dust. Only the VESDA sensors could differentiate between smoke and the ultra fine corrugated dust produced by the die cut blades.

The Results

Upon completion of its testing, PRI began installing the VESDA very early warning smoke detection system in all of its Super Blue corrugated ink curing and drying units. Every corrugated printing press is unique in its operation, so VESDA system’s flexible implementation capabilities make it ideal for any PRI application.

The VESDA system easily integrates with the customer’s existing printing press monitoring and fire suppression systems, becoming an integral component of the manufacturing process. Upon detecting the presence of smoke, the VESDA system triggers a multistage fire suppression process that shuts down the entire press, and can even initiate the fire suppression system. By integrating with a variety of manufacturing systems, VESDA can protect the entire printing press from damage until the source of the alarm can be identified and addressed.

Currently, PRI is the only manufacturer to integrate the VESDA very early warning smoke detection system in all of its corrugated curing and drying units. The safety and security provided by the VESDA system ensures piece of mind for PRI customers and serves as a key differentiator of its Super Blue units versus its competitors.