

The Customer

The Company is a leader in the development and manufacture of high performance pressure sensitive adhesives and tapes. Their products can be found worldwide in such industries as aerospace, automotive, building & construction, optical, personal care, packaging, security & solar.

The Process

An adhesive coating containing solvents such as toluene, heptane, hexane, isopropyl alcohol, & acetone is applied to a paper or film substrate. Dryers are employed to evaporate off the solvents. The solvent flammability concentrations in the dryers can vary up to 40% LFL. Safety and fire codes outline the design specification for the safe operation of solvent ovens & dryers. The codes limit the maximum solvent concentration allowable to 25% LFL under worst conditions. If the LFL exceeds 25% LFL continuous solvent vapor monitors must be used.

The Company has an excellent safety record. They decided to make safety a priority, in addition to conforming to the NFPA 86 codes, to protect their personnel and equipment. Control Instruments' solvent vapor analyzers are installed on their lines to continuously monitor the exhaust of the dryer zones in order to stay safe.

The Challenge

The Company was expanding their operations and a new line was being added. To continue with their safety directive, they planned on also equipping the new line with solvent vapor analyzers.

The LFL systems in place on the existing lines were over 25 years old. They had a decision to make regarding whether or not to upgrade the existing LFL systems. Plant management advised it was getting more difficult to supply the necessary spare parts but were very pleased with the service support and product quality of Control Instruments' products.

The Solution

The Company chose Control Instruments' PreVEx Flammability Analyzers for their new line, and to upgrade their older LFL systems. These analyzers provide independent zone control, quicker response time, on-board diagnostics for predictive PM and troubleshooting, automatic calibration, and automatic ignition in case of flameouts.

The analyzers give consistent and reliable readings when faced with multiple or changing solvent concentrations. This was a very important feature because they use a mixture of solvents in their process. The "Universal Calibration" feature allows solvent changes without recalibration, avoiding unnecessary downtime and production delay.

The analyzers are fully heated to keep all the elements in the oven atmosphere in the vapor state eliminating clogging and sample condensation.

Additional features include failsafe design, low maintenance and easy servicing.

With the installation of the PreVEx analyzers the Company is not only operating safely, but seeing time & cost benefits as well.



SIC Code

- 2672: Coated and Laminated Paper, Not Elsewhere Classified

NAICS Code

- 322220: Paper Bag and Coated and Treated Paper Manufacturing