The Customer
The Company is a global supplier of vibration damping and sealing products for the automotive, consumer electronic and industrial markets. They offer more than 400 grades of elastomeric and viscoelastic formulations and operate over 400,000 square feet of manufacturing facilities. They sell elastomer-coated metals, gaskets, brake shims and automotive brake noise insulators and they provide a variety of sealing materials, such as deck plates, oil filter adaptors, water outlets, pumps, relief valves, and rear cam and surge tank covers.

The Process
During the manufacture of the company’s products solvents are applied to a web material. The web material contains PTFE and/or rubber based adhesives and at times silicone as well. The main solvent component used is MEK which is not a high flash point solvent. The Company has three presses each consisting of 4 to 9 zones. Control Instruments’ FFA SNR144 and SNR671 LFL analyzers were being used to monitor the flammability levels of the varying solvent levels in the zone’s atmosphere.

The Challenge
The FFAs and the few SNR671s were mounted a distance from the oven and had long sampling lines. The last three zones were very challenging due to the PTFE, silicones and other resins. The sample lines were clogging from VOCs and vaporized web material. They added end of line filters on all sample tubing and it helped to a certain degree. But frequent cleaning was still required which meant downtime and production loss.

The Solution
The Company decided to upgrade the existing LFL systems with SNR674 PrevEx Analyzers. The SNR674 is well suited for the dirty environment of this application. It operates at a temperature high enough to keep all the elements in a vapor state.

They mounted the SNR674s directly on the oven wall eliminating the long sample lines. By keeping the sample lines as short as possible they were able to minimize the VOC condensation and eliminate the clogging.

The Customer immediately saw the time and cost benefits of the new systems: no more clogging issues and they were also able to increase line speed which increased production throughput and profits!

SIC Code
• 3089: Injection molded finished plastic products

NAICS
• 326199: All other plastic product manufacturing