

Headspace Monitoring

The Customer

The Company manufactures industrial inorganic chemicals that serve markets ranging from food to building and construction and from health and medicine to transportation. Their products are used in a variety of end-use products such as office supplies, mouthwash, pharmaceuticals, computers, furniture, paints, carpet, garbage bags, cosmetics, chewing gum, lozenges, cleaning products and food.

The Process

Combustibles and other substances are vented off the various processes in the plant, collected and then sent to a condensate collection tank.

These collection tanks can contain a complex mixture of materials and hazardous chemicals, many of which are present in the headspace of the tanks. These need to be vented to the atmosphere to prevent potentially flammable concentrations of gases in the tanks.

The Challenge

The Company wanted to monitor the tank headspace for flammable gases and vapors to prevent a fire or explosion.

They needed an analyzer that could handle measuring the unknown and varying types of combustibles (HC's and non-HCs) that might be present.

The Solution

The Company chose to monitor the headspace with a PreVEx Flammability Analyzer. This analyzer is well suited for this demanding application. It has the unique ability to accurately measure the total flammability of all constituents in the process stream, even if they are unknown. Based on a proprietary flame temperature measurement technique, the analyzer requires no recalibration or adjustment for most common process VOC's. This helps prevent false alarms and shutdowns by maintaining accuracy when process conditions change.

The analyzer has a very fast response time and can react quickly to prevent a fire or explosion. In addition it features failsafe operation, low maintenance and easy servicing.



SIC Code

- 2869: Industrial Organic Chemicals NEC

NAICS Code

- 325199: All Other Basic Organic Chemical Manufacturing