Ensuring Accurate Analysis in a Process Mass Spectrometer with SilcoNert® 2000

A SILCOTEK® CASE STUDY WITH:



"Control Analytics utilizes SilcoTek and the SilcoNert coating when we are building systems that require accurate and fast response time in a wide variety of applications."

-Mike Stafford, Control Analytics, Inc.

SUMMARY:

Control Analytics, Inc. is an analyzer system engineering, systems integration, service, and analyzer and sampling components sales company specializing in on-line process monitors and environmental analyzers and systems. When building a process mass spectrometer sampling system for a customer, they turned to SilcoTek to ensure they produce the most reliable and accurate system.

CHALLENGES:

When using typical stainless steel components in sampling systems, many users will experience some variation of surface problems. Using a metal like stainless steel allows problems like adsorption, reactivity, and surface corrosion to interfere with the integrity of a sample.

HOW SILCOTEK HELPED:

An inert flow path is a critical factor in achieving consistent low level detection of reactive compounds as well as maintaining a reliable corrosion resistant surface. When Control Analytics sends this process mass spectrometer system to their customer, they'll be able to count on a faster response time in their analysis as well as a reliable reading.

GAME-CHANGING BENEFITS:

SilcoTek is glad to work with Control Analytics, Inc. on this process mass spectrometer project because of their continued dedication to creating a high performing system. The excellent craftsmanship can be seen in the image below (Figure 1). The benefits of building an analyzer sampling system such as this with an inert flow path include consistent performance for improved regulatory compliance, improved corrosion resistance, easier calibration, increased sensitivity, and a faster response time (Figure 2). SilcoTek is proud to be a key player for Control Analytics, Inc. and their customers.

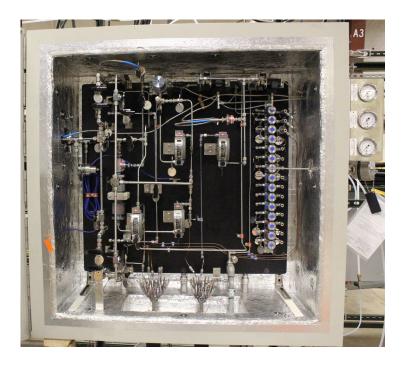


Fig. 1. The sample conditioning system that CAI built for their customer.

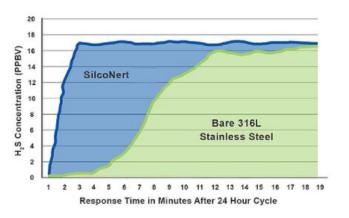


Fig. 2. The response time difference in a stainless steel and a SilcoNert-coated system when sampling hydrogen sulfide.

