

Application

Environmental Compliance
Stack Gas Monitor
CO from Amonia Vent Line

Location

Fort Saskatchewan, Alberta
Canada

Maintain Temperature

120°C

Product

O'Brien Electric Traced
TRACEPAK® Heated Hose

The system was down and unreliable because of the current sample line. It was in a general purpose area and 24 meters long with a 3/8" stainless steel braided Teflon sample line and a 1/4" stainless steel calibration gas line. The measurement of CO is particularly troublesome because the molecule is so small it can pass through Teflon. The problem is not that CO escapes from a sample line because most are under a slight vacuum, the problem is that they will suck CO from the bundle materials.

When any bundle is first brought up to temperature some trace amounts of CO are produced as the materials are heated. The elevated background CO diminishes with time and can usually be eliminated by operating the bundle at temperatures well above the design maintain temperature and pulling a slight vacuum purge through the hose. When trace amounts of CO are being measured this advanced burn-in process can reduce the elevated background produced by a new Teflon hose from weeks to 2-3 days.

O'Brien provided a Heated Hose that was flexible, with a weatherproof jacket, built in RTD, stainless steel tube stub ends to connect to the sample probe and sample conditioning cabinet. We were also able to duplicate the power and control wiring so existing equipment would not have to be modified. A custom product was designed, constructed, burned in and tested in days instead of weeks.