Perma Pure GASS™ -2040 eliminates analyzer failure and reduces maintenance costs at North American cogeneration plant

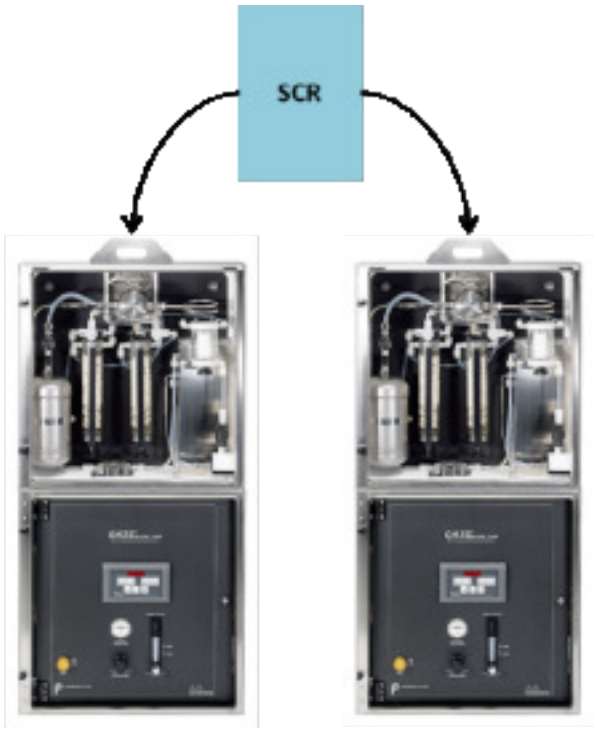
Results

- **Reduced analyzer downtime**
- **Reduced maintenance of heated sample lines**

Application

A cogeneration plant using gas turbines and the Hitachi-Zosen method for Selective Catalytic Reduction was facing frequent analyzer failures and difficulties in measuring extremely low level NOx (under 5ppm) due to moisture in the gas stream.

Ammonia slip was limited to 10ppm and the plant needed to accurately measure NOx levels below 5ppm. A Perma Pure Nafion®- based GASS system was installed to precondition the gas stream and provide extremely dry sample gas to the analyzer. An ammonia scrubbing canister is used when ammonia is present to protect the analyzer and prevent loss of drying efficiency.



"Analyzer failure rate fell from weekly to less than once per year" - I&C Technician

After using the GASS™ -2040 system, the plant successfully reduced analyzer failures due to condensing water and was also able to realize savings by reducing the length of the heated sample lines. The dry sample gas provided by the GASS™ -2040 has meant that maintenance for the sample lines has been greatly reduced and no replacement has been needed.

The systems have been installed and been running successfully for more than 10 years.

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