A single unit that continuously monitors the five major components of emissions.

NSA-3080 Continuous Emission Monitor

Features

- Employs Shimadzu's unique ratio non-dispersive infrared method that compensates the fluctuations of light sources and detectors, thus ensuring highly stage measurement.
- Incorporates an easy-to-maintain, thin-profile cubicle that ensures ease of daily inspections.
- Provided with an analyzer in control of each function, such as the auto calibration, remote calibration, probe purge, and operation processing functions of the unit.

NSA-3080

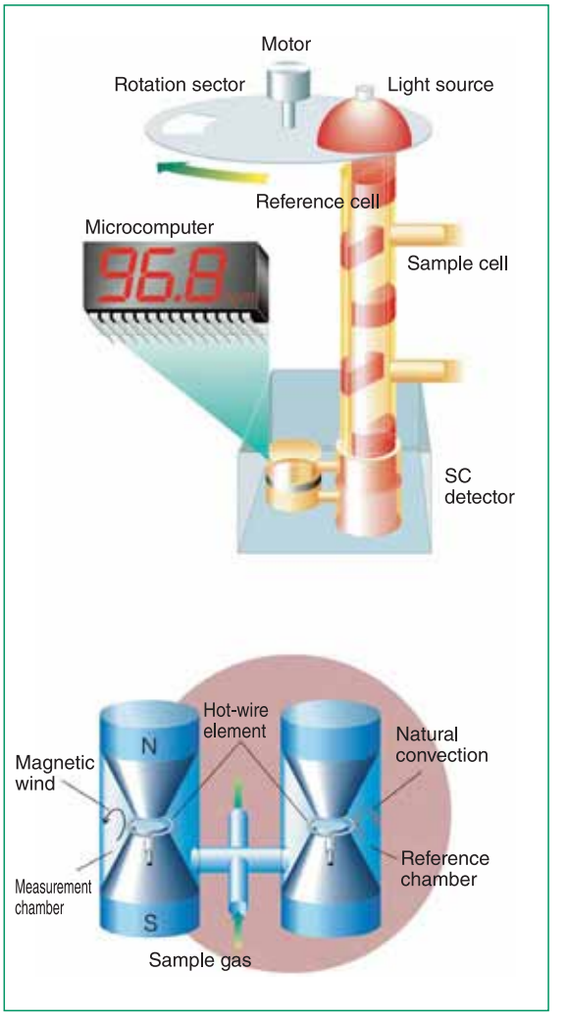
Applicable field
Measurement of Emissions from Installations, such as Boilers, and Garbage Processing Plants

Overview (Technical principles, actions, etc.)

Emissions from boilers and incinerators contain NOx, SO_2, CO, CO_2, and O_2. For the purpose of combustion monitoring and control for the prevention of air pollution, the concentration of these components must be monitored continuously. The NSA-3080 is Shimadzu's gas measurement equipment that monitors stationary sources of emissions. The equipment is based on Shimadzu's unique infrared gas analyzer of ratio photometry type built into a compact and easy-to-maintain cubicle together with a sampling system.

Measurement Principle

Molecules, such as NO and SO_2, absorbs infrared rays with particular wavelengths. The infrared gas analyzer utilizes this characteristic phenomenon to make measurement. Ratio photometry is a method of measuring the concentration of samples while maintaining the sensitivity of measurement constant with the ratio compensation of comparison and measurement signals. O_2 is measured by using a character that oxygen is attracted to magnetic fields with ease, when a magnetic wind is generated and detected by the heat ray element of the analyzer.



NSA-3080 Measurement Principle

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