

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

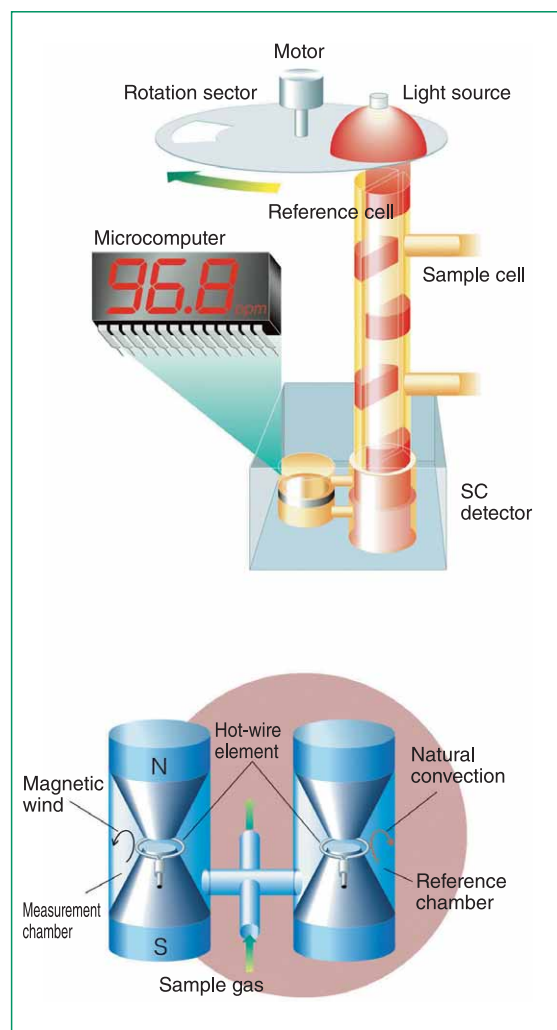
Overview

(Technical principles, actions, etc.)

Emissions from boilers and incinerators contain NO_x, SO₂, CO, CO₂, and O₂. 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 SO₂, absorb 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. O₂ 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

Shimadzu Corporation Environment Business Unit 1 Nishinokyo-Kuwabara-cho, Nakagyo-ku, Kyoto 604-8511

● TEL / +81-75-823-1635 ● FAX / +81-75-823-4614 ● E-Mail / Click "CONTACT US" in the navigation bar of the website shown on the right-hand side. ● <http://www.shimadzu.co.jp>

※Note: This publication introduces examples of technologies and products believed useful towards solving environmental and energy issues. In no way does it constitute guarantees concerning their transfer or sale.