

# Industrial emission analysis

## OVERVIEW


Many companies of various technologies work hard to reduce emissions, with one of the most commonly tools used today being the catalytic converter. Measuring exhaust gas emissions **before and after** catalysts helps to determine the effectiveness of the catalysis and whether the company is compliant with emissions regulations.


## THE PROBLEM


To comply with EPA and others emissions regulations, the gases to be measured are those released into the atmosphere after passing through the filtering system. Normally, the gases covered by the standards are CO, **total NO<sub>x</sub> (NO + NO<sub>2</sub>)** and **C<sub>x</sub>H<sub>y</sub> hydrocarbons**. Also, often required is measuring the level of Oxygen (O<sub>2</sub>), this is because many emissions reports must be verified on the basis of a given specific O<sub>2</sub> level as a reference.

the process itself acting in a timely manner upon the detection of any anomalies in the recorded values. In this way, three fundamental needs are met: **Process optimization, safety in the workplace and adaptation to emissions regulations.**

 TFT color display

 Optional heated sample line


 Continuous analysis


 Up to 12 gases simultaneously

## SOLUTIONS

Seitron offers 2 solutions: the **Chemist 900 Rack** for continuous emissions monitoring (CEM) and the **Chemist 900** as a portable analyzer with sensors for measuring O<sub>2</sub>, CO, NO, NO<sub>2</sub>, C<sub>x</sub>H<sub>y</sub>, NO<sub>x</sub> (No + NO<sub>2</sub>), H<sub>2</sub>S, H<sub>2</sub>, NH<sub>3</sub>, SO<sub>2</sub>, amongst others.

Emission analyzers with high range CO sensors (up to at least 10%) are required to analyze gases **before the catalysis**, when they are not yet filtered. Subsequently, with an analyzer equipped with a low range CO sensor (0 ... 500 ppm), it is possible to **measure the gases after the catalysis process** to properly understand the extent of the reduction in emissions. The combined use of the two analyzers further facilitates adapting to the regulations and verifying the proper functioning of the catalysts and

 Field-replaceable sensors

 PC software included

