

## **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** <u>and</u> <u>after</u> 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 NOx (NO + NO<sub>2</sub>) and CxHy 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  $O_2$  level as a reference.

## **SOLUTIONS**

Seitron offers 2 solutions: the S9000-Rack for continuous emissions monitoring (CEM) and the S9000 as a portable analyzer with sensors for measuring  $O_2$ , CO, NO,  $NO_2$ , CxHy, NOx ( $No + NO_2$ ),  $H_2S$ ,  $H_2$ ,  $NH_3$ ,  $SO_2$ , amongst others.

Emission analyzers with high range CO sensors (up to at least 10%) are required to analyze gases <u>before</u> 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 <u>after</u> 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 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.





Optional heated sample line



Continuous analysis (CEMs)



Up to 12 gases simultaneously



Field-replaceable sensors



PC software included



DOC-DEP 039259 19-04-2022