

Emissions analysis in a cement plant

OVERVIEW

There are many points within a cement plant that should be monitored and measured with a portable gas emissions analyzer to maximize product quality, **combustion efficiency**, **safety** and **emissions reduction**.



THE PROBLEM

Despite a CEM (Continuous Emission Monitor similar to our S9000-RACK) being necessary to monitor the gases in the main chimney to ensure regulatory compliance with EPA regulations, the use of a portable analyzer with a high temperature probe is essential for measuring the parameters that significantly affects the production process along with the quality of the product, the efficiency of the kiln's combustion and the emissions generated at various points of the system.

- Rotary kiln gas outlet: O₂, CO, NOx, CO₂, SO₂, CxHy, temp.
- Pre-heater & Pre-calcination kiln: O₂, CO, NOx, CO₂, temp.
- Exhaust gas conditioning system: CO, NOx, SO₂ and CO₂
- Electrostatic Precipitator (ESP): CO
- Main chimney: O_2 , CO, NOx, CO_2 , SO_2 and CxHy.

THE SOLUTION

Seitron offers two solutions – the Chemist 900 Rack for continuous analysis and the Chemist 900 as a portable analyzer. Indeed, the Chemist 900 can even be set up as a kit suitable for use in cement factories thanks to the provision of a high-temperature sampling probe, specific cement dust filters for the sampling, a built-in gas cooling system and accurate measurement of O_2 , CO, CO₂ and both NO and NO₂ for the calculation of the total NOx, SO₂ and CxHy.

