



Process & Analytical Instruments Company

# CONTINUOUS EMISSION MONITORING (CEMS)

## APPLICATION SOLUTIONS



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# MONITORING SOLUTIONS FOR PALM OIL REFINERY

## RELATED APPLICATIONS

### Continuous Emissions Monitoring (CEMS)

- Emission monitoring of systems fuelled with solid gaseous or liquid fuels
- Emission monitoring of so-called TA air plants
- The efficiency of biogenic production processes and optimum operation of the plant largely depends on continuous monitoring of the biogas composition.

## PRODUCT BENEFITS

- The tested measuring ranges can be selected for a variety of ranges to ensure use in different areas of application for the CEMS (checked for suitability according to EN 15267-3: TÜV and MCERTS).
- Simple and fast to configure
- Very low costs of procurement and operation



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# MONITORING SOLUTIONS FOR PALM OIL REFINERY

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Analytical Products and Solutions

## Standard Continuous Emissions Monitoring System (CEMS)

CEMS Application Solutions

CH4, H2S, CO, CO2 and O2 are the main components that are measured in Continuous Stack Emissions Monitoring for environmental compliance.

CH4 and H2S measured during the methanation process give a good overall view of the performance of the degradation process and bacterial activity. A decrease in methane content can be a first sign of organic overload, provided that the feedstock mix has not recently changed. Similarly, a sudden increase in H2S can provoke process instability.

Simultaneous real-time monitoring of CH4, H2S and CO2 empower process automation (i.e. operation of scrubbers).

Before entering the distribution chain, the product must be qualified, again for economic reasons (excess H2S and/or CO2 in the CH4 would make it 'sour' and potentially corrosive enough to damage distribution infrastructure).

