

## Gasmeter™ in emissions monitoring – applications:

# Stack testing

### Stack testing

Portable **Gasmeter™** measuring system is an ideal tool for stack testing. Just a single analyzer can be used to measure almost all criteria pollutants - this saves a lot of time and effort, not to mention the fast setup time and simple operation procedure.

Some key benefits of the **Gasmeter™** portable measuring system include:

- Just one analyser to
  - carry up to the platform
  - operate
  - maintain
- Very low need for calibrations – no span calibrations needed
- All measurement data is stored on a computer, allowing full post-measurement processing of the data
- The same system can be used in many different applications, due to the expandability of the system



The **Gasmeter™** portable measuring system:

- **Gasmeter™** Dx-4000 gas analyzer
- **Gasmeter™** portable Sampling Unit
- Portable Sample Probe
- Sample Lines

All parts that are in contact with the sample gas are heated to 180°C.

## Applications:

In typical stack testing application following components are continuously measured:

<i>Component</i>	<i>Formula</i>	<i>Typical Ranges</i>
Water vapour	H <sub>2</sub> O	High %
Carbon dioxide	CO <sub>2</sub>	High %
Carbon monoxide	CO	From low ppm to high %
Nitrogen monoxide	NO	From low ppm to high ppm
Nitrogen dioxide	NO <sub>2</sub>	From low ppm to high ppm
Nitrous oxide	N <sub>2</sub> O	Low ppm
Sulphur dioxide	SO <sub>2</sub>	From low ppm to high ppm
Methane	CH <sub>4</sub>	From low ppm to high ppm
Ammonia	NH <sub>3</sub>	Low ppm
Hydrogen fluoride	HF	Low ppm
Hydrogen chloride	HCl	Low ppm

One of **Gasmeter's** outstanding advantages is the capability to measure several additional components, which can easily be added into the analysis settings. Some typical examples:

<i>Group</i>	<i>Examples</i>	<i>Application area</i>
Hydrocarbons	Methane, Ethane, Acetylene	Combustion efficiency in natural gas fueled incinerators
BTEX	Benzene, Toluene, Ethylbenzene, m-,o- and p-Xylene	Combustion and Pyrolysis processes
Aldehydes	Formaldehyde	Incinerators, Cement industry
Non-organic compounds	Ozone	Pulp and paper industry
	Chlorine dioxide	Pulp and paper industry
	Hydrogen cyanide (HCN)	Waste incineration