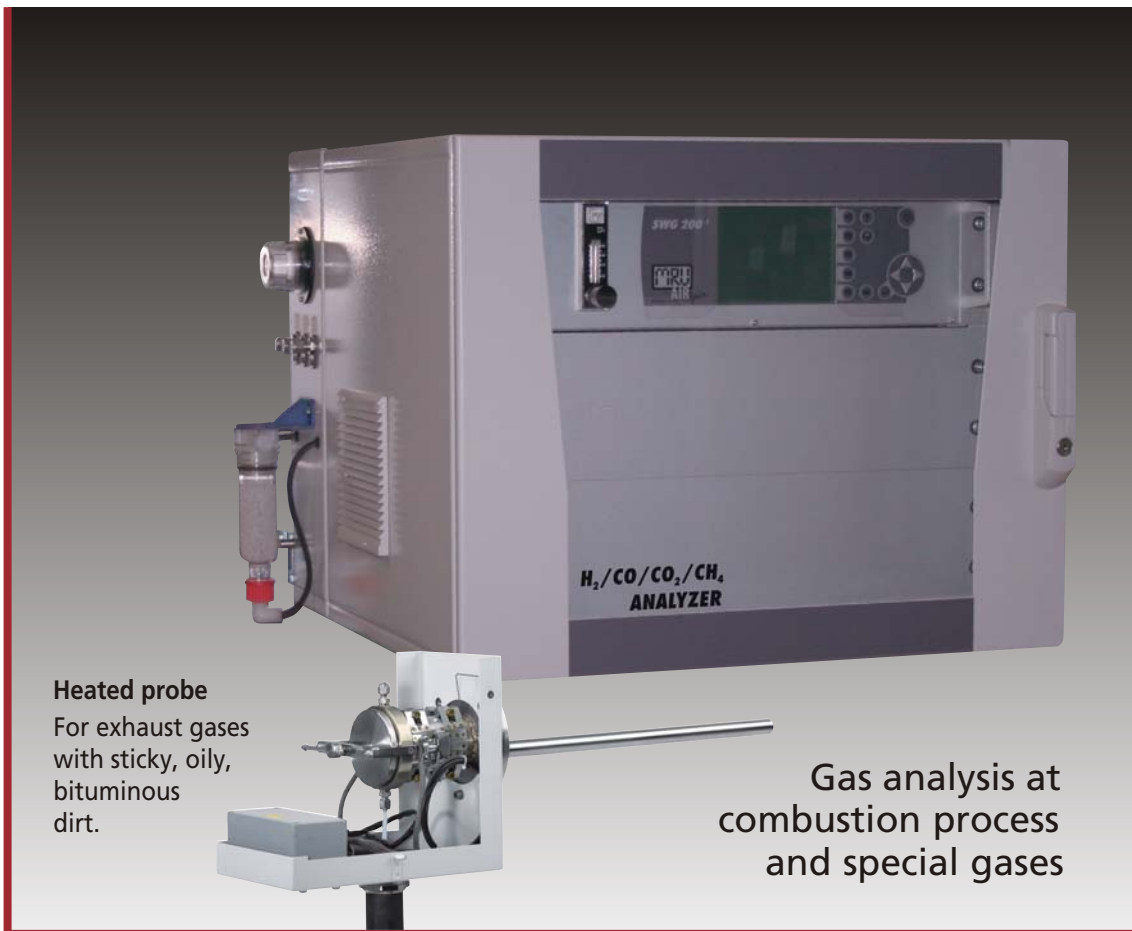




# EMISSION MONITORING SYSTEMS

We *care* about the environment

**BIOMASS- / COAL GASIFICATION  
BIOGAS · SYNGAS  
LANDFILL GAS · DIGESTER GAS · STACK GAS  
COKE- / BLAST FURNACE GAS**



**Heated probe**  
For exhaust gases  
with sticky, oily,  
bituminous  
dirt.

Gas analysis at  
combustion process  
and special gases



## SWG 200-1

MODULAR ANALYSIS SYSTEM  
WITH 19" RACK TECHNOLOGY

INNOVATIVE · ECONOMICAL

**O2 CO2 CO CH4 H2 H2S**

# SWG 200-1

## Process gas analyzer

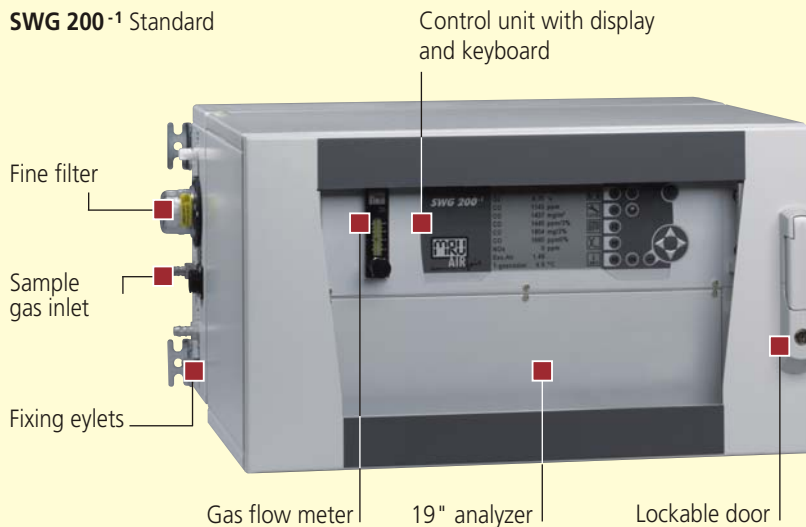


Infrared modules and electro-chemical sensors commonly operate in the **SWG 200-1**.

The multi-component analyzer is used everywhere where efficient Mehrkomponenten-Analysator solutions are required. Within small unit size, IR-active modules (CO + CO<sub>2</sub>+ CH<sub>4</sub>), H<sub>2</sub>-Hydrogen sensor (TCD) and EC-sensors (H<sub>2</sub>S + O<sub>2</sub>) measure continuous, selectively and precisely gases.

**Applications:**  
**BIOMASS GASIFICATION**  
**COAL GASIFICATION**  
**STEEL WORKS**  
**THERMAL**  
**HEAT TREATMENT**

SWG 200-1 Standard



### Standard hardware

Standardised 19" racks are mounted in a steel metal enclosure with fixing eyelets for wall mounting.

The complete flue gas conditioning by means of electrical gas cooler with electrical gas cooler with automatic condensate draining pump, with high-grade sample gas filtration for separation of water, tar and dirt, with sample flow monitoring and alarm, with auto-zero calibration are processor-controlled and continuously monitored, as well as RS 485 for data communication and 8 channel analog outputs 4 ... 20 mA.

### Typical gas mixture for biomass gasification (Syngas):

**CO<sub>2</sub> 15 %    CH<sub>4</sub> 35 %**  
**CO 25 %    H<sub>2</sub> 15 %**

### Technical specification

Measured components	measuring range	accuracy	measuring cell
Oxygen O <sub>2</sub>	0... 21 %	±0,2 Vol.-% abs.	electrochemical
Hydrogen sulfide H <sub>2</sub> S	0... 500 ppm (*)	± 5 ppm or 5 % reading	electrochemical
*) with high measuring range a discontinuous measurement is recommended.			
<b>3-gas infrared bench</b>	<i>min. measuring range</i>	<i>max. measuring range</i>	<i>linearity error</i>
Carbon monoxide CO	0... 3 %	0... 100 %	3 % of full scale
Carbon dioxide CO <sub>2</sub>	0... 3 %	0... 100 %	3 % of full scale
Hydrocarbons (as Methane CH <sub>4</sub> )	0... 3 %	0... 100 %	3 % of full scale
<b>THERMAL CONDUCTIVITY DETECTOR</b>	<i>min. measuring range</i>	<i>max. measuring range</i>	<i>linearity error</i>
Hydrogen H <sub>2</sub>	0... 1 %	0... 100 %	2 % of full scale
Repeatability	1 % of smallest measuring range		
Calibration	By software, calibration gases required, instrument air or clean ambient air for auto-zero		
Operating / storage temperature	+ 5 °C ... +40 °C, max. 90 % rh, non condensing, -20 °C ... +50 °C		
Ambient conditions	no use in aggressive, corrosive or very high dust ambience hazardous area use only with special equipment (on request).		
Data transfer	8 channel analog output 4 ... 20 mA, RS 485 digital (modbus RTU)		
Alarm relays	3x potential free NO contacts		
Power supply	110 ... 230 Vac / 50 ... 60 Hz / 100 ... 500 W,		
Dimensions / Weight	(WxHxD) 480 x 600 x 575 mm = steel enclosure for indoor mounting, IP 52 / 24 kg		

Data subject to change without notice.

Dealer:



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