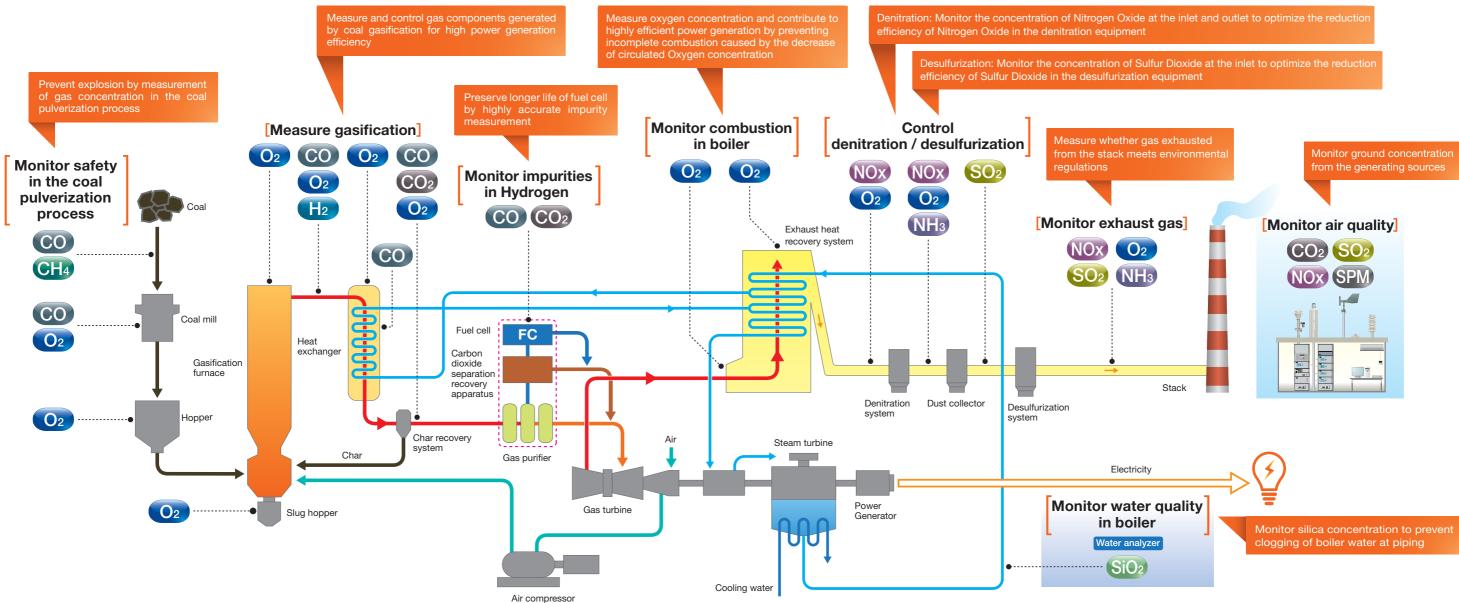
# **HORIBA**



### Various Measurement and Monitoring for IGFC and IGCC Plants

IGCC (Integrated Coal Gasification Combined Cycle) generates electricity by gasification of coal and using it as fuel for gas turbine. It is a highly efficient power generating technology which simultaneously operates the boiler by using exhaust heat and generates electricity by steam turbines. IGFC (Integrated Coal Gasification Fuel Cell Combined Cycle) is placed in front of the IGCC gas turbine and is a technology that uses fuel cells to generate electricity from Hydrogen gas generated from coal. IGFC has higher efficiency power generating technology than IGCC which is said to have a 55% of power generating efficiency and reduce carbon dioxide by 30% lower than the conventional method. (In-house investigation as of 2019)







measurement needs in fuel and power generation systems such as coal, oil, LNG and latest IGFC, IGCC

Simultaneous and continuous measurement of up to three components by one unit (NOx, SO<sub>2</sub>, CO, O<sub>2</sub>, NH<sub>3</sub>) Meets the specification

requirements from electric power companies

### Stack Gas Analyzer ENDA-5000 Series

Measures gas emitted not only from power plants but also from incinerations plants and petrochemical plants Simultaneous and continuous

measurement of five components (NOx, SO<sub>2</sub>, CO, O<sub>2</sub>, NH<sub>3</sub>)

Long term stability by Cross Flow Modulation type NDIR

## Trace Gas Analyzer

Monitors trace impurities such as H2, N2, O2 for quality control at gas manufacturing facilities

Continuous measurement of up to two components among CO, CO2 and CH4

Long term stability by Cross Flow Modulation type

Minimum detection limit of 10ppb

# Multi Component Gas Analyzer

VA-5000 Series

Multi gas analyzer that can be used in various application from scientific experiments and research to exhaust gas measurement

Continuous measurement of up to four components (CO, CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, NO, SO<sub>2</sub>, NH<sub>3</sub>, O<sub>2</sub>)

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Covers a wide range of measurement with one unit whether the concentration is low or high

Optimal measurement range can be always selected. Equipped with a high sensitivity detector

# Silica Analyzer



Monitor Silica in boiler water Short measuring time which is 5 minutes with high repeatability

Wide measurement range with a high sensitivity range of 0-10µg/L to a high-concentration range of 0-5.0mg/L

### Ambient CO<sub>2</sub> Monitor APCA-370

Suitable for air monitoring, air background measurement and research applications Long term stability by Cross Flow Modulation type NDIR as optical alignment is unnecessary Minimum detection sensitivity of 0.5ppm

