

# Solutions for Chemical Manufacturing

### High Quality Analyzers for Diverse Gas, Water, and Liquid Process Applications

Mass Spectrometers & Optical Spectroscopy Analyzers



## **Process Control**

#### **Applications:**

- Rapid gas and liquid analyzers to enable real-time control of process reactors
- Fast, accurate process optimization for increased manufacturing yields, safer operation and reduced wear on equipment
- Inline and online process analyzers for methanol in water, caustic and carbonate concentrations, ethylene dichloride (EDC) vent gas, etc.





FTIR/FT-NIR process Analyzer for Liquids, Solids and Gases ANALECT PCM 1000™

Industrial Mass Spectrometers for Real-Time, Multi-Stream Process Control MAX300-RTG™ 2.0



Real-Time, Multi-Stream Process NIR Spectrometer NIR-O™



Dual Beam Photometer for Continuous PAT Monitoring ClearView db<sup>®</sup>

#### Optical / Mass Spectrometers & Heating Value Analyzers



#### **Applications:**

- Real-time gas analyzers for flare compliance and control
- H<sub>2</sub>S, Total Sulfur, Net Heating Value/BTU (NHV), H<sub>2</sub>, and
- full speciated composition
- Complete analysis for compliance with regulations such as EMACT, MONMACT, RSR, Subpart Ja, Ontario Reg. 530/18, Korean Facility Management Standards to Reduce Fugitive Emissions, and HRVOC rules



Total Sulfur Gas Analyzers **FGA-1000™** 



Injection Style Heating Value Analyzer for Zero-Hydrocarbon Emissions for BTU and Flare Control 9800<sup>™</sup> Injection Style Calorimeter



Real-Time Mass Spectrometers for Compliance and Flare Control MAX100-BTU<sup>™</sup> and MAX300-RTG<sup>™</sup> 2.0

#### Heating Value, Spectroscopy & Electrochemical Analyzers

#### **Applications:**

- Real-time gas analyzers for environmental compliance and combustion control
- Rapid response for optimized combustion efficiency and accurate H<sub>2</sub> blending to reduced carbon emissions Multiple solutions for compliance with regulations such as 40 CFR Part 60, and HRVOC rules
- H<sub>2</sub>S, Total Sulfur, Net Heating Value (NHV), O<sub>2</sub> and COe, Wobbe, Specific Gravity, CARI, and full speciated composition



**Fuel Gas** 



Fast, Multi-Cycle Total Sulfur Fuel Gas Analyzer **FGA-1000**™

Direct Heating Value Analyzer for BTU, CARI, Wobbe and Density 9610™ Calorimeter



In Situ O₂ and COe for Combustion Monitoring for Burner Optimization O2CX<sup>™</sup> Monitor



Industrial Mass Spectrometers for Real-Time, Multi-Stream Fuel Compliance and Control MAX300-RTG™ 2.0



#### Applications:

- Water Influent and effluent discharge control
- Process control, high purity, oil in water, cooling water, condensate return, water-steam cycles and environmental compliance
- Total Organic Carbon (TOC) in water



TOC Water Analyzer for Harsh Wastewater Applications QuickTOCultra™



TOC Water Analyzer for Clean Water Applications QuickTOCuvII™



TOC Water Analyzer for Municipal & Cooling Water Applications QuickTOCeco™



COD Water Analyzer for Laboratories QuickTOClab™

#### Electrochemical Sensors & Laser Spectroscopy Analyzers





# Instrument Air & Dryers

#### **Applications:**

- Continuous moisture analysis in instrument air and dryers and portable spot checking
- Trace moisture in clean dry air, ppb to %



Aluminum Oxide Dew Point Meters for Portable/Fixed/Loop-Powered Applications XDT / XPDM / LPDT / LPDT2<sup>™</sup>



CRDS Analyzer for UHP Moisture in Air **Spark™** 

#### Heating Value, Electrochemical & Spectroscopy Analyzers



## **Steam Methane Reformer**

#### **Applications:**

- Hydrogen and syngas process control, and hydrogen purity analysis
- Increased accuracy and efficiency for all stages of the hydrogen economy- generation, storage, and delivery
- Gas analyzers for H<sub>2</sub>O, CO, CO<sub>2</sub>, H<sub>2</sub>, N<sub>2</sub>, CH<sub>4</sub>, H<sub>2</sub>S, hydrocarbons, BTU, Wobbe, CARI and Density



Benchtop Mass Spectrometers for Real-Time, ppb-level, Multi-Impurity Analysis MAX300-LG™



Industrial Mass Spectrometers for Real-Time, Multi-Stream Process Control MAX300-RTG<sup>™</sup> 2.0



Injection Style Heating Value Analyzer for Zero-Hydrocarbon Emissions for BTU and Flare Control 9800<sup>™</sup> Calorimeter



Portable and Fixed Aluminum Oxide Dew Point Meters XPDM<sup>™</sup>



Real-time Cavity Ring Down Spectroscopy (CRDS) Impurity Analyzers for H<sub>2</sub>O,CO, CH<sub>4</sub> and CO<sub>2</sub> **CO-rekt<sup>™</sup>** and **Prismatic 3<sup>™</sup>** 

#### Optical & Mass Spectrometry Analyzers



# Sulfur Analysis



Fast, Multi-Cycle Total Sulfur Gas Analyzer SGA-1000™



Real-Time Total Sulfur in Liquids Analyzer **SLA-1000**™

#### Spectrometers, Water Quality, Electrochemical & Chilled Mirror Analyzers



# Laboratory, Safety, & Compliance

#### **Applications:**

- Sulfur analysis in butane, diesel, liquid fuels, LNG, hydro-treaters, blenders and scrubbers
- Renewable Natural Gas (RNG) and biofuels manufacturing
- H<sub>2</sub>S, Total Sulfur and Total Nitrogen and Trace Sulfur
  Net Heating Value/BTU (NHV), H<sub>2</sub> and full speciated composition
- Meets ASTM D5453, for compliance with regulations like US EPA
- Meets ASTM D5453, for compliance with regulations like US EPA Tier III, European Euro 6 or the Indian Bharat VI



Real-Time Laboratory Total Sulfur and Total Nitrogen in Liquid and Gases XT-2000™



Industrial Mass Spectrometers for Real-Time, Multi-Stream Fuel Compliance and Control MAX300-RTG™ 2.0

#### **Applications:**

- Air and fenceline monitoring compliant with regulations such as OSHA requirements, USEPA Method 320, and the RSR
- O<sub>2</sub> deficiency safety monitoring, sulfur and nitrogen in fuels and biofuels, moisture calibration of sensors and standards
- Trace gas analyzers for H<sub>2</sub>O, O<sub>2</sub>, H<sub>2</sub>, CH<sub>4</sub>, NH<sub>3</sub>, CO, CO<sub>2</sub>, N<sub>2</sub>, Ar, He and hydrocarbons



Trace to Percent Oxygen Monitors for Portable and Fixed Applications Series 3520<sup>™</sup> and OXY-SEN<sup>™</sup>



Real-Time Air Analyzers for Environmental Health and Safety MAX300-AIR™



Real-Time Hydrogen Peroxide Vapor (HPV) Sterilant Gas Monitoring System ClearView db<sup>®</sup> Hydrogen Peroxide Vapor HPV™



FTIR Environmental Vapor Monitoring Analyzer ANALECT EVM™



Total Sulfur-Total Nitrogen Gas Analyzers **XT-2000**™



Chilled Mirror Dew Point Meters **373 Model**™

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COD Water Analyzer for Laboratories QuickTOClab™



TOC Water Analyzers for Pure and Process Water Applications for Laboratories **QuickTOCpurity**™



# GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights manufactures and delivers premium sensors, monitors, detectors, analyzers, instrumentation, and software that are mission-critical to keep your operations, personnel, and the environment safe – every day across the globe. Get the most reliable, precision analytical technologies available on the market today. We will work to match your needs and budget, and provide the optimal, and most stable process analysis solution for your application.

# CENTERS OF EXCELLENCE | PROVIDING PROVEN SOLUTIONS

Process Insights is committed to solving our customers' most complex analytical, process, and measurement challenges everyday.

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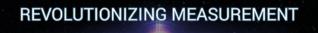
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For a complete list of sales & manufacturing sites, please visit: https://www.process-insights.com/about-us/locations/



**EVERYWHERE**