

Solutions for Oil Refineries

High Quality Analyzers for Diverse Gas, Water, and Liquid Hydrocarbon Applications

Total Sulfur & Heating Value Analyzers, Spectroscopy & Stack O₂ Monitoring



Fuel Gas

Applications:

- Real-time gas analyzers for environmental compliance and combustion control
- Rapid response for optimized combustion efficiency and accurate H₂ blending to reduced carbon emissions
- Multiple solutions for compliance with regulations such as 40 CFR Part 60, and HRVOC rules
- H₂S, Total Sulfur, Net Heating Value (NHV), O₂ and COe, Wobbe, Specific Gravity, CARI, and full speciated composition



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



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



In Situ O₂ and COe for combustion monitoring for burner optimization

O2CX™ Monitor



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

Optical / Mass Spectrometers, Total Sulfur, & Heating Value Analyzers



Flare Gas

Applications:

- Real-time gas analyzers for flare compliance and control
- H₂S, Total Sulfur, Net Heating Value (NHV)/BTU, H₂, 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 Calorimeter for Zero-Hydrocarbon Emissions for BTU and Flare Control 9800CXi™ Injection Style Calorimeter



Real-Time Mass Spectrometers for Compliance and Flare Control MAX300-RTG™ 2.0

Optical & Mass Spectrometry Analyzers & Total Sulfur Analyzers



Sulfur Analysis

Applications:

- Sulfur analysis in butane, diesel, liquid fuels, LNG, hydro-treaters, blenders, and scrubbers
- H₂S, Total Sulfur and Total Nitrogen, Trace Sulfur, Net Heating Value (NHV)/BTU, H₂, and full speciated composition
- Meets ASTM D5453 for compliance with regulations like US EPA Tier III, European Euro 6, or the Indian Bharat VI



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



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



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



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



UV-VIS Process Analyzer for UV Active Applications **508 UV-VIS™**

Optical Spectroscopy Analyzers & Photometers



Crude Oil Processing

Applications:

- Real time process analyzers for naphtha conversion, catalytic conversion, upgrading units, isomerization, alkylation, and gasoline and diesel blending
- Monitor catalyst efficiency
- PIONA content of reformate, octane numbers, volatility (RVP, vapor-to-liquid ratio), aromatics content, olefins, oxygen, benzene, distillation parameters, Fuel ID, and Fuel Color + Turbidity



Process FTIR Analyzer for Refinery Monitoring ANALECT® Hydrocarbon SmartSystem™



FTIR/FT-NIR
Process Analyzer for
Refining Applications
ANALECT® RefinIR™



Benchtop NIR Spectrometer for QC Lab and Pilot Plant Operations LAB NIR-O™



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



Dual Beam Photometer for Continuous PAT Monitoring Multiple Enclosure Options ClearView db®

Dew Point Monitors & 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 % level



Aluminum Oxide Dew Point Meters and Transmitters with Hyper-Thin-Film Technology for Portable/Fixed/Loop-Powered Applications

XDT™ | XPDM™ | HDT™ | LPDT2™



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

Heating Value, Dew Point Monitors & 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 H₂O, CO, CO₂, H₂, N₂, CH₄, H₂S, hydrocarbons, BTU, Wobbe, CARI, and Density



Injection Style Heating Value
Analyzer for Zero-Hydrocarbon
Emissions for BTU and Flare Control
9800CXi™ Calorimeter



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

5000

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



Portable and Fixed Aluminum Oxide Dew Point Meters XPDM™



Spectrometers, Electrochemical & Chilled Mirror Analyzers



Laboratory, Safety & Compliance



Percent and Trace Oxygen Analyzers, and Oxygen **Deficiency Safety Monitors** Series 3520™ and OXY-SEN™



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

Applications:

- Air and fenceline monitoring compliant with regulations such as OSHA requirements, USEPA Method 320, and the RSR
- O₂ deficiency safety monitoring, sulfur and nitrogen in fuels and biofuels, moisture calibration of sensors and standards
- Trace gas analyzers for H₂O, O₂, H₂, CH₄, NH₃, CO, CO₂, N₂, Ar, He, and hydrocarbons



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



Total Sulfur-Total Nitrogen Gas Analyzers XT-2000™

Water Quality Analyzers



Water & Wastewater



TOC Water Analyzer for Harsh Wastewater Applications QuickTOCultra™



TOC Water Analyzer for Clean Water Applications QuickTOCuvII™

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 Municipal and Cooling Water Applications QuickTOCeco™



COD Water Analyzer for Laboratories QuickCODlab™

For a complete list of sales & manufacturing sites, please visit:

https://www.process-insights.com/about-us/ locations/

For a complete range of products, applications, systems, and service options, please contact us at: info@process-insights.com

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