

Detecting a Trace

Teledyne Analytical Instruments

Location: City of Industry, CA

Established: 1946

Products/Service:

Gas and Liquid Analyzers,
Sensor and System Solutions

Certifications:

ISO, CE, ATEX, FM, CSA, MDD, 510K

Technology Specialty:

Electrochemical O₂ Sensors, Trace Gas Analysis, Sample Preconditioning and System Integration



Teledyne Analytical Instruments (TAI) is a leading, global supplier of gas and liquid analyzers, sensors and system solutions that are readily applied in the process control, quality control, pollution abatement, safety and OEM markets.

TAI is best known for our oxygen detection capabilities based on the electrochemical micro-fuel cell, paramagnetic and zirconium oxide O₂ sensors we bring to the market.

We also compliment our O₂ analysis capabilities by offering our customers with thermal conductivity detectors (TCD) typically used for H₂ analysis, flame ionization detectors (FID) for trace hydrocarbon detection purposes, UV/VIS absorption and fluorescence photometers typically applied for H₂S, SO₂, CL₂ and Oil-in-Water analysis, Near Infrared (NIR) photometers for liquid phase water impurity analysis in solvents or organic compounds, Non-Dispersive Infrared

(NDIR) analyzers typically used for CO, CO₂, CH₄ and SO₂ detection, Aluminum Oxide capacitance sensors for trace moisture analysis and catalytic-bead combustibles sensors for hydrocarbon gas leak detection purposes.

Based on the wealth of detection capabilities at our disposal, TAI can provide over one hundred portable and on-line analyzers, which are designed to cater to a myriad of applications in a number of diverse industries.

TAI's standard product range is also routinely extended by developing turnkey system solutions tailored to a customer's exact needs. The expertise and flexibility to design and manufacture proven, cost-effective sample preconditioning systems as well as combining multiple analyzers into single packaged solutions, is a core competency within TAI that serves to effectively differentiate us from our competition.



Teledyne Analytical Instruments

Offers These Quality Products for Your Application

Product	Industry	Application
INDUSTRIAL Oxygen Analyzers - Series 3000		
Ultra-Trace (PPB) O2 Analyzers	Semiconductor	Impurity Analysis of UHP Gases Used in Wafer Fabrication
On-line and Portable Trace (PPM) O2 Analyzers	Air Sep, Petchem, Steel, Ntl Gas	Impurity Analysis of Bulk Gases, Hydrocarbon Feedstocks, and Annealing Furnace Gas Mixtures
On-Line and Portable Percent (%) O2 Analyzers	Air Sep, Petchem, Steel	Impurity Analysis of Crude Bulk Gases, Hydrocarbon Feedstocks
	Cement, Power	Coke Ovens, Blast Furnace, Rotary Kilns, Coal Silo's, Boiler Trim
Safety % O2 Analyzers	Mfg'g / Medical	O2 Deficiency / OSHA Compliance Monitoring in Enclosed Rooms
Thermal Conductivity Analyzers (TCD) - Series 2000		
High Sensitivity TCD Analyzers	Air Sep	Binary Gas Mixture Analysis (H2 in N2, N2 in Ar, N2 in H2, Ar in O2)
	Power Gen	Hydrogen Cooled Turbine Generator Analysis, Nuclear Containment Monitoring
	Petchem	H2 Purity Analysis in Hydrocarbon Recycle Gas Streams
H2 Specific Palladium Sensors	H2 Fuel Cells	For Low Level Detection of Hydrogen Leaks to Address Safety Concerns
Flame Ionization Analyzers (FID) - Series 4000		
Trace Hydrocarbon Analyzers	Air Sep	Impurity Analysis of Bulk Gases used in Electronics Manufacturing
	Enviro	Detection of Methane and non-Methane Hydrocarbons for Gobar Warming Analysis
	Food and Beverage	Analysis of THC, Benzene, Acetaldehyde and BTEX in Beverage-Grade CO2
	Power Gen	HC's in Cooling Tower Water for Heat Exchanger / Tube Rupture Leaks
Near Infrared Photometers (NIR) - Series 5000		
Single Beam, Dual Wavelength Folded Optics	Petrochemical	PPM to % H2O(L) Analysis in Intermediate and Final Product Solvents and Organics
UV / VIS Photometers - Series 6000		
Single Beam, Dual Wavelength Folded Optics	Petchem, Power and Enviro	PPM to % H2S, SO2, CL, COCL2 in Refinery, Chemical, Stack Gas
Oil in Water Detection	Petchem, Power and Enviro	Offshore Platforms, Boiler Return Condensate, Refinery Run-Off, Wastewater
UV Fluorescence	Food and Beverage	Total Sulphides Analysis in Beverage-Grade CO2
Infrared Photometers (IR)- Series 7000		
Gas Filter Correlation	Air Separation	PPB Detection of CO2 in O2 and Air
Micro-Flow Detectors	Enviro, Power and Petchem	PPM to % CO, CO2, CH4, SO2, HC's in Stack Gas and Various Process Streams
Thermopile Detectors	Petchem and Steel	Percent Level Detection of CO, CO2, CH4 in Various Process Streams
Moisture Analyzers - Series 8000		
Al2O3 Hyper Thin Film Detectors	Air Sep, Petchem, Steel	Impurity Analysis of Bulk Gases, Hydrocarbon Feedstocks and Annealing Furnace Gas Mixtures
Combustion Efficiency Analyzers - Series 9000		
On-Line and Portable Monitors	Power Gen	O2, CO, CO2, THC Analysis for Optimizing a Boiler's Air-to-Fuel Ratio
MEDICAL Oxygen Monitors and Sensors		
	Medical	Respiratory Therapy for Ventilator, Respirator and Incubator Patients
AUTOMOTIVE Electrochemical O2 Sensors		
	Automotive	Automobile Engine Exhaust Analysis for Smog Certification Purposes
DIVING Mixchek and O2 Sensors		
	Diving	Helium and O2 Analysis for Tri-Mix Diving Gas Cylinders and Rebreather Circuits



TELEDYNE INSTRUMENTS
Analytical Instruments
 A Teledyne Technologies Company

16830 Chestnut Street • City of Industry, CA 91748
 Phone: 626-934-1500 • Fax: 626-934-1651
www.teledyne-ai.com