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## Advanced Sensor Technologies

Your partner to solve difficult electrochemical process measurements for over 40 years.



# Manufacturing Custom Built to Order Measurement Solutions

Advanced Sensor Technologies manufactures Long-Lasting Industrial pH Sensors, ORP sensors, Ion Selective (ISE) Sensors, Conductivity (EC) Sensors and Dissolved Oxygen (DO) Sensors for use with mating Field Instrumentation, Controllers and Transmitters. Specializing in Difficult and Severe Service Process Control Measurements and Continuous Monitoring Applications.

## Products



## Smart MODBUS Sensors & Touchscreen Controllers



## Industrial pH/ORP Sensors



## Industrial Ion Selective (ISE) Sensors



## Industrial Conductivity Sensors



## Industrial Dissolved Oxygen Sensors



## Industrial Instrumentation



## HOT-TAP Valve Retractable Assemblies



## Submersible Assemblies with Waterproofing Seals



## ZEUS pH Sensors

Note that the links above do not represent the entirety of the ASTI industrial product line but rather just some of the most commonly sold offerings. Please inquire to the ASTI factory for any products or features not listed on our website. Requests for specials are encouraged.

## Product Categories

[Sensors](#)

[pH Sensors & ORP Sensors](#)

[Ion Selective \(ISE\) Sensors](#)

[Conductivity \(EC\) Sensors](#)

[Dissolved Oxygen \(DO\) Sensors](#)

[Instruments](#)

[ASTI Transmitters](#)

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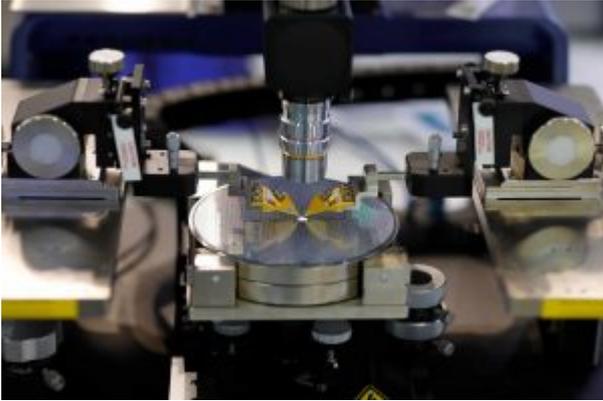
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## [Case Studies](#)



## Chemical



## Acid Etching



## Mining



## Pulp & Paper



## Wastewater Treatment



# Overview

- **The ONLY industrial pH, ORP and Ion Selective (ISE) sensors on the market that do not use any O-rings, washers or elastomer whatsoever inside of the sensor assembly.** This ASTI design where all parts are press fit and adhesive sealed in multiple stages eliminates the primary failure mode experienced by competitors to achieve unsurpassed performance along with the other unique features related to



novel materials of construction and design.

- **Novel Proprietary Solid-State Non-Porous Application Specific Reference Junction System** offers unsurpassed longevity and minimal maintenance especially in presence of heavy slurry media with particulates as well as dissolved gases such as



hydrogen sulfide and ammonia.

- **Rugged Industrial pH Sensing elements** are optimized for each application type to yield best results including configurations suitable for use in the presence of hydrogen fluoride (HF), saturated brine and dissolved gases among other



specialized offerings.

- Reference junction configurations available for high temperatures and pressures as well as **special extreme dehydration resistant version for intermittent wet and dry**



use enabled pH & ORP sensors.

- **Parabolic style low-profile break-resistant pH element** are suitable for slurries and abrasives with very high solid particular content. Many pH element configurations can also be supplied in configurations suitable for use in elevated



temperatures and pressures.

- **Rugged low-profile platinum disc style ORP sensing elements** offer minimal cleaning and most accurate measurement even with heavy fouling present and high flow and



pressure installations.

- **Completely novel ion selective sensing elements offer unsurpassed performance and longevity** for continuous field ISE measurements including support for elevated



temperatures for selected membrane types.

- All sensor types available as **analog configurations for legacy installations** and **smart digital configurations for modern Industrial Internet of Things (IIoT)** to retrofit or refurbish existing installations as well as for new installations,



plants or expansions.

- **Fully customizable conductivity sensors with user defined materials of construction for all wetted materials of construction** such as sensor body, electrodes, insulators as well as all sealing elastomers (O-Rings) to ensure best performance for the specified application of interest.



- **All installation styles are supported for each sensor type** including inline, immersion, fully submersible, twist lock quick disconnect, HOT-TAP valve



retractable and sanitary TRI-CLOVER.

- Full line of instrumentation has configurations to support both analog and smart digital sensors including **advanced touchscreen controllers with encrypted secure full graphical remote access, integral datalogging and MODBUS TCP** communication



capabilities.

- All transmitters and controllers always come **standard with isolated scalable 4-20mA analog output(s)** and optional features such as programmable contact relays with simple supervision, On/Off Control and Time Proportional Control (TPC) modes.

