

# Intelligent Atmosphere Analyzers



Optimize your heat treating by running your furnace more consistently.



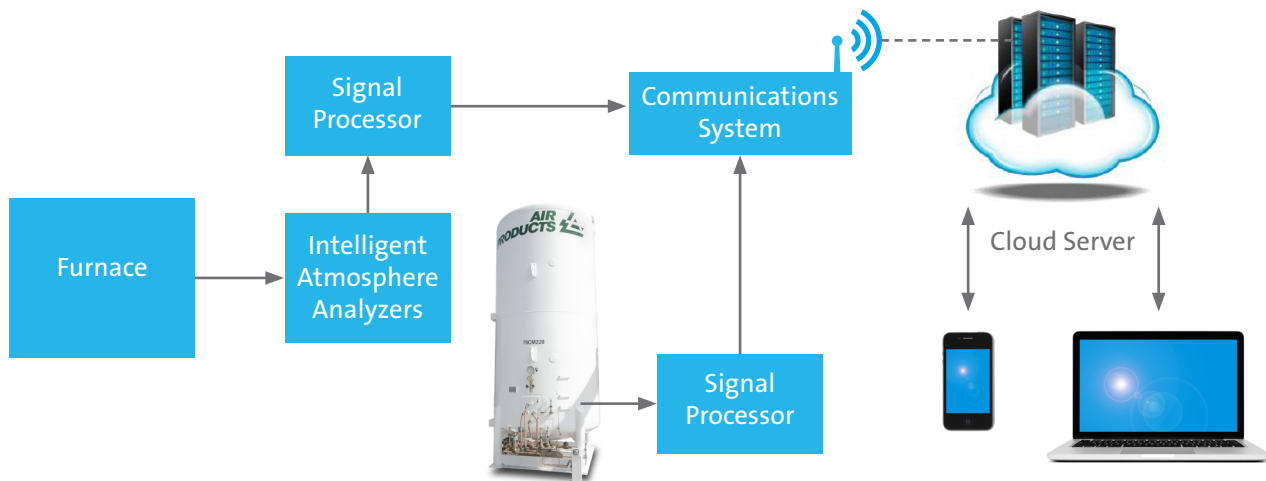
## Benefits

- Improves product reliability
- Captures relevant atmosphere and process data
- Analyzes potential for savings through optimizations
- Provides alerts to conduct preventive maintenance
- Enables compliance with CQI-9 and NADCAP requirements

Improve your heat treating efficiency with Air Products' atmosphere supply and process management systems. These state-of-the-art systems monitor composition parameters to ensure your furnace is running with the desired gas atmospheres, and provide alerts for any needed maintenance or adjustments. They feature Air Products' Process Intelligence—our IIoT (Industrial Internet of Things) driven approach to process optimization, applying decades of metals processing experience in gas supply, applications knowledge, and safety.

## Atmosphere Supply Panel

The Atmosphere Supply Panel controls gas flowrate, pressure, and composition to continuously monitor and maintain desirable furnace conditions. Gas flow and gas composition control can be customized from fully manual to fully automated. The panel complies with NFPA 86 standards, and all options can be tailored to meet customer specifications. All process data can be uploaded and saved to the cloud and is easily accessible in the form of customized reports and alerts.



Air Products can provide Intelligent Atmosphere Analyzers, transmitters, communications systems, and/or access to the cloud server based on customer specifications

## Furnace Atmosphere Measurement System

The Furnace Atmosphere Measurement System monitors and controls the furnace gas atmosphere via real-time monitoring of gas density, temperature, pressure, and purity. Keeping your furnace within the required atmosphere specifications can dramatically improve product quality and increase yield. The system can also manage these other properties:

- Dew point
- Oxygen level
- Hydrogen and/or carbon monoxide percentage
- Carbon potential
- Additional options available upon request; data tracking and reporting compatible with other smart connected equipment

## Smart Nitrogen-Methanol Lance

Our smart Nitrogen-Methanol lance provides real time updates on pressure and temperature. By knowing the status of your lance, maintenance can be scheduled proactively reducing unnecessary downtime and your system can continue running at its best.

## Process Data Acquisition System

The Process Data Acquisition System collects all available instrument and equipment parameters in your facility and stores that data in one location. It uses smart technology enabling different systems within your facility to share data and adjust processes accordingly. The data history is stored and accessible for reference.

## Tank Monitoring System

The Tank Monitoring System tracks gas supply conditions including pressure, liquid level, and flow rate. Its remote monitoring capabilities allow you to monitor storage tank levels from afar.

**Air Products Intelligent Atmosphere Analyzers can create the ideal conditions in your furnace to improve product quality, reduce operating costs, and increase yield.**

Contact us to help you monitor, acquire, and store data for:

- Dew point
- Oxygen
- Carbon potential
- Hydrogen
- Binary gas composition
  - Density
  - Temperature
  - Pressure
  - Purity
- Tank liquid level
- Maintenance and adjustment recommendations

**For more information, please contact us at:**

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