

Outsource Your

# Gas Handling Equipment Manufacturing

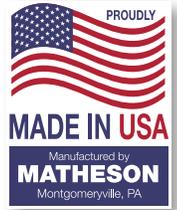


**MATHESON**

The Gas Professionals

The **MATHESON Equipment Technology Center** functions as an extension of our customers own resources. Our goal is to provide innovative solutions to your problems in a cost-effective manner. You can count on us for technological sophistication, high reliability, incomparable service, and a commitment to quality.

MATHESON has been manufacturing gas handling equipment for more than 90 years. From start to finish we can provide design, engineering, documentation, manufacturing, testing, installation, start-up, and support.



## Project Example:

**Customer need:** Customer needed to purge natural gas lines before making repairs to piping or adding to existing piping. They needed the ability to deliver the purge gas in tight locations and the ability to regulate flow rates for different sized piping. They needed scalability.

**Customer Concept** ⇨⇨⇨⇨⇨⇨⇨⇨ **Design** ⇨⇨⇨⇨⇨⇨⇨⇨ **Manufacture**

**MATHESON solution:** MATHESON engineers took the customer's idea, and produced a functional, efficient gas delivery system. The result was a custom rotameter panel assembly with two FM-1127 rotameters in parallel with a bypass line. The final assembly was designed and manufactured by MATHESON at a fraction of the cost of similar panels that had been quoted to the customer.

# MATHESON Equipment Technology Center

<b>Applications:</b>	Aerospace / Aviation Environmental Labs Food Processing Gas Chromatography Heat Treating Laser Equipment Medical Devices Petrochemical Pharmaceutical / Bio-Pharma Safety / Health / Environmental Semiconductor Ultra High Purity / Nanotechnology / Solar Mass Spectrometry 3D Printing
<b>Location:</b>	Montgomeryville, PA
<b>Certification:</b>	ISO 9001:2015
<b>Factory Size:</b>	45,000 SF 4,000 SF clean room space 30,000 SF manufacturing space
<b>Clean Rooms:</b>	Class 100 (ISO class 5) <ul style="list-style-type: none"> <li>• Ultra High Purity Orbital Welding</li> <li>• 100% Weld Inspection</li> <li>• Latest Welding Technology</li> </ul> Class 100K (ISO class 8) <ul style="list-style-type: none"> <li>• Final Assembly</li> <li>• Full System Checkout</li> </ul>
<b>Manufacturing Capabilities:</b>	Ultra High Purity TIG Orbital Welding Glass Forming and Machining Electro-mechanical Assembly Inboard Helium Leak Testing to $1.0 \times 10^{-10}$ sccs NIST Traceable Pressure and Flow Calibrations System Integration Functional Test
<b>OEM:</b>	Dedicated Production Personnel and Work Cells Precision Assembly and Welding Tube Fabricators
<b>Engineering and Design:</b>	Complete Engineering and Design Staff Project and Production Management 3D CAD Parametric Modeling Safety Compliance PLC Automation* Startup and Training Support

\*PLC automation available; however, not part of our standard offering



Configured Gas Cabinet Systems



Fuel Cell Hydrogen Source Manifold



Fuel Cell Hydrogen Source System



Rotameter 4 Gas Mixing Assembly



High Flow Automated 4 Gas Blender



Customized Pressure Differential Switchover Manifold



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## About **MATHESON**

MATHESON is a single source for industrial, medical, specialty and electronic gases, gas handling equipment, high performance purification systems, engineering and gas management services, and on-site gas generation. Our mission is to deliver innovative solutions for global customer requirements.

## **MATHESON** *and Safety*

MATHESON places the highest value on Safety – every day. We value our safety record, and we've received many industry awards for our safe operations. All our employees are thoroughly trained on an ongoing basis to deliver MATHESON's safety standards.

## **MATHESON** *and Quality*

MATHESON also places the highest value on Quality. Our plants are certified to ISO 9001 standards, and we employ Lean Six Sigma principles to measure and improve our quality results on a basis of continuous improvement.

## **MATHESON** *and Sustainability*

MATHESON is committed, at all levels, and in all locations, to principles of Sustainability and Corporate Responsibility. Our principles embrace Environmental Sensitivity, Community Support, and Financial Performance. Our aim is to ensure uninterrupted access to our products and services. The Equipment Technology Center is ISO 9001:2015 certified.

## *Our Mission*

The Equipment Technology Center develops, designs and manufactures custom equipment to solve the most challenging gas management problems in any industry. Our core capabilities allow us to deliver prototype systems rapidly and to follow up with production units, which exceed customer expectations – consistently.

At MATHESON we define success with two words – “customer satisfaction.” This is evident in the long-term relationships we have had with many of our customers.

If you feel that our broad range of capabilities, 90 plus years of experience and commitment to service can help you, **call MATHESON at 800-828-4313.**



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