

# Analyzer Technology Conference

# ATC

## In this Issue

Editor's Message  
Conference Chair Message  
ATC 2026 Registration  
ATC 2026 Location & Hotel  
ATC 2026 Exhibitor Showcase  
ATC 2026 Technical Program  
ATC 2026 Training Program

## Spring 2026 Newsletter



## Upcoming Events

April 13 – 17, 2026 Analyzer Technology Conference  
[Analyzer Technology Conference \(analyzertechconference.org\)](http://analyzertechconference.org)

### ATC Planning Committee:

<b>Stuart Simmonds</b>	<b>Kraig Kmiotek</b>	<b>Duane King</b>
<b>Wes Carter</b>	<b>Paul Barnard</b>	<b>Shannon Caldwell</b>
<b>Dale Merriman</b>	<b>Jaeden Krein</b>	<b>Randy Lamirand</b>
<b>Cindy Cauthen</b>	<b>Rocky Marlatt</b>	<b>Don Turnbaugh</b>
<b>Shana Kiser</b>	<b>Bill Stahl</b>	<b>Marko Puzic</b>
<b>Bac Vu</b>	<b>Hannah Hager</b>	<b>Princess Gbadamosi</b>
<b>Rod Merz</b>	<b>Jerry Zlomke</b>	<b>Vinod Vincent</b>
<b>J.C. Arènes</b>	<b>Joshua Christian</b>	
<b>Bobby Singh</b>	<b>Tim Kuiken</b>	
<b>Grant Merriman</b>	<b>Janette Brodnik</b>	
<b>Kim Wilkerson</b>	<b>Victor Cardozo</b>	

### Editor's Message:

Each spring as I prepare to write my newsletter introduction, my thoughts drift back across the past year looking for inspiration from events, experiences, or thoughts that relate to the upcoming conference. Looking back at the last several newsletters, I realize that each one has a sort of theme to the newsletter introduction for each year. In 2022 the theme was resilience as we prepared to gather together for the first time as the analyzer community in the post-COVID era and in our new ATC format. 2023 was the year of expansion and planning as the conference committee looked to grow into much of the format that you see in the conference today. 2024 had a theme of excitement to come together as the global analyzer community. And 2025 had a theme of origins, discussing my personal introduction into this industry and community. This was to be a recurring theme (and in time will continue to be), sharing the experiences of others on their introduction into the analyzer field, with the first volunteer being my friend Dan Podkolski, whom we lost earlier this past year. For those not aware, Dan was my proofreader and bouncer of ideas for the newsletter and is very much missed as I prepare this latest edition without his watchful eye and grammar corrections. I hope he thinks that I did good on this one (I know it should be "did well" Dan).

And as I prepare the Spring 2026 ATC newsletter, my thoughts have continuously gone back to the word perspective. Over the past year, my perspective has changed as related to the analyzer industry as a whole. For those not aware, the company that I work for, M&C TechGroup, was acquired last May by MSA Safety and over the past 10 months, my perspective on business has changed drastically. We went from being a small/mid-sized privately held company to a large publicly traded company. With the acquisition, my perspective on how to view markets, compliance reporting and planning, and available resources for development of every kind has taken a seismic shift. For those who have worked for large companies exclusively, I am sure there would be a similar shift in

perspective going to a much smaller company and seeing opportunities and challenges in a completely new way.

One definition of perspective is a particular way of viewing, thinking about, or understanding a situation, strongly influenced by an individual's experiences and beliefs. Connecting the dots on how this relates to ATC and our gathering as the analyzer community is summed up nicely in this definition. In the best possible way, we all bring our own perspective to Galveston as we gather. Ultimately, we are all facing the same opportunities and challenges in the analyzer world and bringing together our collective perspectives to solve the problems. Our individual experiences influencing our viewpoints, we all come together to share how we can help each other, no matter our starting perspective. Looking at issues from every angle, whether an end user, a vendor, researcher, or developer, our collective perspectives help move the entire industry forward.

So, as we prepare to gather together once again in Galveston, I encourage you to pack along your perspective on all things we face together and share your viewpoints throughout the week. In the same spirit I encourage everyone to try and view the opportunities we will be discussing from every other possible point of reference, and you likely will open your eyes and mind to new ways to attack the exact issues we all come together to discuss each year.

Looking forward to seeing everyone in Galveston and sharing perspectives over a drink or two throughout the week.

*Tim Kuiken*  
ATC Newsletter Editor

## Message from the Conference Chairmen:

Hello Analyzer Folks.

Welcome to the 5th annual Analyzer Technical Conference. Building upon the continued growth and success of our conference we expect this year to be even bigger and better than ever. The vendor's hall is larger than ever, the training program has been expanded again, and our coverage of the process analytical industry continues to be unrivaled. As we look to the future of the industry, we have also continued to expand our reach into the college communities and industry giants to invite students and alumni alike to join our conference.

Here's a reminder of our program and the new additions we made to enhance the conference for our regulars and newcomers alike.

1. The conference is a five-day event – from Monday to Friday.
2. The conference itself, with three days of technical papers from within the community, runs from Tuesday to Thursday. With the vendors hall open concurrently.
3. This is bookended by two training days.
  - a. Monday : Classroom technical training hosted by industry professionals.
    - i. Due to its popular demand we have continued with the expanded technical training to offer two tracts of fundamental courses (running concurrently) plus the additional advanced classes. See our website for all the details and sign up.
  - b. Friday : This is our hands on product training program run by the vendors themselves. A unique chance to get top quality product training with the conference itself.
  - c. Both these training days are opportunities not to be missed for all analytical personnel. ATC prides itself on having a low-cost training option for our customers in the Petrochemical Industry. Training that addresses what they are facing day to day, either as analyzer technicians or specialist engineers.
4. The Vendor's Hall has been redesigned again to allow for some more booths, but we have also ensured we leave ample room in the hall to walk around the exhibits, to gather and discuss products and projects or to just catch up with old friends in a comfortable and relaxed environment.
5. This year our booth spaces have expanded to 131 plus the two open bars during the Hospitality hours (5pm to 6.30pm Monday to Wednesday evenings)
6. We will have water and coffee throughout the day outside the Technical Paper auditorium upstairs in the Grand Ballroom.

Tuesday is an open day in the vendor forum where we encourage you to invite analyzer engineers/techs and analyzer students from the surrounding area to walk around and take the opportunity to chat with the different manufacturers from our industry.

We have speakers and attendees arriving from all over the world to participate in informal discussions, see new technology exhibited, and hear the latest information about analytical science in our industry.

As always, we want to thank the dedicated team of volunteer professionals from within our community that have worked so hard to put on this conference. Without their efforts these events would not be possible.

But we are not content to stop here, we have instituted a summer volunteer program to review the feedback from each conference and to work on new ideas on how to continue improving the conference each year. So, of course, we want to continue to receive feedback from the community. As always, all ideas and volunteers are welcome.

So finally, all that is left to say to all our returning regulars and newcomers alike, we hope you will enjoy the conference.

Please get signed up (all the details are in this newsletter and on the ATC website) and we'll see you in Galveston.

Wesley Carter / Dale Merriman / Stuart Simmonds  
ATC 2025 Conference Co-Chairs

## Analyzer Technology Conference 2026 Registration

Registration is open for the Analyzer Technology Conference taking place on April 13-17, 2026 in Galveston, TX. Through the conference link below you can access individual registration as well as sign-up for the limited space training sessions both prior to and after the conference technical program on Tuesday through Thursday of the conference. The planning committee requests and would appreciate registering as soon as possible for planning and accommodation purposes. Please sign up today!

[Analyzer Technology Conference  
\(analyzertechconference.org\)](https://analyzertechconference.org)

## Register Today!

The Premier Analytical Technology Conference & Showcase

- 30+ Peer-reviewed Technical Papers & Presentations
- 115+ Vendor Exhibit Booths already registered
- Technical Training for Advanced System Design
- Hands-on Vendor Training by World-Renowned Analyzer Manufacturers
- Free Food & Drinks included with Registration

## In Memoriam



**Daniel Edward Podkulski**, a devoted husband, father, brother, and accomplished chemical engineer, passed away on June 14, 2025, in Kingwood, Texas. Daniel was born on March 3, 1958, in Buffalo, New York. He was 67 years old.

At the heart of Daniel's world was his family. He is lovingly remembered by his wife, Anne Michelle Podkulski; daughter Lianne (Dylan) Podkulski; son Bradley Podkulski; stepson Michael Villwock; sisters Margaret (James) Chouinard and Judith Gaub; and brother John (Jason) Podkulski. He was preceded in death by his Mother Anne Lewis Podkulski; Father Daniel Stanley Podkulski; and Sister Anne Podkulski.

Daniel earned his Bachelor of Science in Chemical Engineering from the University of Minnesota, laying the foundation for a distinguished career that spanned decades.

Daniel accepted a position with ExxonMobil Chemical Company in 1998 and worked in numerous roles in Chemical Engineering with a focus on Consulting, Global Projects, Research and Engineering, Analyst Initiatives, and Technology Development. Daniel also served as Chairman for the International Society of Automation, the Environmental Committee/Group, and the Houston Analysis Section, and the Analyzer Technology Conference, demonstrating both leadership and dedication to advancing the industry he loved.

Daniel's commitment extended beyond his career into service for his country as a member of the Minnesota National Guard. His sense of duty and responsibility was evident in every aspect of his life.

Daniel found joy in many pursuits outside of work. A passionate Aviator and Dispatcher, he enjoyed piloting glider planes—a hobby that reflected both his adventurous spirit and technical precision. He had a deep love for animals and was a devoted Pet Father to two dogs and nine cats. His compassion extended to community efforts as well; he actively participated in Catch, Spay/Neuter, and Release programs for feral cats. He also loved gardening and was a volunteer at the Mercer Botanic Gardens for their March Mart.

Music played an important role in Daniel's life. He appreciated jazz, blues, and rock music and frequently attended concerts with his wife, Michelle. Daniel enjoyed an online relationship with and proofreading for Marc Myers's website, JazzWax. Travel was another source of happiness. Daniel and Michelle especially enjoyed cruises that took them to destinations around the globe. Daniel was also passionate about NASCAR and Formula 1 racing, the National Hockey League, and the Houston Astros. Daniel had a great appreciation of Band t-shirts and Hawaiian shirts, and Attendees of his Memorial Service are invited to dress accordingly.

Daniel Edward Podkulski leaves behind a legacy defined by intellect, service, compassion, and love for those closest to him. May his memory bring comfort to all who knew him.



**Robert William "Rob" Dahlgren**, 73, of Bartlesville, Oklahoma, left this life early Wednesday morning, January 21, 2026, at his home.

Rob was born October 29, 1952, in Pensacola, Florida, to Richard Wallace Dahlgren and Bonnie Mae (Hoffman) Dahlgren. At the age of two, his family moved to Superior, Wisconsin, where they remained until 1958 before settling in Yukon, Oklahoma. Rob graduated from Yukon High School in 1970, where he served as his senior class president. He attended El Reno Junior College where he earned an Associates of Arts Degree and then attended the University of Oklahoma for one year before transferring to Oklahoma State University. He graduated in May 1974, earning a Bachelor of Science Degree in Chemistry.

Rob moved to Bartlesville in 1975 and began a 42-year career with Phillips Petroleum/Applied Automation in Analytical Methods Development which was merged into Siemens USA. He married Karen Kay Soule on October 8, 2000, in Bartlesville.

Rob was a long-time member of Our Savior Lutheran Church until its closure, after which he and Karen worshiped at St. Luke's Episcopal Church in Bartlesville. He carried a strong and steady faith in Jesus Christ throughout his life. Rob faced his pancreatic cancer diagnosis with strength, grace, and dignity, supported by the love of his family.

A lifelong learner and self-described "maker," Rob loved building, creating, and discovering how things worked. He read constantly and delighted in researching new skills—whether carving small wooden figures, creating cigar-box guitars, making longbows and knives, crafting bicycles from scratch, or fixing up old Volkswagen buses. He held a pilot's license and was a member of numerous groups and clubs over the years, including the Jaycees, a beer brewing club, a Volkswagen group, and Via de Cristo, where he served as Rector and participated in many retreats.

Rob had an adventurous spirit and loved being outdoors, especially camping and kayaking at Copan Lake. He enjoyed riding motorcycles, cycling in the Oklahoma Freewheel, sailing in the Caribbean and around the Greek Islands, and traveling in the RV with Karen to visit friends and family. He fiercely loved his family and cherished the many friendships he built throughout his life.

Rob is survived by his wife, Karen Dahlgren of Bartlesville; two sons, Ryan Dahlgren of Tulsa and Stephen Dahlgren of Oklahoma City; one step-son, Dennis Soule and his wife, Kelley, of Skiatook; two brothers, Greg Dahlgren of Yukon; Terry Dahlgren and his wife, Susan of Yukon; one sister, Cindy Crick of Arlington, Texas; as well as numerous grandchildren, great-grandchildren, nieces, and nephews. He was preceded in death by his parents, Richard and Bonnie Dahlgren, and by his sister-in-law, Christy Dahlgren.

## Smile! It Makes People Wonder What You're Up To

Prepare your funny bone for all the fun and laughter to be had in Galveston



## ATC 2026 Checklist

- Register for Conference
  - Register Exhibit Booth
  - Register For Monday Advanced Training
  - Register for Friday Vendor Hands-On Training
  - Book Hotel Room
- 

Chuck Norris can divide by zero.

Chuck Norris counted to infinity — twice.

Chuck Norris destroyed the periodic table because Chuck Norris only recognizes the element of surprise.

Chuck Norris doesn't fill out online forms because he doesn't submit.

Chuck Norris does not own a stove, oven, or microwave, because revenge is a dish best served cold.

Chuck Norris doesn't cheat death. He wins fair and square.

Chuck Norris narrates Morgan Freeman's life.

Chuck Norris cannot turn left, because he is always right.

Chuck Norris' calendar goes straight from March 31 to April 2. No one fools Chuck Norris.

Chuck Norris can start a fire by rubbing two ice cubes together.

When Chuck Norris looks in the mirror there's no reflection, because there's only one Chuck Norris.

How many push-ups can Chuck Norris do? All of them.

Why did the physicist break up with the biologist?  
There was no chemistry.

If Silver Surfer and Iron Man teamed up, they'd be alloys.

Heisenberg and Schrödinger get pulled over for speeding  
The cop asks Heisenberg: "Do you know how fast you were going?"  
Heisenberg replies: "No, but we know exactly where we are!"  
The officer looks at him, confused, and says: "You were going 108 miles per hour!"  
Heisenberg throws his arms up and cries: "Great! Now we're lost!"  
The officer looks over to the car and asks Schrödinger if the two men have anything in the trunk.  
"A cat", Schrödinger replies.  
The cop opens the trunk and yells: "Hey! This cat is dead."  
Schrödinger angrily replies: "Well, he is now!"

## **Analyzer Technology Conference 2026 Location & Hotel:**

The leading analytical technology conference returns in 2026 to its home roots at the Galveston Island Convention Center. The conference hotel is the Hilton Galveston Island Resort. Please contact the hotel directly for available rooms in the conference hotel block. Additionally, nearby hotel options include:

- Holiday Inn Resort: Galveston-On The Beach, an IHG Hotel
- Comfort Inn & Suites Beachfront
- Hampton Inn & Suites Galveston in Galveston, TX
- The San Luis Resort, Spa & Conference Center





## Analyzer Technology Conference 2026 General Schedule:

### Date & Hours: April 13-17, 2026

Monday, April 13th:	8:00 AM – 4:00 PM – <i>Fundamentals and Advanced Training Programs</i> 4:00 PM – 5:00 PM – <i>ATC Business Meeting</i> 5:00 PM – 7:00 PM – <i>Vendor Exhibit Hall Open – Analytical Technology Pavilion</i>
Tuesday, April 14th:	8:00 AM – 5:00 PM – <i>Technical Session Presentations</i> 8:00 AM – 7:00 PM – <i>Vendor Exhibit Hall Open During Breaks &amp; Lunch – Analytical Technology Pavilion</i>
Wednesday, April 15th:	8:00 AM – 5:00 PM – <i>Technical Session Presentations</i> 8:00 AM – 7:00 PM – <i>Vendor Exhibit Hall Open During Breaks &amp; Lunch – Analytical Technology Pavilion</i>
Thursday, April 16th:	8:00 AM – 5:00 PM – <i>Technical Session Presentations</i> 8:00 AM – 3:30 PM – <i>Vendor Exhibit Hall Open During Breaks &amp; Lunch – Analytical Technology Pavilion</i>
Friday, April 17th:	8:00 AM – 4:00 PM – <i>Vendor Conducted Hands-On Training</i>

## Analyzer Technology Conference 2026 Exhibit and Sponsorship:

Please join our largest ATC event yet, with 100+ vendors in our Technology Pavilion where you can discuss new solutions to your measuring needs. Monday we will open with a reception from 5:00-6:30 in a casual environment with Hors D'oeuvres and open bar. Tuesday is open day where we encourage you to invite analyzer engineers/ techs as well as students from the surrounding area. This free event will give an opportunity for visitors not attending the papers to visit with the different manufacturers and reps in our industry. Meals will be provided by ATC and our sponsors. Wednesday and Thursday the Technology pavilion will be open during breaks only. Please check your schedule for various times. We look forward to continuing our success with bringing end users and new technology together in one open space.

Shana Kiser  
ATC 2026 Vendor Chair



## Analyzer Technology Conference 2026 Technical Program:

Technical program : 30 papers will be presented over 2 1/2 days of the conference, finishing at lunch on Thursday. It is gratifying to see many new presenters this year, from North America, Europe and the Middle East. Topics include Spectroscopy, Analyzer Optimization, Mass Spectrometry, Process Sampling, Calibration and Maintenance. The full program will be available on the website after March 16th.

Paul Barnard & Joshua Christian  
ATC 2026 Technical Program Chairs





## Analyzer Technology Conference 2026 Technical Training Program:

As we look ahead to this year's Analyzer Technology Conference, I'm pleased to share an update on the 2026 Technical Training agenda, which continues to build on ATC's mission of delivering practical, industry-driven education for analyzer professionals.

The conference once again spans the full week, with dedicated training days complementing the technical paper sessions and vendor exhibition. Our goal remains the same: to provide meaningful learning opportunities that support both career development and day-to-day operational excellence.

### 2026 Training Agenda Overview – Monday April 13th, 2026

The 2026 program features a balanced mix of Fundamentals and Advanced training, structured to support attendees at all experience levels.

Fundamentals Training will be offered as two concurrent full-day tracks, allowing participants to customize their learning experience. This year's fundamentals agenda covers core analyzer technologies used across the process industries, including sample extraction and conditioning, spectroscopy, mass spectrometry, combustion analysis, gas and flame detection, moisture and dew point measurement, physical property analysis, water quality analysis, oxygen analysis, and gas chromatography. These sessions are well suited for technicians and engineers new to analyzers, as well as experienced professionals expanding their technical breadth.

For those seeking deeper technical immersion, ATC 2026 will feature a choice of three full-day Advanced courses, each focused on practical application and real-world challenges:

FUNDAMENTALS TRACK 1	FUNDAMENTALS TRACK 2
1.1 Fundamentals of Sample Extraction and Conditioning – Michael Hoffman - Valmet	2.1 Fundamentals of Spectroscopy – Bob Bear - Ametek
1.2 Fundamentals of Mass Spectrometry – Monique Mahoney-Ashberry - Process Insights	2.2 Fundamentals of Combustion Analysis – J.C. Arenes - Novatech
1.3 Fundamentals of Gas & Flame Detection - Sam Loyacano - Teledyne Gas & Flame	2.3 Fundamentals of Moisture & Dew Point Measurements - John Kerney - Ametek
1.4 Fundamentals of Physical Property Analysis - Corentin Thierry - Bartec	2.4 Fundamentals of Water Quality Analysis – Ryan Crews - M4 Knick & Tony Magnusen - Process Insights
1.5 Fundamentals of Oxygen Analysis – Stuart Simmonds - Novatech	2.5 Fundamentals of Gas Chromatography – Al Kania - Valmet
<b>ADVANCED – Sample Conditioning Systems</b>	
<b>Presented by Steve Smith - CGS Fabrication Services, Inc</b>	
This advanced course provides a detailed exploration of process sample systems, focusing on design principles, terminology, calculations, and real-world applications. Topics include vapor, liquid, and vaporizing sample systems; sparger systems; vent gas mitigation; hardware functions; and practical design walkthroughs. The course emphasizes accurate datasheets, system response time, solubility, Joule-Thomson effects, and other critical considerations essential to reliable analyzer performance.	
<b>ADVANCED Spectroscopy / Chemometrics</b>	
<b>Presented by Bryan Bowie – ExxonMobil / Randy Bishop – JP3</b>	
This advanced program combines spectroscopy fundamentals with applied chemometrics for process and analytical professionals.	
<b>Morning Session – Spectroscopy:</b>	
An in-depth introduction to Infrared and Raman spectroscopy with industrial applications, including TDLAS, cavity ringdown techniques, NIR, MIR, FTIR, FT-NIR, and Raman spectroscopy. Emphasis is placed on process optimization, product quality, and real-world petrochemical use cases.	
<b>Afternoon Session – Chemometrics:</b>	
An applied introduction to chemometrics covering basic linear algebra, Principal Component Analysis (PCA), multivariate regression techniques (MLR, PCR, PLS), and an overview of advanced modeling methods for analytical data interpretation.	
<b>US EPA Regulatory Landscape for Flares and Fenceline Analyzers</b>	
<b>Presented by Troy Boley – Spectrum Environmental Solutions</b>	
This advanced regulatory workshop provides a focused review of the U.S. EPA regulatory framework affecting flare monitoring and fenceline analyzer programs, with emphasis on current and emerging requirements. Topics include routine compliance demonstrations, event thresholds, root-cause corrective actions, enhanced monitoring strategies, and instrumentation considerations across multiple industry sectors. The course blends regulatory interpretation with practical field experience.	



## **Continuing Education Credits for Students**

I'm especially pleased to highlight that Continuing Education Credits will be available for students attending the training program this year. This is an important step in supporting the next generation of analyzer professionals and strengthening the connection between academic learning and real-world industrial application.

ATC has long valued student participation, and offering Continuing Education Credits reinforces our commitment to professional development and lifelong learning. We encourage students and educators alike to take advantage of this opportunity as part of the broader ATC experience.

## **Why Attend the ATC Training Program?**

What sets ATC training apart is its focus on practical, industry-relevant education. The training days are designed to complement the technical paper sessions and vendor interactions, giving attendees a unique opportunity to learn, network, and engage with experts from across the analyzer community — all in one place.

Training sessions are capacity-limited, and historically fill quickly, so early registration is strongly encouraged.

I look forward to welcoming you to Galveston and to another outstanding year of learning, collaboration, and knowledge sharing at the Analyzer Technology Conference.

J.C. Arènes  
ATC 2025 Technical Training Chair

## Analyzer Technology Conference 2026 Hands-On Vendor Training Program:

Today's organizations are expected to run more efficiently while managing increasingly complex systems with smaller teams. As operations become more demanding and resources remain limited, developing the right technical skills is essential to maintaining reliable and effective maintenance programs. The ATC Hands-On Training sessions are designed to bridge that gap by providing participants with practical, real-world experience using the latest analyzer technologies. These interactive workshops allow attendees to work directly with modern instrumentation while learning from experienced industry professionals. Through guided exercises and real application examples, participants gain valuable insight into analyzer operation, troubleshooting, and best practices. Our goal is to equip your team with the knowledge and confidence needed to tackle everyday operational challenges and keep your analytical systems performing at their best.

HANDS-ON VENDOR TRAINING	
	
	
	

Bobby Singh  
ATC 2026 Vendor Training Chair

## Analyzer Technology Conference 2026 Product of the Year:

The Product of the Year (POTY) is recognition of new and exciting analyzers or analytical technology that are improvements over previously existing process measurement devices. The POTY judging team is comprised of anonymous analyzer subject matter experts from oil and gas companies who are the users of process analyzers. No vendors of analytical products are involved in the judging process. To enter a product for consideration, please visit the ATC conference website and look for the POTY tab at the top of the page - <https://www.analyzertechconference.org/product-of-the-year>

### Vendor Product of the Year Guidelines

1. Nominations must be received by April 9, 2026.
2. Nominations must be sent to the following location: Product of the Year
3. The product must have been available for sale within the previous two calendar years from this conference (2024 for this year).
4. The product must be available for view at the conference.
5. The product has not been nominated in prior ATC conferences.

We look forward to your entries!

## Analyzer Technology Conference 2025 Product of the Year Winner:

The 2025 Product of the Year winner is Smith Analytical Emissions Master designed to deal spent analytical sample streams. Well done Smith Analytical!



# Emissions Master (EM)

For many analyzer installations, mitigating hydrocarbon fugitive emissions at the equipment location can be challenging due to the absence of a flare, low pressure, or thermal oxidizer return point. To eliminate all hydrocarbon emissions after passing through the sample system or after the measurement has been made, the US Patent 10,753,204 and US Patent pending 15/796,412 Smith Analytical Emissions Master (EM) is now available.

## The Emissions Master is Designed to Handle:

The Emissions Master has a High Heating Value (HHV) BTU throughput ranging from 6,000 up to 20,400 BTU/HR. The Emissions Master is offered with either an EPA approved catalytic converter or a combustion chamber for the conversion of hydrocarbons into CO<sub>2</sub> and water vapor. With either model, no back-pressure is generated on the vent gas header.



## SPECIFICATIONS

- All electrical hardware is rated for Class 1, Division 2, Group B/C/D T3 or ATEX
- All emissions destruction hardware is housed inside a 12"H x 12"W x 8"D Appleton Division 1 Explosion Proof Enclosure. Additional electrical hardware is in a NEMA 7 Division 1 enclosure. The control hardware for the EM is in a NEMA 7 or 4X stainless steel enclosure, depending on the control hardware selected.
- 110VAC-20 amp power required
- Regulated Instrument or plant air supply. Maximum air flow consumption is based on the sample being sent to the Emissions Master:
  - a. Methane stream – Air consumption 60-67 LPM (2.3 SCFM)
  - b. Mixed gas stream – Air consumption 70-79 LPM (2.8 SCFM)
  - c. Propane gas stream – Air consumption 24-26 LPM (0.93 SCFM)
  - d. Air consumption for the Emissions Master High Flow unit will range from 50-120 LPM (1.7-4.23 SCFM) depending on the gas stream composition.
- If instrument or plant air is not available, the EM can be supplied with an optional area-rated ADI air pump capable of delivering up to 80 LPM (2.82 SCFM) of air to ensure proper operation of the Emissions Master. This will require an additional 110VAC circuit.
- The EM is equipped with either the standard dual-channel controller or the optional area-rated PLC controller.
- Mounting arrangement can be horizontal or vertical.
- Standard Flow Emissions Master weight is 400lb (181 Kg). The High Flow Emissions Master weight is 600lb (272 Kg).
- Provided the vent gas and combustion air setting are properly set, the hydrocarbon destruction efficiency will be > 99.9%. Every Emissions Master is tested during Factory Acceptance Testing to ensure the total hydrocarbon emissions is less than 10 ppmv.

Table 1 below provides a comparison of the Emissions Master mitigation technology to competing products.

**TABLE 1 – EMISSIONS MITIGATION TECHNOLOGY MAXIMUM FLOW RATES BASED ON GROSS HEATING VALUES**

MODEL	HYDROGEN FLOW-LPM	METHANE FLOW-LPM	ETHANE FLOW-LPM
Emissions Master	31.38	4.76	2.69
Emissions Master High Flow	62.76	9.52	5.39
MTI Trace Erase	1	0.35	0.19
Falmouth	0	1.57	0.83

MODEL	ETHYLENE FLOW-LPM	PROPANE FLOW-LPM	PROPYLENE FLOW-LPM
Emissions Master	2.95	1.87	2.06
Emissions Master High Flow	5.90	3.74	4.12
MTI Trace Erase	0.21	0.13	0.15
Falmouth	0.89	0.57	0.59

**Units Required to Handle 1 LPM of Methane # of Units**

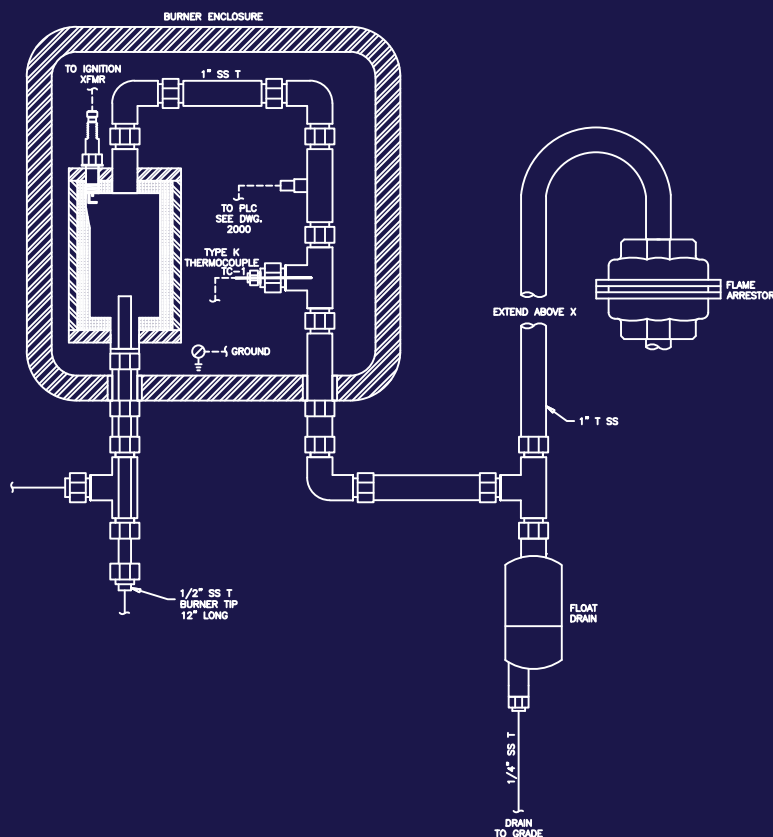
Emissions Master	1
Emissions Master High Flow	1
MTI Trace Erase	3
Falmouth	1

**Units Required to Handle 1 LPM of Ethane # of Units**

Emissions Master	1
Emissions Master High Flow	1
MTI Trace Erase	5
Falmouth	2

**Units Required to Handle 1 LPM of Propane # of Units**

Emissions Master	1
Emissions Master High Flow	1
MTI Trace Erase	7
Falmouth	2



For additional information on the Emissions Master product series, please contact your Account Manager or email [sales@smithanalytical.com](mailto:sales@smithanalytical.com).