



**ENTECH**  
INSTRUMENTS

*See What's Really There™*



# 2022 CATALOG

Solutions for Chemical Monitoring & Analysis

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## President's Letter



Entech Instruments is continuing its tradition of providing the most advanced and accurate sample preparations systems available for headspace and gas sample analysis by GC and GCMS. Our new Multi-Capillary Column Trapping Systems (MCCTS) are transforming the way that gas phase sample preconcentration is performed prior to GC injection, all without the use of liquid nitrogen or even electronic cooling systems. These "fan cooled", extremely robust and reliable multi-stage capillary column traps manage water and CO<sub>2</sub> hundreds of times better than any packed trap system. This means much faster release for better chromatography, supporting "faster" GC methods, while also demonstrating far better immunity to contamination when exposed to high concentration

samples. Our MCCTS traps have been implemented in a full cryogen free TO15 solution with much faster GC injections and shorter run times than other TO15 systems on the market. Other applications using this revolutionary capillary trapping technology will also soon be announced.

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Entech's patent pending Sorbent Pen™ technology takes SPME to the next level by providing enhanced sensitivity, improved quantitation, and greater robustness than its fiber-based predecessor. Sorbent Pens utilize a unique flow through cartridge that forms a seal on a vial allowing a vacuum to be created within the vial. This new technique called VASE (Vacuum Assisted Sorbent Extraction) has been demonstrated to cover the entire range of analytes from the lightest volatile compounds (Freon 12/Vinyl Chloride and others) to very heavy 5-6 ring PAH compounds, while remaining in the headspace to avoid actual contact with the sample matrix. With 50-150x higher phase loading and the use of traditional adsorbents with thousands of times more surface area than SPME, the Sorbent Pen™ can fully extract difficult compounds from complex matrices providing superior sensitivity and reproducibility. Sorbent Pens are also available for performing Diffusive and Active air monitoring, making the Sorbent Pen technique extremely versatile. Our newly released SPR40 -Sample Preparation Rail promises to be a game changer for headspace sample preparation and general thermal desorption methods. Rather than desorbing a TD tube into a completely different instrument with separate traps, transfer lines, and rotary valves to have to clean and maintain, the SPR40 allows thermal desorption of Sorbent Pens directly into a GC or GCMS to allow dramatically improved recovery, consistency, and easy of maintenance. Watch for a new wave of applications coming out in 2019-2020 using the SPR40 Robotic inlet.

Our unmatched Silonite™ surface coatings continue to be perfected, resulting in the most consistent, durable, and inert coatings available for GC inlet systems and for mercury vapor handling without surface interactions. Silonite™ surface treatments play a vital role in achieving our ultimate goal; to provide our customers with complete solutions for "analytical grade" VOC and SVOC handling and inlet systems that can sample, store, and recover virtually all GCMS compatible compounds.

Finally, for US EPA Method TO-15 and China HJ-759, Entech is proud to be the only supplier that manufacturers and supports the complete solution for sampling and analysis of airborne contaminants using Silonite™ coated stainless steel canisters. Entech has assembled an extraordinary and talented team of Chemists and Service Engineers with a combined knowledge of over 200 years of laboratory and field experience – to provide our clients with premier customer service and on-site support. To our valued customers we would like to say thank you for your patronage through the years and we look forward to servicing your analytical needs for many years to come.

Sincerely,  
Daniel B. Cardin – President



Entech Instruments is a leading developer and manufacturer of analytical instrumentation that supports professionals around the world in the Environmental, Industrial Hygiene, Food & Beverage, Product Testing, Forensics, and Clinical Analysis markets.

To provide solutions for such a diverse set of industry applications, Entech has assembled an extraordinary and talented team – a combined knowledge of over 200 years of laboratory and field experience – to provide our clients with premier customer service and on-site support. We invite you to share your application challenges and requirements so we can create a customized solution just for you.

~ The Entech Team

# TrueSeal™ Valve

## Features

- 3rd Generation valve offering superior performance.
- Not as susceptible to particulate induced leaks.
- Two separate seals ensure leak-tight operation.
- Repairable if very large amounts of debris were to enter the valve.
- Unique soft nickel seal is the same material used in ultra-torr and VCR fittings.
- Not subject to damage even after repeated hard tightenings.

# TRUESEAL™

FOR AIR & GAS SAMPLING



## Silonite™ Canisters with the **NEW** TrueSeal™ Valve



15L Canister  
w/ TSG-01

6L Canister  
w/ TSG-01

3.2L Canister  
w/ TSG-01

2.7L Canister  
w/ TSG-01

2.5L Canister  
w/ TSG-01

1.4L Canister  
w/ TSG-01

1L Canister  
w/ TSG-01

### 0.01–100 PPB Trace Level

Entech's Silonite™ canisters feature a large volume capacity for detection of volatile chemicals down to the low part per trillion range. An inert and durable internal Silonite™ coating provides a high-quality, long-term sample storage solution. Losses in the valve are avoided by using our new TrueSeal™ Valve which includes Entech's new "sure-seal" technology. An integrated valve guard is securely welded to the canister for superior light-weight valve protection without any stresses to the valve stem associated with heavy "strapped-type" valve guards. These canisters are certified to meet or exceed the technical specifications required for EPA methods TO-14a and TO-15. High quality performance is verified for EVERY canister with our demanding chemical inertness tests.

### Features

- Silonite™ Surface Coating**  
*We believe that each and every canister should be as inert and corrosion resistant as possible. That is why all of our canisters feature Silonite™.*
- Welded Valve Guard**  
*Unlike "strap" designs, our TrueSeal™ guard provides superior valve protection and far less added weight.*
- Extended Range Canister Sampling**  
*Our Silonite™ Canisters are more inert than SUMMA® or electropolished canisters, allowing recovery of a greater range of chemicals – including reduced sulfur compounds.*

*The 3.2L and 2.7L are lighter alternatives for canister sampling featuring minimal weight and maximum portability. 6L and 15L Canisters are ideal for large volume sampling and lab standards.*

Description	Unit	Part #
1L Can Silonite™ TrueSeal™ Valve	EA	29-MC10LSV
1L Can Silonite™ TrueSeal™ & Compound® Gauge	EA	29-MC10LSVG
1.4L Can Silonite™ TrueSeal™ Valve	EA	29-MC14LSV
1.4L Can Silonite™ TrueSeal™ & Compound® Gauge	EA	29-MC14LSVG
2.5L Can Silonite™ TrueSeal™ Valve	EA	29-10252
2.5L Can Silonite™ TrueSeal™ & Compound® Gauge	EA	29-10252VG
2.7L Can Silonite™ TrueSeal™ Valve	EA	29-10272A
2.7L Can Silonite™ TrueSeal™ & Compound® Gauge	EA	29-10272VG
3.2L Can Silonite™ TrueSeal™ Valve	EA	29-10322
3.2L Can Silonite™ TrueSeal™ & Compound® Gauge	EA	29-10322VG
6L Can Silonite™ TrueSeal™ Valve	EA	29-10622
6L Can Silonite™ TrueSeal™ & Compound® Gauge	EA	29-10622VG
15L Can Silonite™ TrueSeal™ Valve	EA	29-11522
15L Can Silonite™ TrueSeal™ & Compound® Gauge	EA	29-11522VG