



Versa

Automated Headspace Vial Sampler

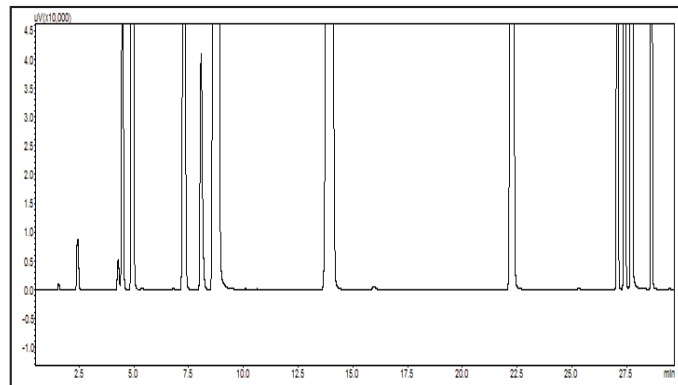
 **TELEDYNE TEKMAR**
A Teledyne Technologies Company

Small Size. Big Value.

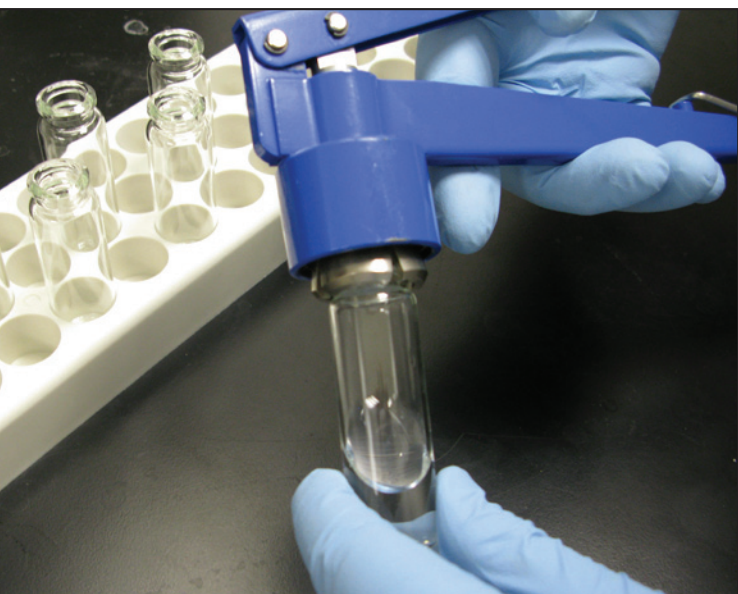
Automated Static Headspace System

Static headspace is one of the most popular techniques due to its versatility for analyzing volatile organic compounds (VOCs) in a complex variety of matrices. This is due to the elimination of tedious sample preparation steps and prevents contamination problems that are common to other sample introduction techniques. Teledyne Tekmar draws on our experience as a leader in low-level VOC analysis with the introduction of this companion autosampler to the Headspace product line.

Versa is the perfect solution for applications which require all the advantages of headspace analysis and is economical to fit any budget.



Residual Solvents per USP <467>



Applications and Industries

The Versa can quickly and accurately identify residual solvents in bulk or finished pharmaceuticals as prescribed in the United States Pharmacopeia (USP) and meets all of the guidelines per USP Method <467>.

Other applications include:

- Dissolved Gas Analysis per Method RSK-175
- Contaminants in packaging materials
- Volatile Organic Compounds (VOCs) in drinking water, wastewater, and soils
 - Screening of high level samples with EPA Method 5021
 - China Environmental Method GB-5749
- Flavor and Fragrance profiling
- Forensics and Toxicology



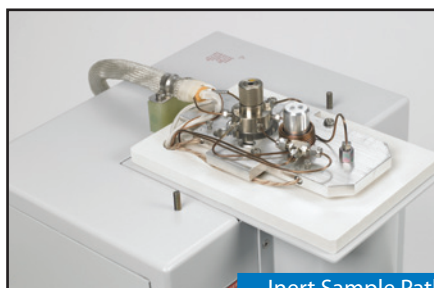
Versa

Features and Benefits

- Small on size yet big on value (only 12" wide)
- 20-position autosampler/single position platen oven for static sampling analysis of 22mL vials
- Sample heating to 200°C throughout pathway
- Built-in pressure control to ensure consistent volume for all samples regardless of external conditions
- Inert sample pathway including transfer line, sample needle, and loop provide superior analytical results by eliminating adsorption and reducing carryover
- Automatic Leak Check and Benchmark test for quick troubleshooting
- Simple method development using Method Optimization Mode (M.O.M.)
- Versa TekLink™ 2G software for use as standard or full 21 CFR compliance



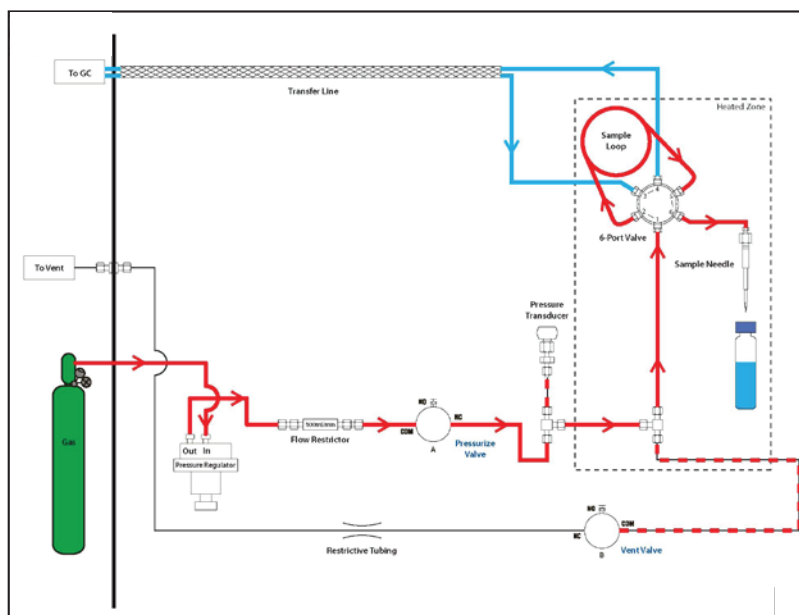
Walk-away Automation



Inert Sample Pathway



Vial Cover (Optional)



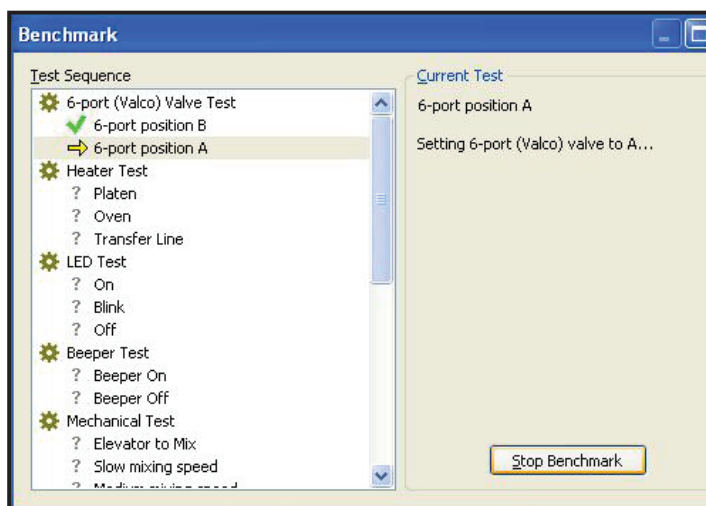
This static flow diagram shows the system in a standby mode in which the loop and needle are continuously swept with an inert gas to ensure cleanliness between samples.



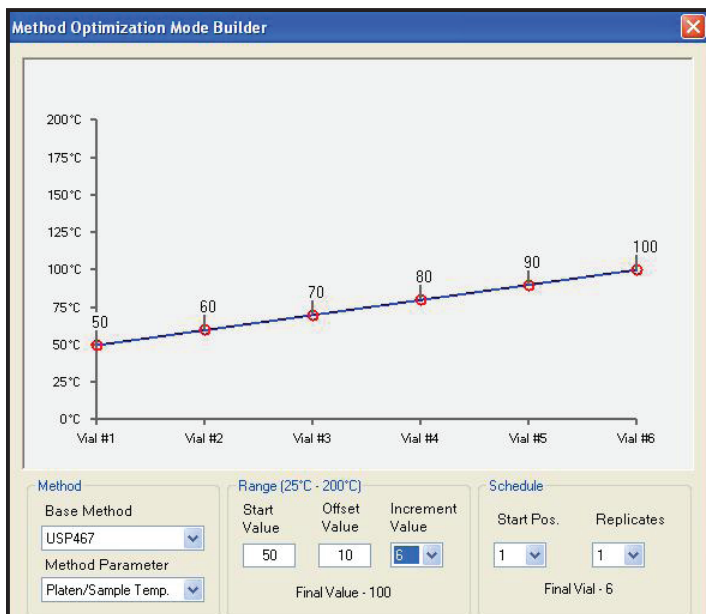
Versa TekLink™ 2G

Fully Optimized User Interface

Versa comes with easy-to-use and proven TekLink 2G software that operates from Windows XP or higher and includes 21 CFR compliance tools. All instrument parameters, method scheduling and editing can be programmed.



Benchmark - Versa TekLink™ 2G is capable of performing useful diagnostics such as a Leak Check and Benchmark test. The Benchmark screen contains an interactive program that tests the Versa components including heaters, LEDs, valves, and the continuity of inputs and outputs.



Method Optimization Mode (M.O.M.) - Developing a new method to achieve the best analytical results for an application can be both difficult and time consuming. With Method Optimization Mode, the analyst can optimize different method variables such as platen temperature, sample equilibration time, pressurization, mixing, loop fill, and inject times and substantially shorten the time required for method development.

The method starts with a value and the parameter of choice will increment during the optimization process. For example, a value of 10 will increment the platen/sample temperature by 10°C for every sample. The first sample will be heated to 50°C, the next sample at 60°C, and so on.

Versa Specifications

Autosampler Capacity	20-Position
Platen Heater	Single position; ambient to 200°C via resistance heater settable in 1°C increments
Vial Size	22mL vials
Sample Loop	Ships with a standard 1mL Silco® coated loop. Other optional loop sizes include 100, 250, 500µL as well as 2, 3, and 5mL
Sample Mixing	System allows variable power settings from low / medium / high
Sample Pathway	Siltek® tubing. Entire sample pathway temperature controlled up to 200°C
Software	Versa TekLink™ 2G software in a Windows® XP or greater environment via USB connection Versa TekLink™ 2G can be configured for full 21 CFR Part 11 compliance tool capability
GC Interface	Interface to virtually all commercially available GC instruments. Supplies or accepts GC and Data System start/ready signals via software selectable GC/IO configuration
Pressure Control	Software has the ability to control pressure to ensure consistent volume regardless of external conditions for all samples via a pressure transducer
Valving	Motor-actuated 6-port valve with removable rotor (controlled from ambient to 200°C)
Voltage Requirements	100/115 VAC ±5%, 50/60 Hz, 5 amps & 220/240 VAC ±5%, 50/60 Hz, 2.5 amps
Gas Requirements	Ultra-high purity (99.999%) Helium or Nitrogen; incoming pressure: 45 - 140 psig
Unit Dimensions (H x W x D)	21in (53.34cm) x 12in (30.48cm) x 21in (53.34cm)
Weight	40lbs (18.14kg)
Environmental Conditions	Operating Temperature: 10° to 30°C; Storage Temperature: -20° to 60°C; Relative Humidity: 10% to 90%
Corrosion Resistance	The chassis and carousel tray are resistant to aqueous samples with pH range 1-10
Certifications	CE, CETL, CSA, ETL

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Service and Support You Can Count On

Teledyne Tekmar can help with your instrument installation. Our team of trained service professionals can provide extended on site training for successful operation and instrument maintenance. For those needing documentation on analytical performance and operating procedures, Tekmar offers validation packages. These packages come complete with Installation Qualification (IQ), Operational Qualification (OQ), and Operating guidelines. Our validation packages are ideal to help you comply with your specific methodology. We also provide on-site validation packages performed by factory trained and certified engineers.

Our experience in state-of-the-art instrument design translates to the most capable support available. From a fully staffed applications laboratory to our worldwide network of technical professionals, we are ready to be your partner and assure that you achieve the maximum productivity from your instrument. Our outstanding customer service is a natural extension of our world class, ISO 9001 Certified Quality System.

