



See What's Really There™

**5400B Thermal
Transfer System**



**5400B
THERMAL**
Transfer System

The Next Generation in Tube Screening & Analysis.



The 5400B Thermal Transfer System

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An elegant solution for Thermal Desorption Tube screening and analysis by GCMS.

The analysis of adsorbent tubes can be a nightmare for analytical laboratories, especially when there is a requirement to get results on 100% of the tubes tested. Instrument problems, unexpected analyte loading outside of the GCMS calibrated range, and cross-contamination make the normal “one-shot” analysis very risky. Even attempting to recover a “split” fraction of the tube sample onto another tube is plagued with problems such as added background, poor leak-free validation, and incomplete recoveries from yet a second tube.

The 5400B Thermal Transfer System simplifies the entire thermal desorption tube analysis process. The 5400B automates the precise transfer of tube samples into vacuum-tight Bottle-Vac™ samplers. During desorption, approximately 600cc of nitrogen is used to recover the tube sample much more completely than direct GC thermal desorbers – which attempt to desorb the sample using as little helium as possible.

Perform Sample Screening, Multiple Analyses, and more. All automated with the 5400B.

The 5400B performs an automated leak check before thermally desorbing the tube sample to ensure quantitative sample recovery. After desorption, final pressure is adjusted to obtain the same desorption volume for each sample transfer. Once the sample is transferred into a Bottle-Vac™, as little as 0.1–1.0cc of the sample can be analyzed, or the entire volume using a 7200 or 7200 / 7650. Further dilutions are also easily accomplished.

Features

- **Sample Screening**
Desorb the tube sample into deactivated glass bottles and analyze as little as 0.01% of the original sample.
- **Perform Multiple Analyses**
- **Increase Dynamic Range**
Optimize GCMS resolution for quantitative analysis.
- **Tube / Canister Shared Calibration**
Reliable and simplified GCMS analysis.
- **Flexible Configuration**
Easily customize your 5400B to handle multiple tube sizes.
- **Flow Rate Control**
Control desorption flow rate to optimize recovery.
- **Leak Checking**
New, low volume pressurized leak check eliminates potential for sample loss.
- **High Temperature Operation**
New, high temperature operation to 340°C for improved high molecular weight recovery for Method TO-17.
- **Complete Software Control**
Improved Windows® software with an advanced and intuitive user interface.
- **Bakeout Mode**
New bakeout mode for TD Tube Thermal Conditioning.
- **Radiello® TD Tube Analysis**
Supports analysis of Radiello® thermal desorption cartridges.

Description	Unit	Part #
5400B Thermal Transfer System*	EA	5400B
Heater - 6mm OD x 11.5cm (Supelco®, Dynatherm®)	EA	09-25010
Heater - ¼" OD x 7" (Tekmar®, Gerstal®)	EA	09-25020
Heater - ¼" OD x 3.5" (Perkin-Elmer®, Markes®, Entech®)	EA	09-25030
Heater - ⅝" OD x 5" (VOST, ¼" ends)	EA	09-25070
Female Micro-QT™ / Tube Fitting	EA	FQT-400VLS
⅜" Radiello® Desorber Tube	EA	36-54100B
SVOC Preparation Tube	EA	36-54200

*Heaters are not included with base unit. Order heaters separately and configure as needed.

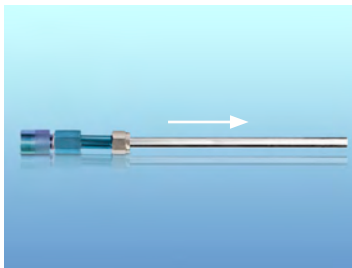
5400B Configuration



1 Attach trap heater onto 5400B assembly.



2 Attach other trap heaters as needed.



3 Attach Micro-QT fitting onto desorption tube.



4 Insert tube with fitting into tube heater.



5 Gently snug thumb-wheel on bulkhead fitting and perform pressurized leak check.



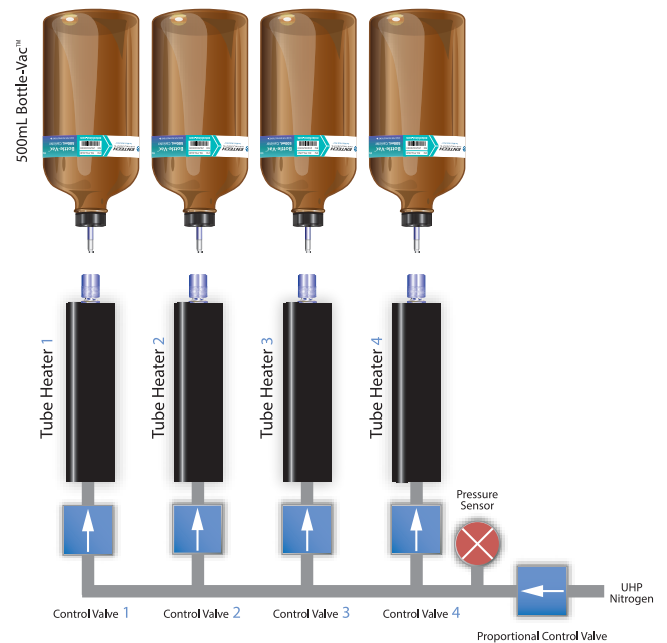
6 Attach an evacuated container to the top.

5400B Automation Software

Features

- Automated Leak Checking
- Automatic Desorption Process
- Consistent Desorption Volume

All the information you need, displayed in just one window!



Finally, a way to analyze thermal desorption tubes that makes sense!



Thermal Desorption
5400B Thermal Transfer System



Analysis
7200 Preconcentrator



Expand your
TD Tube Analysis
Capabilities!

Transfer tube samples to Bottle-Vac™ samplers to accurately perform screening and multiple analyses!

Call Us Today to Learn More!



7200
Preconcentrator



7650-L20
GC Gas Autosampler



7016D
Canister Autosampler



4700
Precision Diluter



3108D
Canister Cleaning System

*The Recognized Global Leaders
in Environmental Air Analysis.*

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