

C2 Short Path™ Thermal Desorption TD-5

A Microprocessor Controlled Short Path Thermal Desorption System for the Analysis of Volatiles and Semi-volatiles by GC and GC/MS Systems.

Features

Analytical quality

- High sensitivity thermal desorption and direct thermal extraction of solid, liquid, and gas samples
- No memory effects – each sample has its own independent and “short” flow path from sample to GC, eliminating transfer lines as a source of contamination
- Stainless steel sample tubes (glass-lined GLT or silco treated) are inert to samples and strong for sample handling and transporting.
- Rapid cryogenic (CO₂ or LN₂) cooling and heating of the GC column head for improved chromatographic resolution (optional Cryo-Trap™ accessory).

Functions/Convenience

- Mounts overtop most GC injection ports—easily removable and transferable.
- Automatic injection and desorption of sample into GC (pneumatic driven injector).
- **NEW** - Windows-based software for control and monitoring of the system
- **NEW** - Seamless integration into Agilent ChemStation™ and Thermo Fisher Scientific Xcalibur™
- Optional - stand alone operation with other top injecting GC's

Specifications

- **NEW** - Desorption: temp range: 20° to 400°C, either isothermal or temperature programmed. Max heat rate: 100°C/min.
- Cryo-trap: min temp: -70°C (CO₂) or -180°C (LN₂). Max temp: 400°C. Max heat rate: 10°C/sec.

The new SIS TD-5 is a "short path" thermal desorption system. It provides unattended thermal extraction (thermal desorption) and injection of volatile and semi-volatile organics from solid, liquid and gas samples into a gas chromatograph (GC). The system delivers samples into the GC along an optimal "short path," thereby eliminating transfer lines and cross-sample contamination issues found in previous systems.

A sample for analysis is introduced into a desorption tube, which is then fitted with a needle and attached to the TD-5 Desorption Unit. The Desorption Unit sits over the GC injection port, where, upon signal from the PC software, it automatically injects and desorbs the sample into the GC injection port and column using the temperatures and times prescribed in the desorption method.

The TD-5 System consists of the Desorption Unit (which contains the sample analysis hardware), an Electronics Console (which contains a microprocessor and power supply), and a Windows-based Thermal Desorption software (which provides control and monitoring of the system). This software can be fully integrated with selected GC data systems (e.g. Agilent ChemStation), or it can operate fully independently from the GC data system. Various accessories are available such as the Cryo-Trap, which cryogenically cools and rapidly heats the GC column head for improved chromatographic resolution.



Applications

Thermal Desorption (Purge & Trap)

Environmental Air Analysis
Flavor and Fragrance Analysis
Off odor/Off-Flavor analysis
Forensic Arson Analysis

Residual Gas, Solvents and Chemicals in:

Pharmaceuticals
Packaging Materials
Building Products
Food Products
Natural Products

Direct Thermal Extraction of:

Plastics
Synthetic Fibers & Materials
Spices
Natural Products
Pharmaceuticals
Finished Products



Multi-sample version of our Thermal Desorption System is also available. See pgs. C6 - C11 Visit sisweb.com