

GERSTEL LabWorks Platform

The basis of your analytical success



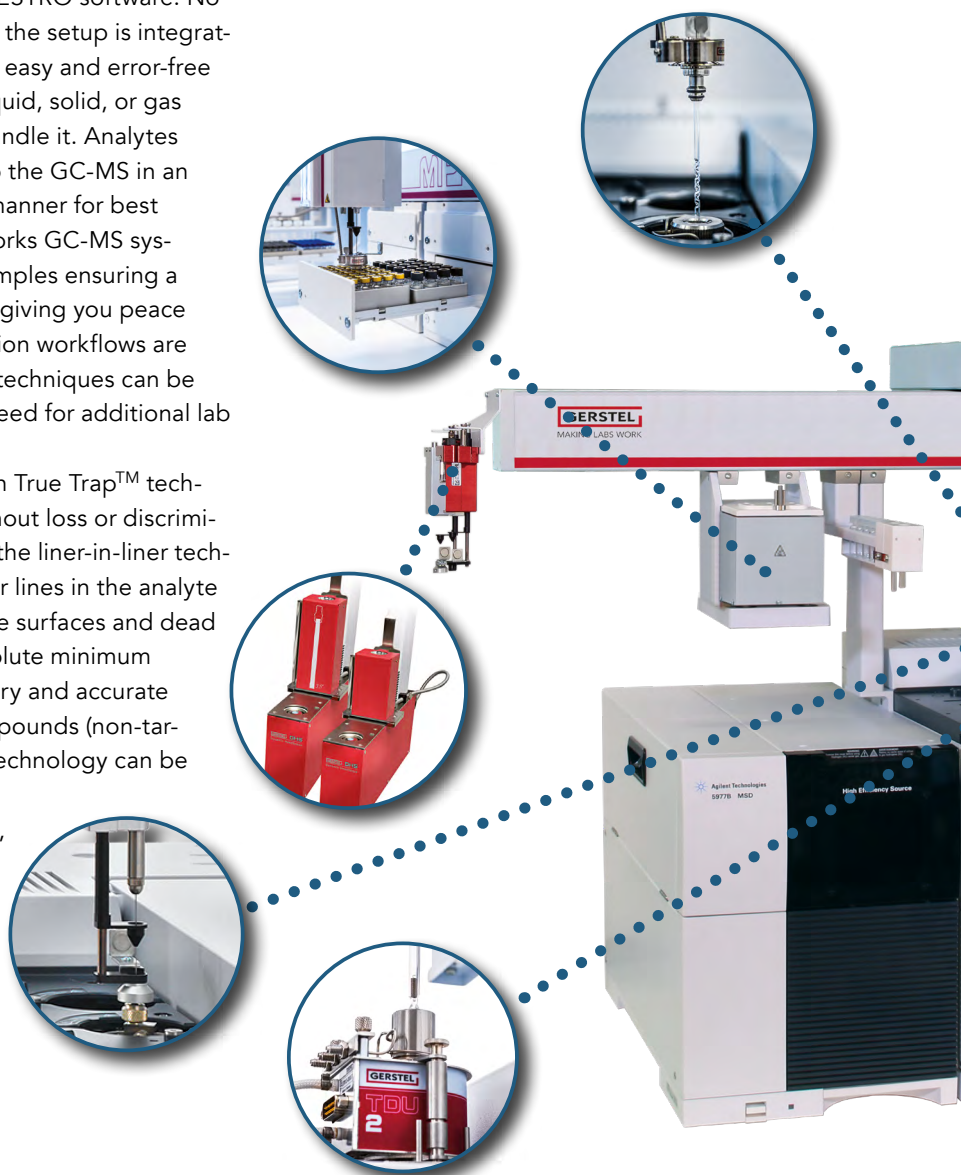
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With this system in your lab, you are prepared for whatever comes your way: The GERSTEL LabWorks Platform is the only truly universal system for GC-MS sample introduction. LabWorks incorporates highly efficient automation with modular flexibility that enables the GC-MS lab to meet critical challenges at short notice. LabWorks Basic enhances the potential of GC labs by incorporating 10 fully automated sample

introduction techniques that are intuitively selected, set up and controlled using MAESTRO software. No programming skills are needed, the setup is integrated with the Agilent software for easy and error-free system operation. Whether a liquid, solid, or gas phase sample, LabWorks can handle it. Analytes are extracted and introduced to the GC-MS in an accurate, reliable, and precise manner for best possible results. A single LabWorks GC-MS system handles a wide range of samples ensuring a good return on investment and giving you peace of mind. Even complex application workflows are easily automated, while further techniques can be added as needed without the need for additional lab bench space.

The LabWorks platform relies on True Trap™ technology for analyte trapping without loss or discrimination. The system is based on the liner-in-liner technology without valves or transfer lines in the analyte flow path. This means that active surfaces and dead volumes are reduced to an absolute minimum for best possible analyte recovery and accurate results – even for unknown compounds (non-target analysis). The True Trap™ technology can be used with Headspace, Thermal Desorption, SPME, SPME Arrow, SBSE, and TF-SPME for highly efficient analyte enrichment and unsurpassed limits of

detection and quantification. The LabWorks platform further includes a range of sample preparation capabilities such as adding internal standard to your sample, diluting, derivatizing, as well as generating calibration curves and updating the method with the new calibration. And LabWorks is easily expanded to include more than 20 sample preparation and introduction techniques that can be accessed as needed. For laboratories that need to respond quickly and flexibly to meet critical challenges, the LabWorks platform offers the most comprehensive and flexible solution available today.



Techniques included in the GERSTEL LabWorks platform

- Liquid injection
- Large volume injection (LVI)
- Headspace
- Thermal desorption (True TD) with TDU and True Trap™ Technology
- True headspace enrichment
- Twister
- TF-SPME (Thin Film SPME)
- Direct thermal extraction
- Thermal desorption of tubes packed with sorbent
- Thermal extraction of liquids in μ -vials
- Derivatization
- Adding internal Standards
- Generating calibration standards
- Generating dilution series

Important features of the LabWorks platform

- 10 sample introduction techniques included in LabWorks Basic
- True Trap™ technology requires only one cryogenic trap for all applications
- Cryogen free focusing of target analytes
- True enrichment for HS, SPME, TD, Twister, TF-SPME and DHS techniques
- No valves or transfer lines – best possible system for nontarget analysis (unknowns)
- Simple modular expansion path for more than 20 additional sample introduction techniques
- Very simple addition of advanced analysis techniques (ODP, 1D/2D etc.)
- No need to reconfigure the GC inlet when changing between techniques
- Space saving system, no further lab bench space required in addition to the GC-MS.
- MAESTRO integration into the Agilent Technologies Software platform

LabWorks platform hardware components

- MPS robotic: Automates the sample preparation and all sample preparation techniques
- Thermal Desorption Unit (TDU 2): Enables the analysis of all sample matrices
- Cooled Injection System (CIS): PTV type GC inlet, highly suitable as universal cold trap for thermal desorption.

