

**GERSTEL**

MAKING LABS WORK



# GERSTEL MPS LabWorks Platform

Eliminate Doubt, Discover the Unknown

Solve your critical analytical challenges  
with unmatched capability and flexibility

# MPS LabWorks Platform

## Automated Sample Introduction

The GERSTEL MPS LabWorks Platform is the only truly universal system for sample introduction for GC-MS. It provides unmatched capability and flexibility in solving your critical challenges

### Key MPS Labworks Platform Features

- 10 Sample introduction techniques in standard platform
- True Trap™ technology requires only one trap for all applications
- Cryogen free trapping for target analysis
- True Enrichment for Headspace, SPME, Thermal Desorption, Twister®, TF-SPME, and Dynamic Headspace Techniques
- No valves or transfer lines (required for non-targeted analysis)
- Easy addition of sample introduction and preparation techniques
- Easy addition of more advanced analytical techniques (ODP, 1D/2D, etc.)
- GC inlet does not need to be reconfigured when switching between techniques
- Requires no additional bench space
- MAESTRO integration into Agilent Technologies software platforms

### MPS LabWorks Platform Hardware Components

1. **MPS Robotic Autosampler**- automates all sample introduction techniques and sample preparation functions
2. **Thermal Desorption System**- provides analyte introduction for all types of sample matrices
3. **Cooled Injection System**- PTV type inlet that also acts as a universal trap for thermal desorption.

# MPS LabWorks Platform 10 Standard Techniques

Eliminate Doubt, Discover the Unknown

## Non-Target Analysis

The MPS LabWorks Platform features True Trap™ technology that provides discrimination free trapping of compounds without the need for valves and transfer lines. This is a requirement for determination of unknown compounds (non-targeted analysis). This technology can be used with Headspace, Thermal Desorption, SPME, SBSE, and TF-SPME for true compound enrichment, achieving unsurpassed detection limits.

The MPS LabWorks Platform also has sample preparation capabilities, such as internal standard addition, sample dilution, and preparation of calibration curves.

**CIS**

1. Liquid Injection
2. Large Volume Injection
3. Headspace Injection
4. Multiple Headspace Injections

**Bonus: Sample Preparation**

- Internal Standard Addition
- Sample Dilution
- Calibration Curve Preparation

**Thermal Desorption**

5. Sorbent packed tubes
6. Direct thermal extraction
7. Multi-desorption mode
8. Twister®
9. TF-SPME
10. Liquid matrices in micro-vials

# MPS LabWorks Platform

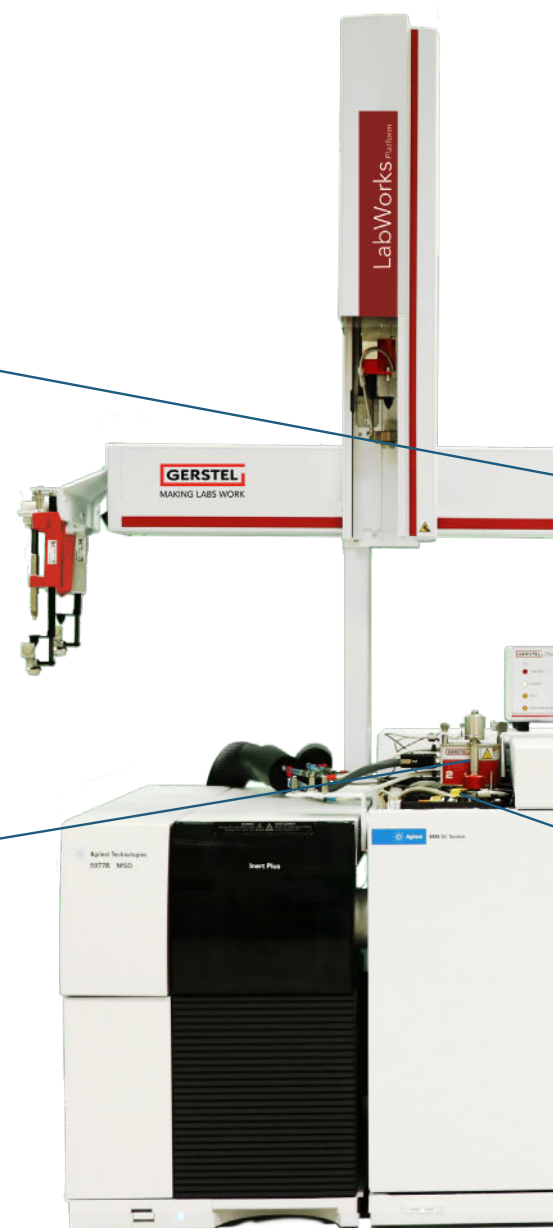
## Automated Sample Introduction

### MultiPurpose Sampler

- Internal Standard Addition
- Sample Dilution
- Calibration Curve Preparation

### Thermal Desorption

- Sorbent packed tubes
- Direct thermal extraction
- Multi-desorption mode
- Twister®
- TF-SPME
- Liquid matrices in micro-vials
- Multiple SPME injection



The MPS LabWorks Platform is easily expanded so that it can perform over 30 sample introduction and preparation techniques.

# The MPS LabWorks Platform is easily expanded through simple addition of modular options

## Dynamic Headspace

- Full Evaporative Dynamic Headspace
- Multi-Volatile Method
- Dynamic Headspace – Large Vessel

- Olfactory Detection Port

## Cooled Injection System

- Liquid Injection
- Cold On-Column Injection
- Large Volume Injection
- Multiple Headspace Injection
- SPME Injection



For the researcher trying to solve the most critical challenges, the MPS LabWorks Platform is the most powerful system available.

# Over 30 Techniques

## Sample Introduction Techniques

- Liquid Injection
- Cold On-Column Injection
- Large Volume Injection
- Automated Liner Exchange
- Headspace Injection
- Multiple Headspace Injections
- SPME
- SPME Arrow
- Thermal Desorption
  - Sorbent packed tubes
  - Direct thermal extraction
  - Multi-desorption mode
  - Twister®
  - TF-SPME
  - Liquid matrices in micro-vials
  - Multiple SPME injection
- Pyrolysis
  - Pulsed, Ramped, and Smart Ramped
- Dynamic Headspace
  - Full Evaporation Dynamic Headspace
  - Multi-Volatiles Method
- Dynamic Headspace Large

## Sample Preparation Options

- Dilution
- Standard Addition
- Calibration Curve Preparation
- Bar Code Reading
- Filtration
- Evaporation
- Weighing
- Mixing
- Centrifugation

- Multiple SPE Options
- Sonication
- Cooled Trays and Stacks
- Custom Trays and Wash Stations

## Additional Modules for Advanced Problem-Solving

- Olfactory Detection Port
- Preparative Fraction Collector
- Cryo Trap System
- Selectable 1D/2D GC for Heartcutting



### Seamless Integration

with Agilent  
*ChemStation*  
*MassHunter*



### True Trap

Core technology provides discrimination-free trapping of compounds without the need for valves & transfer lines



### Space Saver

Small Footprint  
All techniques mounted on GC



### Non-targeted Analysis

Multiple extraction techniques for true compound enrichment & achieving unsurpassed detection limits

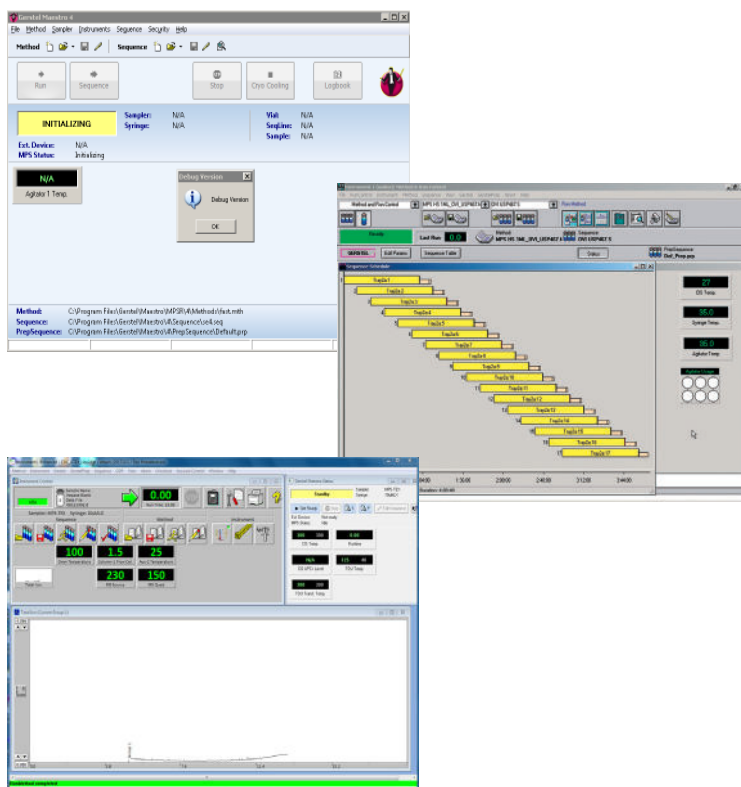
# GERSTEL MAESTRO Software

MAESTRO software is a flexible and robust platform for efficient automated sample preparation and introduction

MAESTRO—  
Sample Prep by  
Mouse-Click



- Maximize sample throughput and lab productivity
- Simple system operation with one method, one sequence table, and one interface
- Catch errors before they occur and protect system components
- Intuitive design and graphics enable proficiency in minutes
- Versatile platform to customize sample preparation and edit active sequences
- Guidance for successful and simplified method development and optimization



Simple User Interface

Unmatched Flexibility

Extensive Context-Sensitive Help

Advanced Sequence Scheduling and Overlapping

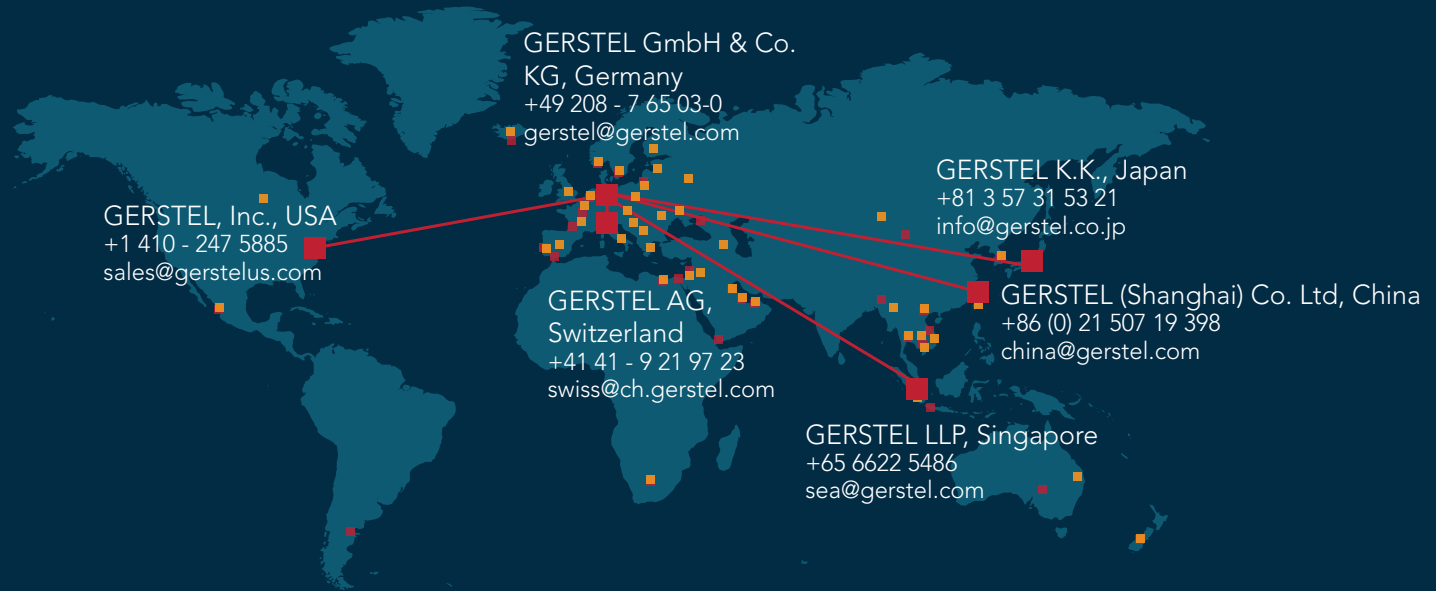
Comprehensive Integration

Maximum Security



# GERSTEL Worldwide Regions

GERSTEL is an international company with offices all over the world including Germany, USA, Singapore, Japan, and China. Contact a member of our team who serves your region.



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