

# CrossLab Preventive Maintenance Services

Protect your instrument investment with tailored maintenance solutions



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# Maintain Peak Performance and Extend Your Instruments Life

CrossLab Preventive Maintenance services



*"I can look at the log book and see that every instrument that failed did not have a PM recently."*

– Contract Testing Lab

## It pays to take good care of your instruments

With factory-recommended service, you can experience:

- **Minimized unplanned downtime:** Save an average of 3.4 days per year of downtime
- **Lowered repair costs:** Experience 41% average savings in repairs costs
- **Reduced repair frequencies:** Lessen the incidence of repairs by as much as 24%

## Put Agilent's 50+ years of experience to work in your lab

Agilent has been manufacturing and maintaining instruments to the highest standards for over 50 years. Here is what you can expect when you partner with Agilent:

- **No hidden fees:** Service includes all travel, labor, and supplies required for expert inspection, cleaning, calibration, and lubrication of your analytical system
- **Tailored services:** Preventive Maintenance is included in a number of our comprehensive repair service plans like CrossLab Silver and Enhanced Extended Warranty. Learn more at: [www.agilent.com/chem/service-plans](http://www.agilent.com/chem/service-plans)
- **Quality:** All field personnel use high-quality Agilent parts and supplies and follow a predefined checklist of Preventive Maintenance procedures. All tasks performed are documented and provided to you as a record of the preventive maintenance at the end of the service.
- **Reliability:** Our knowledge and expertise has led us to create defined maintenance procedures that identify a list of high-wear parts and supplies to replace, regardless of condition. This helps to avoid potential points of failure throughout the year, protecting you against unplanned downtime.

# Agilent Preventive Maintenance Service Options for GC and GC/MS

Services Included	Preventive Maintenance (PM)	Enhanced PM	Preventive Maintenance MS Only	MS Ion Source Cleaning
Inspection	•	•	•	
System Cleaning	•	•	•	
Leak Test	•	•		
Autosampler Maintenance	•	•		
Verification	•	•	•	
Documentation	•	•	•	
Parts and supplies replacement **	•	•	•	
Source Cleaning*	•	•	•	•
Vacuum System Maintenance*	•	•	•	
Vacuum System Verification*	•	•	•	
Replace Flow Path Components		•		
Enhanced System Cleaning		•		

\*Applicable to GC/MS instruments

\*\*In accordance with predefined CrossLab Preventive Maintenance procedures

## Why Upgrade to an Enhanced Preventive Maintenance?

Enhanced Preventive Maintenance is created especially for GC systems equipped with a headspace sampler. It includes the Preventive Maintenance services plus the addition of maintenance services for the headspace sampler. This includes replacement of most solvent pathway components, regardless of condition.

Tailored services that match your needs: Enhanced Preventive Maintenance provides an additional level of service for instruments experiencing high use or work with harsh solvents.

*Note: Enhanced Preventive Maintenance is only available as an addition to the purchase of an Agilent CrossLab Preventive Maintenance or CrossLab Silver or Gold service plans*

# GC and GC/MS Maintenance Service Definitions and Entitlements

**Inspection:** Perform general inspection of the complete system.

**System Cleaning:** Remove dust from fans and vent covers, inspect and clean inlet detector when applicable.

**Leak Test:** Perform inlet pressure decay test.

**Autosampler Maintenance:** Inspect cabling and configuration setting. Inspect and clean syringe and all fans.

**Verification:** Re-establish normal operation conditions, check and record detector offset. Perform chemical checkout.

**Documentation:** Record maintenance in instrument service logs.

**Source Cleaning:** Remove and clean the Mass Spec ion source.

**Vacuum System Maintenance:** Inspect vacuum pumps and replace mechanical/diffusion pump oil.

**Vacuum System Verification:** Establish vacuum and verify pressure. Perform system auto-tune.

**Replace Flow Path Components\*:** Tubing assembly, union, sample probe, and loop.

**Enhanced System Cleaning\*:** Vacuum dust from pneumatic compartment, clean 6-port valve sensor.



\*Enhanced PM

# Agilent Preventive Maintenance Service Options for LC, LC/MS & ICP/MS

Services Included	Preventive Maintenance (PM)	Enhanced PM	Preventive Maintenance MS Only	MS Ion Source Cleaning
Inspection	•	•	•	
System Cleaning	•	•	•	
LC Pump Maintenance	•	•		
Pump Maintenance	•	•		
Ion Lens Cleaning	•	•		•
Sampler Maintenance	•	•		
ICPMS Vacuum System Maintenance	•			
Column Maintenance	•	•		
Valve Maintenance	•	•		
Detector Maintenance	•	•		
Fraction Collector Maintenance	•	•		
Verification	•	•	•	
Documentation	•	•	•	
Parts and supplies Replacement**	•	•	•	
Source Cleaning*	•	•	•	•
Vacuum System Maintenance*	•	•	•	
Vacuum System Verification*	•	•	•	
Enhanced LC Pump Maintenance		•		
Autosampler Maintenance		•		
Detector Maintenance		•		

\*Applicable to LC/MS instruments

\*\*In accordance with predefined CrossLab Preventive Maintenance procedures

## Why Upgrade to an Enhanced Preventative Maintenance?

Enhanced Preventive Maintenance is created especially for LC and LC/MS systems. It includes the Preventive Maintenance services plus additional maintenance services for the pump, autosampler and detector. This includes replacement of most solvent pathway components, regardless of condition and a replacement deuterium lamp.

Tailored services that match your needs: Enhanced Preventive Maintenance provides an additional level of service for instruments experiencing high use or work with harsh solvents.

*Note: Enhanced Preventive Maintenance is only available as an addition to the purchase of an Agilent CrossLab Preventive Maintenance or CrossLab Silver or Gold service plans.*

# LC and LC/MS Maintenance Service Definitions and Entitlements

**Inspection:** Perform general inspection of the complete system.

**System Cleaning:** Remove dust from fans and vent covers.

**LC Pump Maintenance:** Replace pump head seal, purge valve seal, and filter assembly frits. Perform wear-in procedure and leak test.

**Pump Maintenance\*\*:** Replace oil mist filter, drain, and replace mechanical pump oil. Verify proper pump operation.

**Ion Lens Cleaning\*\*:** Remove and clean surfaces of the ion lens. Sonicate ion lens parts.

**ICPMS Vacuum System Maintenance:** Inspect vacuum hoses and exhaust tubes for possible problems. Check pump for evidence of leakage.

**Sampler Maintenance:** Replace rotor seal and needle seat assembly. Clean and inspect sampler and perform pressure test.

**Column Maintenance:** Replace column switching valve rotor seal. Perform pressure test.

**Valve Maintenance:** Replace rotor seal. Inspect valve fittings and capillaries for leaks.

**Detector Maintenance:** Inspect flow cell for leaks and verify performance.

**Fraction Collector Maintenance:** Replace tubing. Clean and inspect ALS thermostat.

**Verification:** Prime system and run test injection

**Documentation:** Record maintenance in instrument service logs.

**Source Cleaning:** Remove and clean the Mass Spec ion source.

**Vacuum System Maintenance:** Inspect vacuum pumps and replace mechanical pump oil.

**Vacuum System Verification:** Establish vacuum and verify pressure. Perform system auto-tune.

**Enhanced LC Pump Maintenance\*:** Replace outlets, outlet caps, sieves for outlet valves, active inlet valve cartridge, sapphire pistons, plunger seals, glass solvent inlet filters, and support seal assemblies.

**Autosampler Maintenance\*:** Replace stator face assembly and isolation seal.

**Detector Maintenance\*:** Replace deuterium lamp. Install standard flow cell kit.



## Preventive Maintenance for Molecular Biology Labs

Molecular biology labs face unique and complex challenges. You can count on our Preventive Maintenance services to maximize instrument performance for:

- Sample quality evaluation (Bioanalyzer, TapeStation)
- Processing (SureCycler, AriaMx, Magnis)
- Throughput (DNA/RNA profiling technologies, such as Scanner C and SureScan)

## Interim Preventive Maintenance for Mass Spectrometer Systems

Depending on your usage and sample types, Agilent may recommend Interim Preventive Maintenance services. It includes an inspection of your system, vacuum system check and replacement of pump oil between annual maintenance services.

\*Enhanced PM

\*\*Applicable to ICP/MS only

## Put CrossLab insight to work for you

Agilent CrossLab integrates services, consumables, and resource management to help labs improve efficiency, optimize operations, increase uptime, and develop user skill.

We also provide consultation for workflow, lab analytics, compliance, and inventory/asset management—including relocation services.

Learn more about CrossLab support for Agilent and select Non-Agilent instruments and see examples of insights that lead to great outcomes.

[www.agilent.com/chem/crosslabstories](http://www.agilent.com/chem/crosslabstories)

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