

# The Ultimate Investment for Your Lab



The new Agilent 5977C GC/MSD, 7000E GC/TQ, and 7010C GC/TQ

**Think a new GC/MS is too expensive and out of your price range? Think again.**

Innovative features on the latest Agilent GC/MS solutions can save you thousands of dollars per day. Instrument intelligence, state-of-the-art source options, and powerful, yet familiar, software prevent instrument downtime and keep productivity at its peak.

## Losses from unplanned downtime

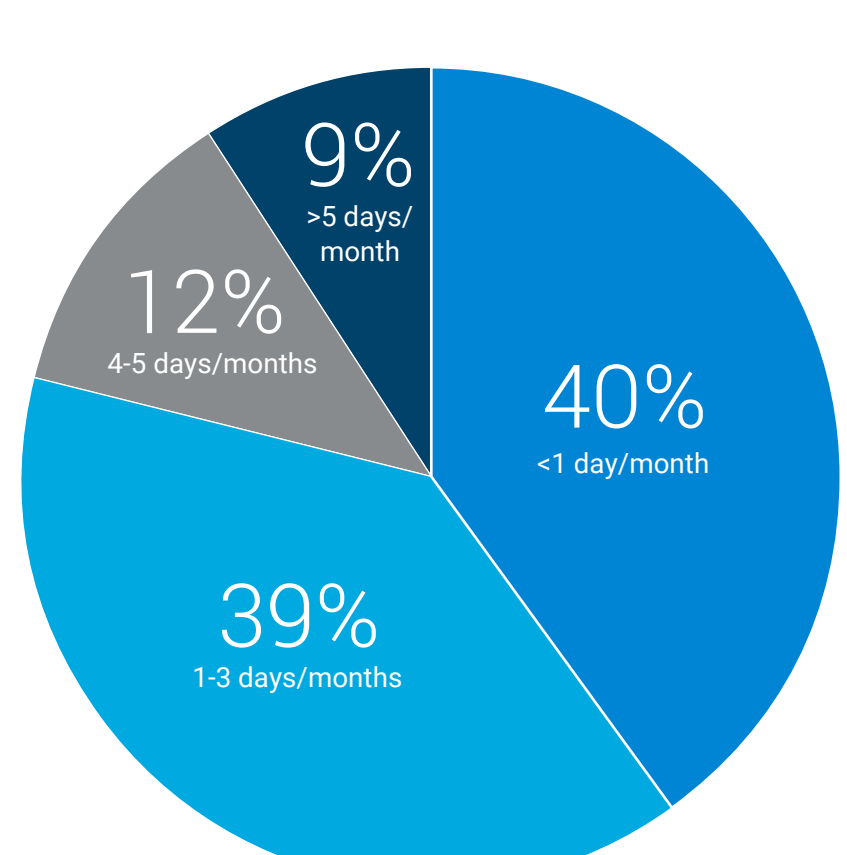
**50%** of GC/MS users said the biggest impact on cost and efficiency of GC/MS operation is **unplanned instrument downtime**<sup>1</sup>.



And, most people lose **1–5 days**, or more, each time an instrument goes down<sup>1</sup>.



## Time lost due to unplanned downtime for GC/MS Systems<sup>1</sup>



For an average **30-minute analysis and \$125 revenue/sample**, downtime can cost your lab as much as

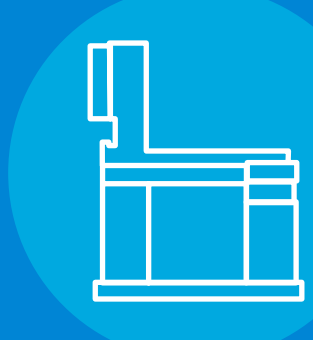
**\$250/hour** per instrument<sup>1</sup>

That's up to **\$30,000**

of missed revenue in 5 days because one GC/MS system is down<sup>1</sup>

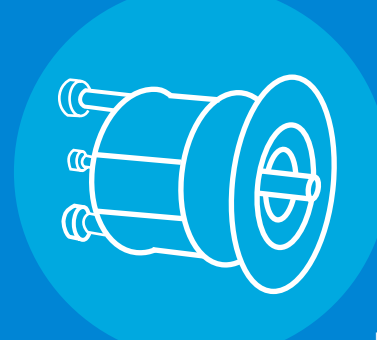
## Influences of downtime

Maintenance factors that had the most influence on downtime



**GC 62%**<sup>1</sup>

liner replacement, changing columns, leaks



**Ion Source 41%**<sup>1</sup>

cleaning, filament change, etc.

## Features that elevate productivity

Decrease GC and MS maintenance with built-in **intelligence** and time-saving features:



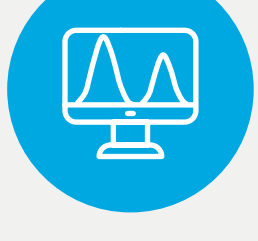
Remote connectivity via the browser interface



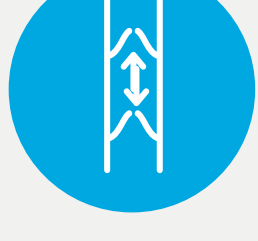
CrossLab Smart Alerts for monitoring system health



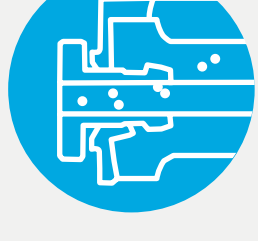
Early maintenance feedback



MassHunter Optimizer<sup>3</sup>



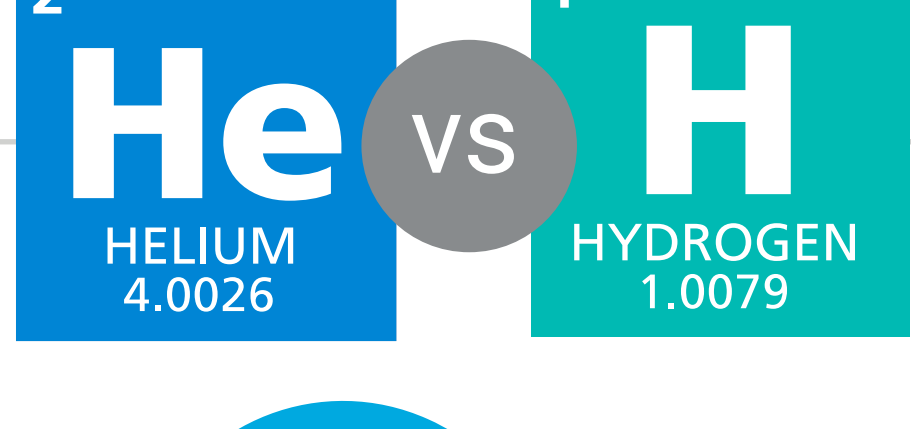
Agilent capillary flow technology enabled backflushing



Hyperbolic gold-coated quartz quadrupole

## Avoid Helium disruption

And improve sustainability by using H<sub>2</sub> carrier gas and the HydroInert source.



How many instruments go down if you can't get helium



Helium unavailability costs

Assuming an average of 48 samples/day

**\$6,000/day**

in missed revenue per instrument<sup>1</sup>

Finite helium costs

**2x more**

per month than sustainably produced H<sub>2</sub><sup>1</sup>

## Reduce manual source cleaning

Reduce GC/MS ion source maintenance frequency with:

**JetClean** The Agilent **JetClean** self-cleaning ion source

**HydroInert** The innovative Agilent **HydroInert** source is optimized for H<sub>2</sub>-based methods

## Keeping operations running consistently

Agilent **CrossLab**

Further increase savings with Agilent CrossLab



Smart Alerts software sends emails to notify you when to replace consumables or if an instrument stops running.<sup>2</sup>



Diagnostic tune MS report can be sent directly to Agilent to save on diagnosis and service time.<sup>3</sup>

CrossLab services offer fast help with a large team of skilled Agilent-certified service professionals

**96%**

of parts available immediately<sup>1</sup>

**50%**

of all issues resolved remotely with virtual technical support<sup>1</sup>

**80%**

of problems fixed in ≤ 1 day<sup>1</sup>

**>\$24,000**

of missed revenue compared to the typical 5-day downtime<sup>1</sup>

## Operators with Agilent experience matter when it comes to quick training and onboarding

**74%** of GC/MS users have experience with Agilent GC/MS instruments<sup>1</sup>

With high staff turnover across industries, **most labs (56%)**<sup>1</sup> said they have lost a GC/MS operator **within the last two years**.



On average, it takes **2 months** to train a new person to proficiency<sup>1</sup>.



Did you know that training a new GC/MS operator likely costs your lab > \$22,000?<sup>1</sup>



Hiring an Agilent-experienced operator, of which there are many, can cut time in half, **saving your lab \$10,000 or more**<sup>1</sup>.

Maximize your lab investment with the new Agilent 5977C GC/MSD, 7000E GC/TQ, and 7010C GC/TQ. **Discover the possibilities.**



**my green lab.** The above instruments have received the Environmental Impact ACT Label from My Green Lab. Learn more: ACT Labeled Products (agilent.com)

To learn more about Agilent solutions visit: [www.agilent.com/chem/gcms-solutions](http://www.agilent.com/chem/gcms-solutions)

### References

1. According to the global survey conducted by LCGC, April 2022

2. Available only on the Agilent 5977C GC/MSD

3. Available only on the Agilent 7000E and 7010C GC/TQ

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This information is subject to change without notice.

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