

Press release

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Brevis GC-2050

Clever new GC is small but powerful

Making more space for high-performance analyses

Shimadzu, one of the world leaders in analytical instrumentation and testing equipment, announces the release of the Brevis GC-2050, a more compact version of the popular GC-2030. The new Brevis GC-2050 further advances the Shimadzu tradition of delivering high-precision gas chromatography analyses – while simultaneously saving valuable laboratory bench space.

A space-saving, compact design

Laboratory space is very cost-intensive to set up and maintain, and the number of analyses that can be performed simultaneously in a lab is often limited by the available bench space.

The new Shimadzu GC-2050 addresses this challenge by combining low space requirements with high analytical performance. Small enough that a typical laboratory table can accommodate several units, the GC-2050 allows the simultaneous operation of two analytical lines with standard capillary columns. As with the successful GC-2030 – its larger sibling – it uses the same techniques for sample injection and detection as well as gas control.

One cost-saving display for all GC instruments

The GC-2030 provides a color touchscreen on the instrument. This is usually not needed during regular operations but is a valuable tool for maintenance work and troubleshooting. For the GC-2050 the app provides full connectivity and functionality on any MS-Windows-compatible desktop, laptop or tablet. Naturally, a tablet or other touchscreen-enabled device provides the most flexible and efficient means to reap the benefits of the new GC-2050. Mobile monitoring helps keep things moving.

Versatile choice of carrier gas

Helium is the preferred carrier gas in gas chromatography, but its limited supply and high price suggest that GC operators have increasingly been turning to other

gases as more economical alternatives. The GC-2050 software allows operators to easily choose their carrier gas from among hydrogen, helium, nitrogen and argon. Whatever gas is used, the GC-2050 immediately detects gas leaks through its rugged gas controllers. Minor leaks are also detected by the automated leak check performed after maintenance work. For even greater safety, a dedicated hydrogen sensor can be installed that stops the gas supply before dangerous concentrations of hydrogen are reached.

Reducing running costs

Because gas consumption is one of the major expenses in GC operations, the new GC-2050 also offers various techniques for reducing these costs. For example, full split flow is only required during sample injection. During the remaining GC runtime, the gas saver reduces consumption and avoids unnecessary use of the carrier gas. If expensive helium is being used, the gas selector switches automatically to the cheaper nitrogen and then back to helium as soon as a new sample measurement is started. At night or during longer rest periods, the GC can shut down automatically after finishing all running analyses. It then restarts automatically whenever the operator wishes to resume testing.

Easy operation and maintenance with Analytical Intelligence

The Analytical Intelligence of the GC-2050 saves working time for other important tasks. One click or swipe is all that is needed to select a maintenance procedure or predefined column condition at any time. In the same way, the predefined GC shut-down and flexible restart procedures can be initiated and performed automatically by the instrument.

Value-added features

In addition to providing a simple, compact, economical and high-precision solution, Shimadzu's new GC-2050 also offers these important benefits:

- **Greater flexibility and scalability**

The GC-2050 can easily be equipped with an SPL injector as well as with an FID (flame ionization detector), FPD (flame photometric detector), ECD (electron capture detector) and an MS (mass spectrometry) detector. Shimadzu's liquid autoinjectors AOC-30i and AOC-20i can also be combined with the

autosampler AOC-20sU for higher sample capacities. And, for headspace injection, the GC-2050 can be operated together with the HS-20 NX headspace sampler.

- **Adaptable software choice**

For further ease of use, the GC-2050 can be operated using LabSolutions as well as several other chromatography data software (CDS) platforms.

- **Easier column installation with ClickTek**

The GC-2050 can also be optionally equipped with user-friendly ClickTek technology for faster and easier exchange of capillary columns.

Precision made compact – by design

The new Brevis GC-2050 is the latest GC instrument in the long Shimadzu tradition of offering laboratories more precision, more savings and more space in which to continue to do their valuable work.

Web summary

Shimadzu, one of the world leaders in analytical instrumentation and testing equipment, announces the release of the Brevis GC-2050, a more compact version of the popular Nexis GC-2030. The new Brevis GC-2050 continues the Shimadzu tradition of delivering high-precision gas chromatography analyses – while simultaneously saving valuable laboratory bench space and reducing running costs. It also provides versatility in the choice of carrier gas, easy operation and maintenance with analytical intelligence, greater flexibility and scalability as well as high safety for operation with hydrogen as carrier gas.



Figure 1: Shimadzu's new Brevis GC-2050 is a cleverly compact, high-performance GC solution

Web link: www.shimadzu.eu/small-but-mighty



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