



Nieka[®] G-SERIES



The solution for
HIGH-THROUGHPUT FUSION
laboratories

Perfect fusion equals PREMIUM RESULTS

A superior control of the fusion process is the starting point of first-class analytical results

- **AT Nieka®**, we used our strong experience from the fusion industry and forged an instrument that is the perfect fit for the most demanding highthroughput fusion laboratories. Downtime is your enemy and using the best tool is your only way to remain on top and deliver results on time
- For the last years, we spent thousands of hours creating just what you need: a high-throughput instrument that creates perfectly homogenous samples for analysis with no surprise. Thanks to the Nieka® exclusive monitoring features, you avoid the unpredictable, even if you are off-site.
- For the first time in a gas fluxer, the G-Series offers a reliable temperature monitoring of the fusion process (patent pending). Nothing has been left aside, from perfect monitoring to perfect fusion: this will lead you to premium analytical results.



Features



High Productivity:

Produces 4 to 8 glass disks or solutions per cycle (up to 48 samples per hour).



Automated Operation:

Multilingual touchscreen controller with easy to access controls, import and export fusion method from USB or network, easy to follow fusion program execution through the instrument's display or PC. All fusion parameters can be fully customized for optimal sample preparation



Monitoring:

Temperature monitoring of the fusion process (patent pending), real-time monitoring through the Nieka® data management system.



Efficiency & Repeatability:

Proprietary heating chambers (patent pending) allow a high thermal efficiency and higher fusion temperatures for difficult samples. Each chamber is well separated from the surroundings, allowing a perfect repeatability.



Easy Installation:

Only a low-pressure gas line and a standard electrical outlet are required. The G-Series runs on propane, any other liquid petroleum gas (LPG) or natural gas. No compressed air or oxygen is required.



Options:

The G-Series fluxers are available in 2 versions: 4 and 8 positions. Each unit can be delivered to make glass disks or solutions only or both (hybrid).



Safety:

Integrated locking safety door, real-time same monitoring and automatic shut-off features, regulatory shutdown button



Connectivity:

USB ports, TCP/IP Ethernet port



Requirements:

100-240V (50/60Hz) electrical supply, propane/ LPG (37 mbar - 0.5psi) or natural gas (20 mbar - 0.3 psi) line.

Built-in safety cabinet

You can see the entire fusion process and a locked door, that opens only when the cooling step is over, protects you. From the real-time flame monitoring to ultimate user safety, nothing has been left aside to provide you with the safest operation.

Huge built-in touchscreen

Use the built-in touchscreen display to edit your methods easily and follow the fusion process in real-time.

Fusion temperature measurement

Our proprietary fusion enclosure allows the instrument to run on low energy while achieving the required high fusion temperature for difficult



Sturdy mechanical systems

Nothing lasts forever but we're getting pretty close with the G-Series: every component is oversized and built to outlast anything else in the industry.

Dedicated mold heating

G-Series fluxers have separate burners for the molds. You can pre-heat any size of mold while reducing your overall fusion process time. The hybrid includes a snap-in module to prepare solutions for AA or ICP sample preparation.

Connectivity

USB or Internet, your fusion recipe can be uploaded to your instrument in a breeze. Manage your methods using our customized computer and tablet interface.

Advanced self-monitoring


Thanks to its self-monitoring feature, the G-Series fluxer analyzes all instrument functionality and logs all the cycles so we can handle the maintenance schedule remotely. That's one more thing off your shoulders.

Technical Specifications GS4





Power	100-240V (50/60Hz) electrical supply
Dimension (W, H, D)	61 x 61 x 73 cm (70kg) - No external power supply unit
Heaters	LPG or Natural Gas burners - 0.5 psi or 0.3 psi line, respectively
Programming	Up to 32 steps per program; 32 program storage space + external USB
Mixing	Clockwise and counterclockwise agitation, fully configurable
Heating configuration	Fusion enclosures for each individual crucible and mold heating units
Special gas needs	Neither pure oxygen nor pressurized gas needed
Bead cooling	Fully configurable cooling steps, from 0 to 100%, filtered air
Connectivity	USB/LAN connectivity
XRF / ICP sample preparation capability	XRF / ICP sample preparation capability Bead-solution switch using a modular system
Ventilation requirement	Hood required, 15 m ³ / min
Control and operation	Touchscreen interface with password-protected access levels
Crucible/mold holders	Ni-based superalloy, durable and easy to clean
Safety	Locking door, redundant systems Emergency stop switch, cold-to-cold operation



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