

Precision & Simplicity



Flash2

Steroglass is exclusively distributed in the USA for oenology by BioSystems/Admeo



The evolution of automatic titration



Steroglass & Titration

Automatic titrators play a crucial role in laboratories as essential analytical tools for ensuring product quality, safety, and regulatory compliance with strict standards, as well as maintaining consistent product characteristics.

For over 20 years, Steroglass has been a leader in the production of reliable and efficient automatic titrators. Their expertise in research and development, combined with high-quality manufacturing and dedicated after-sales service, has always been the hallmark of our company.

The Flash2, the fifth generation of titrators manufactured by Steroglass, is at the forefront of innovation with solutions designed to meet the needs of the oenological, food, environmental, and chemical industries.

Flash2 is ideal for performing a **wide range of titrations** easily and precisely, including:

- pH
- Titratable acidity
- Buffer capacity
- Sulfites
- Chlorides
- Ascorbic acid (vitamin C)
- Peroxides
- Conductivity
- Alkalinity
- Hardness
- COD
- TAN, etc.

Limitations of Manual Analysis

Titration is a crucial analytical technique for the quantitative determination of a specific substance (analyte) dissolved in a sample.

The titration method depends on the analyte, the titrating reagent, and the type of reaction that occurs between them (acid-base, redox, complexometric, argentometric, etc.). Measuring the volume of titrant dispensed allows the analyte content to be calculated based on the stoichiometry of the chemical reaction.

Historically, analyses were performed manually using glass burettes. Today, automated titrators offer significant improvements in precision, repeatability, and productivity!

Manual processes can be affected by several factors, leading to unreliable results such as calculation and transcription errors.

Automation simplifies all phases of titration, including the addition of auxiliary reagents and titrant, reaction control, calculation, and recording of measured values. Greater precision, fewer retests, material savings, and improved productivity are guaranteed!



Advantages of Automatic Titration

- Easy to use thanks to pre-installed methods and the possibility to add new ones without purchasing extra application packages.
- Automatic control of all analysis steps and recording of the titration graph.
- Reduction of analysis and sample preparation time by up to 90% compared to manual methods.
- Full automation of the analysis through automatic sampling, degassing, and leveling systems.
- High reproducibility, eliminating operator-related errors.
- Operator safety, avoiding contact with aggressive chemical reagents.
- Full connectivity and data traceability.
- Upgradable instrument, allowing enhancements at any time.
- Sustainability through reduced reagent usage and complete elimination of disposable plastic consumables.

Ease of use
Automatic control
Time reduction
Complete automation
High reproducibility
Safety
Connectivity
Scalable instrument
Sustainability

Compact Design & Ease of Use

Flash2 is an ultra-compact instrument, ideal for saving space in the lab. Its multifunction graphic screen guides the user through all stages of programming, analysis, and data interpretation, ensuring an easy and precise titration process.

Fully Automated Titration Process

- Flash2 comes with precision burettes for titration reagent dispensing. It is also equipped with peristaltic pumps to dispense auxiliary reagents, when required for certain analyses.
- The AS24 Plus autosampler, available in 14, 18, and 30 positions, enables a fully automated titration process at every stage of analysis.

Connectivity & GLP Compliance

Data automation is possible via the Flash2Data software or direct connection to LIMS. Full result processing is ensured, along with the option to add up to eight secondary users and one primary administrator.

Minimal Maintenance, Maximum Reliability

Flash2 is designed for high performance and maximum reliability, minimizing the need for technical support. High-quality components and an intuitive system allow for continuous and precise operations while avoiding major breakdowns.

Operator Safety

Long and repetitive analyses, as well as contact with toxic chemicals, pose significant safety risks—especially when dealing with hazardous reagents. Flash2 supports operators—even those with minimal experience—in ensuring safe, risk-free analysis.

Oenological Analyses: Wines and Musts

Automatic titrators, essential tools for winemakers, allow precise measurement of pH, titratable acidity, and free and total SO₂—key parameters that influence taste, mouthfeel, preservation, and long-term stability. These analyses help optimize the winemaking process from harvest timing to bottling, to achieve the highest possible wine quality.



Technical Specifications

GENERAL FEATURES

Dimensions (WxHxD)	25,5 x 20,5 x 44 cm
Weight	~10 kg
Burettes	Up to two, stepper motor, resolution > 1.5 million steps
Syringes	Interchangeable (5-10-25 mL)
Electrode channels	Three (2 pH/mV and 1 µA)
Peripheral connections	RS232 for up to three devices (printer, balance, barcode reader, conductivity meter)

SPECIFIC FEATURES

Power supply	230V AC 50 Hz , 115 Vac 60Hz
Screen	7-inch high-brightness RGB touchscreen
Langues	Italian, English, French, Spanish, German, Portuguese
RGB LEDs	Four colors to indicate instrument status (standby, analysis in progress, error, result)
Additional ports	Three USB, one Aux connector
Methods	Internal memory for 30 user-modifiable methods, import/export via USB
Database memory	Up to 300 results, calibrations, titrant concentrations, factors, blanks, electrodes, pH buffers
Software	Flash2Data for result processing, sample input, and remote analysis control
Data export	USB stick (.csv file), Flash2Data software, LIMS or printer
User management	Two levels – 8 users + 1 administrator
Sampling system	Single analysis support or AS Plus autosampler with 18 positions (100 mL beakers), 14 positions (150 mL beakers), or 30 positions (25 mL beakers)

Steroglass® is one of the leading companies in the scientific field thanks to its remarkable expertise and technical support, as well as its range of specific and unique products.

Their goal is to design, develop, produce, and market innovative and high-quality products to provide our clients with the best possible solutions demanded by the market.

CERTIFIED TECHNICAL SUPPORT

Our experience at your service

Technical/analytical consulting

Technical maintenance contracts

Repair/adjustment/calibration

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