![Malvern Panalytical — a spectris company]

LeDoser-12™

Tireless and timely repeatability

A STRONG LINK IN **THE ANALYTICAL CHAIN**

LeDoser-12 is a 12-position dispensing balance that makes a huge difference in the preparation of samples for XRF analysis. In fact, this instrument saves tremendous labor time and costs since it weighs samples and dispenses borate flux automatically while leading to highly repeatable results. Employees can then perform more valuable tasks in the laboratory.

LeDoser-12 is a robust instrument that does not get tired or distracted; it can work in harsh work conditions and always provides the same repeatability.

LeDoser-12's value to sample preparation by fusion

- Saves 90% of labor time related to the weighing step
- Fully adaptable to your standard operating procedure (SOP)
- Samples ready just in time

TAILORED SOLUTIONS
THROUGH EXPERTISE

Malvern Panalytical experts are the reference for all steps of the fusion process or development of new applications. Their personalised solutions allow customers to properly manage risks, reach a quick ROI, and benefit from a large database of preparation methods for a broad range of samples.

THE IMPORTANCE OF **THE WEIGHING STEP** IN THE ANALYTICAL PROCESS

Sample preparation by fusion is known to be the best method to enhance the accuracy and precision of XRF analytical results. However, to fully take advantage of this method, all sources of errors must be minimized.
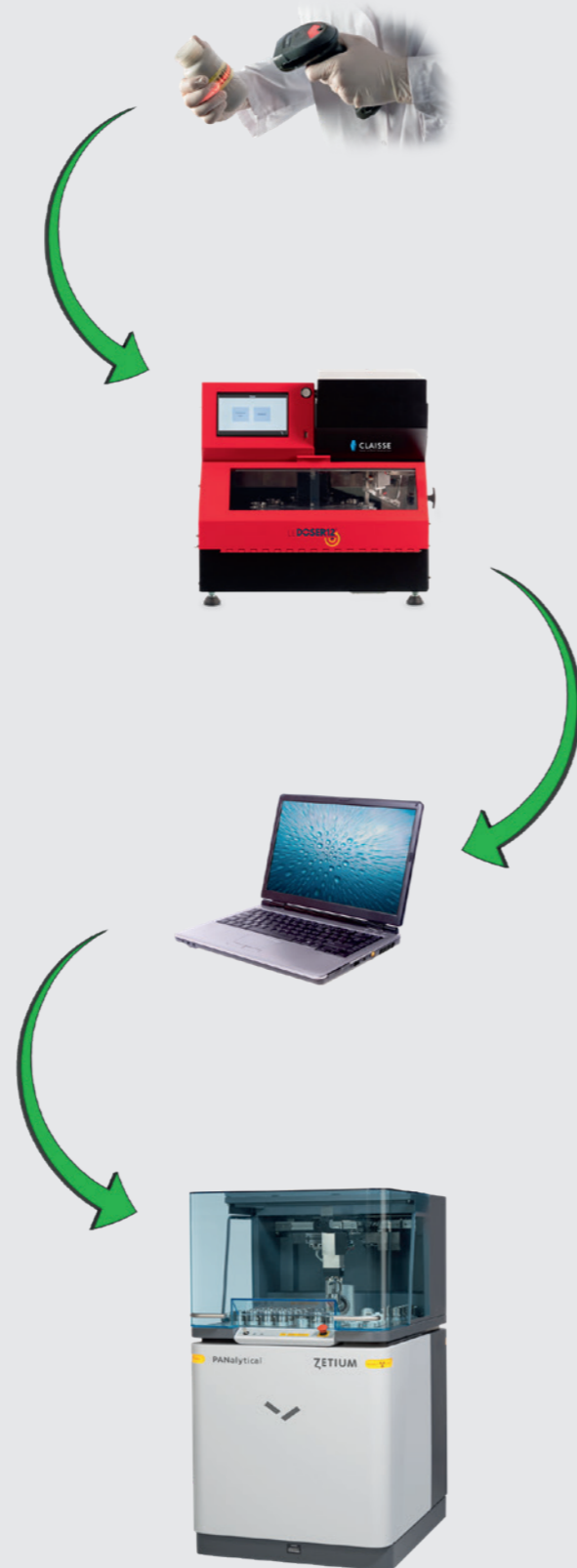
Sampling, sample treatment, fusion and XRF are all potential sources of errors. Because it has an impact on the dilution ratio of the sample, a weighing error of the sample or the flux will change the measured concentrations. As all the other potential sources of errors, the weighing step should not be neglected to ensure high-quality analytical results.

LeDoser-12: **AN OVERVIEW**

Dispenses and weighs borate flux

- No need to precisely weigh the sample (it can be scooped or roughly weighed)
- Three different weighing modes: Sample-to-flux ratio, catch weight, and absolute weight
- Prioritization of samples
- Two-piece carousel for easy crucible handling
- Sample tracking (it can be connected to a barcode reader)
- No manual data transfer since it is LIMS ready (avoids errors in data input and saves time)
- Multilingual interface.

CONNECTIVITY

Essential practices to ensure the best weighing

To enhance repeatability
- Avoid transferring the weighed content to a different container

To enhance to productivity
- Optimize employees' time
- Have the mixture ready just-in-time
- Keep track of your samples

TECHNICAL **SPECIFICATIONS**

Productivity	
• Weighs and dispenses flux for XRF, AA and ICP analysis	• Runs autonomously for up to 250 weighings
• 12 positions	• Maximizes weighing speed depends on the requested tolerance, flux quantity and type
• Manages sample weights	

Weighing Modes	
• Samples can be weighed directly on the instrument. They can also be scooped or roughly weighed on a separate balance. In all cases, LeDoser-12 will measure the exact quantity of sample added.	• Sample-to-flux ratio
	• Catch weight
	• Absolute weight

Electrical	
• Voltage: 100-240 V	• Power: 100 VA
• Current: 1 A	• Phase: 1 phase
• Frequency: 50/60 Hz	

Dimensions	
• Small and compact	
• Height: 51 cm (20 in.)	
• Depth: 51 cm (20 in.)	
• Width: 45.5 cm (18 in.)	

Weight (with balance)
• 19 kg (42 lb.)

Control and Operation	
• One-touch operation	• Low-volume detector located in the flux tank
• Intuitive touch screen interface	• Segmented carousel (two x 6-position) to facilitate the handling of crucibles
• Multilingual interface	• Prioritization of samples
• Detailed weighing parameters and results display	• Tank stirrer option
• Automated sliding doors	• Industrial grade balance
• Can be used as as balance	
• Crucible detector	

Programmable Weighing Parameters	
• Sample-to-flux ratio	• Adaptable calculation method for the tolerance for each dosing step
• Number of dosing steps	• Adjustable weighing method for each weighing position
• Target weight and tolerance at each dosing step	

Software and Communication	
• 2 USB ports	• Balance validation function (accessible via the interface)
• High-capacity weighing program storage (4 G Compact Flash)	• Connectivity option (can be linked to a LIMS system)
• Smart flux flow software control	• Optional barcode reader directly connected to the instrument
• Management tool for different flux compositions	• Sample tracking option

Safety
• User operation levels are protected by a password
• Certified CE and CSA
• Conformal-coated PCB for high corrosion resistance
• Meets the UL 94 flammability standard
• Meets RoHS requirements

WHY INVEST IN LeDoser-12
DISPENSING BALANCE?

Distribution of labor time

With Claisse LeDoser-12, there is no need for the laboratory technician to precisely weigh samples. Instead, they can be scooped or roughly weighed. LeDoser-12 takes care of the rest. It adjusts the borate flux quantity when it is used in the ratio mode or delivers the required quantity of flux in the catch weight mode. By doing so, the instrument completely eliminates the operator time for borate flux weighing and allows the operator to perform other valuable tasks.

Samples are ready just in time

By eliminating the pre-weighing step and ensuring constant sample throughput, LeDoser-12 instrument synchronises the sample preparation process and enables the samples to be ready just in time for the subsequent fusion and analysis steps.

Connectivity

Sample ID can of course be entered manually, but the instrument can be plugged into a barcode reader for better sample tracking. The sample tracking option eliminates the risk of losing track of samples (misidentification or inversion). Sample identification formats can be configured for the customer's convenience.

The fact that the instrument is LIMS ready eliminates manual data transfer, avoids the risk of making errors and helps save time. Note that the user can access all weighing information, including sample and flux weight, weighing program details, date, time, sample ID, etc.

WHY CHOOSE
MALVERN PANALYTICAL?

We are global leaders in materials characterization, creating superior, customer-focused solutions and services which supply tangible economic impact through chemical, physical and structural analysis.

Our aim is to help you develop better quality products and get them to market faster. Our solutions support excellence in research, and help maximize productivity and process efficiency.

Malvern Panalytical is part of Spectris, the productivity-enhancing instrumentation and controls company.
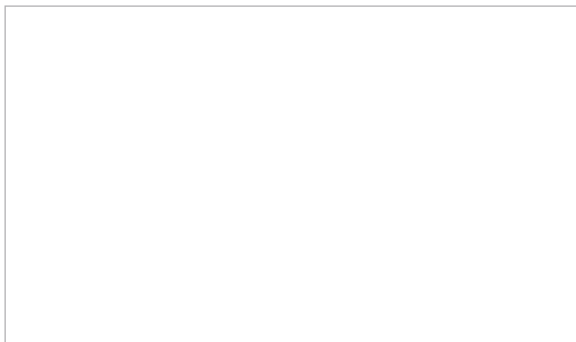
www.spectris.com

SERVICE & **SUPPORT**

Malvern Panalytical provides the global training, service and support you need to continuously drive your analytical processes at the highest level. We help you increase the return on your investment with us, and ensure that as your laboratory and analytical needs grow, we are there to support you.

Our worldwide team of specialists adds value to your business processes by ensuring applications expertise, rapid response and maximum instrument uptime.

- Local and remote support
- Full and flexible range of support agreements
- Compliance and validation support
- Onsite or classroom-based training courses
- e-Learning training courses and web seminars
- Sample and application consultancy

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