SPECTRA.ELEMENTS

Performance Meets Ease-of-Use
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SPECTRA.ELEMENTS offers a wide range of tools which allow for complete instrument control. A thought-through software interface makes them easily available:

- All functionality can be accessed through one main window – no more cluttered screens with several different windows!
- The tools are organized in tabs making them available at any time. This allows for quick switching between e.g. the measurement \(\text{(Loader)}\) or the results \(\text{(Results Manager)}\) tab.
- SPECTRA.ELEMENTS’ calibration tool \(\text{(Wizard)}\) guides the user step-by-step through the calibration process along its tree-structure. Proposed analytical lines can be accepted or overruled. The peak/background positions of the chosen lines can then be adjusted e.g. by height, area integration, or according to a fixed position.
- SPECTRA.ELEMENTS Part 11 ensures compliance with FDA 21 CFR Part 11 for R&D and product control applications particularly in pharmaceutical and biotechnological environments.

Powerful Plug-Ins for Highest Flexibility
SPECTRA.ELEMENTS comes with all necessary plug-ins which help the user to get the most out of the measurement data.

- The Evaluation Plug-In allows for extensive re-evaluation of analysis results without re-measuring. The operator has several quantitative and qualitative viewing modes to optimize the obtained results by:
  - Adjusting compounds
  - Modifying the evaluation type of every compound
  - Changing the chemical species of a compound
  - Re-evaluating the results with a different solution
  - Tweaking standardless solutions with advanced evaluation options
- Additional Lines enable the user to e.g. define a Minor Line for the lower part and a Major Line for the upper part of a calibration curve.
- To generate print templates of result summaries the Report Generator offers the function to conceive customized or use pre-defined designs for quick print-outs.

Functionality for All Applications
SPECTRA.ELEMENTS comes with a multitude of functionality and is set up for all applications. However, it also includes features to make it even more capable in many specialized functions:

- Blanks and duplicates: The automatic analysis of blanks and duplicates facilitates routine measurements in many industrial process and quality control applications, e.g. in petrochemistry.
- Aut-O-Matrix: Petroleum-based samples contain compounds such as O or CH2. These cannot be measured directly, but SPECTRA.ELEMENTS can determine such compounds automatically by Compton peak optimization.
- Nitrogen atmosphere: SPECTRA.ELEMENTS lets you reduce the cost of liquid sample analysis by nitrogen support (the software also supports measurements under air, helium, and vacuum).
- Loss-Eliminated Alphas: Routine measurements of ignited samples such as from cement or iron-ore can be analyzed without dedicated input of loss-on-ignition (LOI) values.
The functionality you need – at your fingertips.

The **Wizard** within SPECTRA.ELEMENTS: Creating your solution does not get easier than this – no floating windows, just one well-organized main window, with an on-the-fly update of the calibration curve and with powerful calibration options.

The **Loader** covers the essential analysis functionality: Name, place, and measure your samples and pre-view analysis results. All within one tool!

You have long lists of sample queues? No problem, the **Joblist** functionality helps you to stay in control of your samples at any time. Joblist lets you easily manage and adjust sample priority and order.

The powerful **Results Manager** puts you in full control of your analysis results! It lets you organize, format, display, print, and export your data with ease.

SPECTRA.ELEMENTS’ **Database Management** with dedicated user levels makes sure your set-up system runs smoothly for years. SPECTRA.ELEMENTS stores sample attributes, measurement results, and evaluations in an integrated database. This enables the user to easily access and quickly query, retrieve, and handle all data.

The software is fully LIMS-capable with all necessary connectivity included.

In many environments regulated by the FDA (US Food and Drug Administration) data safety security is crucial. This is ensured e.g. through electronic record keeping, electronic signature, audit trailing, and other measures. These functionalities are provided with **SPECTRA.ELEMENTS Part 11** for full compliance with 21 CFR Part 11. Optional IQ/OQ procedures are offered with the installation of the instrument.
Technical Features

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Your SPRECTRA.ELEMENTS Advantages:

- Tab-based organization of all functions guarantees easy overview and fastest access to all controls and information
- The intuitive user interface allows operators of all skills and backgrounds to easily and quickly get started
- 21 CFR Part 11-compliance for full functionality for pharma, biotech, and food-related applications
- The industry standard for calibrating XRF solutions: The Wizard comes with an ergonomic user interface and powerful calibration tools
- The highly customizable Results Manager features a full suite of functionality to display, organize, and arrange your data according to your requirements
- Powerful user account functionality allows for full control of operator access
- Seamless integration of options like the standardless software module SMART-QUANT FP
- Future-proof design ready for extensions and plug-ins

The Results Manager: View and analyze your results

Design und print results summaries: The Report Generator

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