

X-ray fluorescence

Precision XRF slurry analysis for mineral processing

In the complex field of mineral processing, Thermo Fisher Scientific presents the Thermo Scientific™ Elescan XRF-100 Online Multi-Stream Elemental Slurry Analyzer—engineered for precision and efficiency. Utilizing energy dispersive X-ray fluorescence (EDXRF) technology, this analyzer delivers real-time, accurate analysis of slurry streams. It provides reliable measurements of metal concentrations, an essential factor in metallurgical quality control and process optimization.

- **EDXRF technology:** The Elescan XRF-100 leverages proven EDXRF technology for rapid and precise measurement of elemental concentrations. This ensures reliable data for visibility of the process in real time, enabling process control and optimization.
- **High count rate:** The Elescan XRF-100 offers a high count rate capability, enabling efficient analysis of slurry streams. This feature is crucial for timely detection of changes in the process.
- **Modular multiplexers:** The Elescan XRF-100 can accommodate various configurations of multiplexers and layouts, providing the flexibility needed to fit into different process plants.
- **Automatic operation:** The Elescan XRF-100 operates autonomously, delivering real-time slurry analysis with minimal user intervention. This ensures consistent data for informed decision making.
- **Maximized uptime and more consistent results:** An automatic window roller ensures the window remains clean and the analyzer delivers accurate results at all times.
- **Convenient local interactive user interface:** A large touch panel features a graphical display; full control is available either locally or remotely from a control room.
- **Simplified transition when upgrading:** Industry standard data interfaces—OPC and Modbus TCP/IP—are utilized.
- **Ease of maintenance & remote support:** The Elescan XRF-100 is designed for easy troubleshooting and repair, due to its modular design. This reduces downtime and also provides remote and automatic system operational reporting, enhancing process control and simplifying troubleshooting.
- **Safety standards:** Safety is paramount in our design. The Elescan XRF-100 features a low power X-ray tube and protective cabinet, meeting stringent global safety standards and eliminating the cost of providing a dedicated protective space inside the concentrator.
- **Profitability & process control:** The Elescan XRF-100 can enhance process plant profitability by promptly detecting changes in feed grade and enabling minimization of process variations. It provides reliable data for effective process control.
- **Sustainability:** The Elescan XRF-100 allows plant operations personnel to minimize losses to tailings, optimize use of reagents, and maintain final product quality within specifications, contributing to achieving sustainability goals.

The Elescan XRF-100 is an essential tool for any mineral processing plant. It offers improved profitability, effective process control, and enhanced sustainability.

For more information, please visit thermofisher.com/elescan

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