

Press Release

Rigaku NEX QC EDXRF for Iron in Ore Materials

Austin, TX – February 20, 2013. Applied Rigaku Technologies, Inc. today announced a new empirical method for the elemental analysis and measurement of iron (Fe) in mining materials.

Elemental analysis is essential in screening samples at mine sites and throughout the processing of ores, ensuring proper extraction and process control. Major and minor elements are also closely monitored in the ore, concentrates, slags and tails during smelting.



Rigaku EDXRF Application Note #1286 demonstrates the effectiveness of low cost energy dispersive X-ray fluorescence (EDXRF) analysis for elemental analysis of metals in ore samples. The new method demonstrates the capabilities of the Rigaku NEX QC EDXRF elemental analyzer in meeting industry demands for a fast and simple technique suitable for measurement along the entire processing line. The report provides details of sample preparation, calibration and repeatability.

For the analysis described in the report, material was ground and dried to a homogeneous powder, which was then prepared by filling a standard 32 mm XRF measurement cell and compacting with a manual sample press. Analysis was carried out using the NEX QC EDXRF analyzer, which utilizes 50 kV direct excitation and a high performance semiconductor detector to provide enhanced sensitivity in a low cost tool ideal for the analysis of ore materials. The NEX QC analyzer is designed to be easily transportable for mine site screening, rugged enough for the smelting operations, and powerful enough for work in a central lab.

The results of the study indicate that the NEX QC EDXRF analyzer is an optimal tool for identifying and quantifying elemental composition of a wide variety of iron materials. With a small footprint and modern touch screen interface, the Rigaku NEX QC analyzer is transportable, rugged and reliable, and ideal for use in iron production.

Request a copy of the report: http://www.rigakuedxrf.com/edxrf/app-notes.html?id=1286_AppNote

About Rigaku

Since its inception in Japan in 1951, Rigaku has been at the forefront of analytical and industrial instrumentation technology. Rigaku and its subsidiaries form a global group focused on life sciences and general purpose analytical instrumentation. With hundreds of major innovations to its credit, Rigaku and its subsidiary companies are world leaders in the fields of small molecule and protein crystallography, X-ray spectrometry and diffraction, X-ray optics, as well as semiconductor metrology. Rigaku employs over 1,100 people globally and its products are in use in more than 70 countries – supporting research, development, production control and quality assurance activities. Throughout the world, Rigaku continuously promotes partnerships, dialog, and innovation within the global scientific and industrial community.

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