Press Release

Rigaku NEX QC EDXRF for Analysis of Iron Oxide in Silica Sand

Austin, TX – May 17, 2012. Applied Rigaku Technologies, Inc. today announced a new empirical method for the analysis of iron oxide in silica sand. Application Note #1177 demonstrates the effectiveness and utility of the Rigaku NEX QC energy dispersive X-ray fluorescence (EDXRF) analyzer in the monitoring of iron content of silica sand.

Silica sands are essential raw materials for glassmaking. Among the major industrial applications of silica sand is the production of glass bottles. As the iron content is one of the major factors that affect the color of the glass, the monitoring of iron content is critical to ensure the quality and consistency of the glass products. Analysis both at the quarry site and in the manufacturing process is essential.

The Rigaku NEX QC is designed to be an ideal tool for reliably measuring the iron content in sand, and can be used at the quarry as well as along the production line to help ensure the highest quality while minimizing wastes and cost overruns.

For this application, the samples were ground to <200 mesh (<75um particle size). 3g of powder was then placed into a standard 32mm XRF sample cup for analysis. Seven assayed standards were used for calibration. The Rigaku NEX QC analyzer is shown to deliver excellent performance for the measurement of iron oxide in silica sand, providing an efficient and reliable means of analysis during the QA/QC process in the production of glass bottles, as well as for screening at the quarry.

A copy of this report may be requested at: http://www.rigakuedxrf.com/edxrf/app-notes.html?id=1177_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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