CERTIFIED REFERENCE MATERIALS: THE HEART OF ACCURATE XRF ANALYSIS

Dan Geist, Bill Britt and Paul Dalager
Analytical Reference Materials International (ARMI)

Even though fundamental parameters and Uniquant have greatly improved the accuracy of “standardless” analysis, matrix matching of samples to Certified Reference Materials (CRMs) still provides the most accurate analytical results.

A vast array of CRMs is needed to supply the industrial marketplace. Although CRMs by NIST and other national certifying bodies are the most desired, they can supply only a small fraction of the demand.

Private producers, such as ARMI, substantially fill the gap on many fronts.

- Popular Metals - All Ferrous, Nickel, Copper, Titanium, Lead, Zinc
- Special Metals - Alloys used in aerospace, medical implants, etc.
- Hydrocarbons - Coals, Cokes and Liquid Fuels
- Aluminum and Magnesium Metal - Calibration suites and specific alloys
- Aluminum Nonmetal - Alumina, Bauxite, Red Mud, and more
- Powders - Minerals/Rocks, Ores, Slags, Ashes/Dusts, Cement, Soils, Sediments/Sludges, Glasses
- Liquids – Water Testing, Wear Metals, Biologicals
- Physical Testing – Hardness, Tensile, Etc.

Private producers also respond, in a timely manner, to the evolving needs of the marketplace. For example, ARMI is marketing sets of Polyethylene (PE) and Polyvinyl chloride (PVC) reference materials designed especially to help show compliance to the WEEE/RoHS* directives. Also, ARMI is marketing various metal sets to help ascertain compliance to the WEEE/RoHS directives.

*WEEE - Waste from Electrical and Electronic Equipment; RoHS - Restriction of Hazardous Substances