# The VANTA Handheld XRF for Elemental Analysis

Nondestructive VANTA handheld X-ray fluorescence analyzers provide decisive results to multiple industries with varied applications. Elements such as lead, mercury, arsenic, copper, gold, silver, platinum, and more are detectable in concentrations of parts per million (PPM) up to 100%, with little or no sample preparation requirements.

The new generation VANTA handheld XRF analyzers are ergonomically advanced with a forward looking design incorporating the latest in electronics, components, and software technology. The VANTA act Count technology can provide even better sensitivity and precision in faster time for more materials than before.

### **Scrap Sorting and Recycling**

The VANTA scrap sorting handheld XRF provides reliable identification in 1 to 2 seconds for most alloy grades and pure metals. It is designed for durability — to withstand the toughest environments. It is ideal for checking a wide variety of materials including ferrous and non-ferrous metals, glass, and plastics in seconds.



### Alloy Positive Material Identification/QA/QC

The VANTA analytical and positive material inspection (PMI) analyzer is vital for quality control and assurance in the metal manufacturing and fabrication industries. It is used for compositional analysis and alloy grade identification, from critical components to raw materials to welds.



### **Jewelry/Precious Metals Identification**

The VANTA provides fast, accurate alloy chemistry and karat classification with one nondestructive, non-intrusive test. Whether importing precious metals, selling or producing jewelry, or processing scrap metal, the VANTA is the ideal choice.



### **Regulatory and Safety Screening**

The VANTA screens for pollutants and poisons such as lead, cadmium, chromium, mercury, arsenic and other toxic elements. It is used to help ensure safety and to help comply with global regulatory programs directed by the EPA, RoHS/WEEE EU Member States' Enforcement Bodies, CPSC, FDA, Border Patrol, and more.



### **Geochemistry and Mining Exploration**

The VANTA provides immediate results to help determine the next course of action throughout the entire mining process — exploration, grade/process control, and environmental sustainability. On-site detection of metals, minerals & contaminants, and GPS-GIS XRF for instant metal mapping ensures time and cost savings.



### **Research and Education**

The VANTA adds an amazing dimension to research and education in the classroom and in the field. Its versatility and rapid response engage students, making the periodic table of elements and science come alive. Environmental, forensics, archaeology, and chemistry education benefit immediately.





# XRF and XRD Analyzers



# Handheld XRF (VANTA)

Fast, ultraportable, nondestructive analysis of materials composition, from Mg to U, from PPM to 100%. Perform tests directly where needed, when time is of the essence or, when materials cannot be moved, damaged or altered.



### Specialized XRF Workstations (LAMBDA, MESA 6000 & SEAMate)

XRF workstations featuring patented diffractive optics for ultra-low detection limits of light elements - Mg, Al, Si, P, S, and Cl. Specialized for oils and other critical applications.



# Automated XRF for Sorting and Recycling (X-STREAM)

High-speed, automated systems for sorting of material streams automatically by chemical composition. These systems take sorting and recycling to a new level of speed and accuracy.



# Portable and Benchtop XRD (Terra & BTX)

Based on NASA technology developed for the MARS Science Lab, these advanced, self-contained, small footprint XRD/XRF analyzers offer high-speed and reduced-cost compositional and structural analysis.



# Mobile XRF (X-5000)

Lab-like EDXRF power and performance in a portable package: closed-beam enclosure, on-board PC, large display & virtual keyboard. 12.7 kg (28 lb); 10W power



#### **Exclusively distributed by:**



