

RADLAB

Laboratory Gamma Spectrometer



Developed specifically for the metal industries to provide the highest degree of accuracy in measured samples for specific radiological content.



- Full scale Isotope analysis and specific activity calculation
- Full scanning times between 1-5 minutes
- Quick scan feature
- Full network capabilities for system monitoring and servicing
- Large 6" (152mm) diameter WELL to accommodate different sample sizes



Detect and identify specific radioactive isotopes in same sample

The RADLAB spectrometer utilizes only highest quality Thallium doped Sodium Iodide crystal, combined with state-of-the-art electronics and software. The result is the ability to identify multiple isotopes and determine specific activity levels in the sample. Results are quickly displayed and a report is generated.

Simplified and Flexible

The RADLAB system uses a Windows™ based environment and the user based interface software utilizes a systematic approach to the step by step sequences when stabilizing the system, taking measurements and filling in data. There are no complex steps that are required to ensure the system is calibrated and taking measurements correctly. Connecting the RADLAB to the outside world is a TCP/IP connection and a serial port. All System functions can be accessed remotely via a network connection.

International Atomic Energy Agency (I.A.E.A.)

The I.A.E.A. has released a document specifying recommended release limits for solids including steel products. The RADLAB's design was focused on the I.A.E.A. recommended release limits, the user interface software is extremely flexible allowing the user to configure the

RADLAB Gamma Spectrometer

Detector Case consists of:

- Detector Case: 24"H(60cm)x24"L(60cm)x 16"W(40cm)
- Outer Detector Case: Painted Aluminum
- Shielding Material: Lead and Copper
- System Weight: 450lbs (204 Kg)
- Maximum Sample Well Size:
6" (15cm) Diameter x 6" (15cm) High

Electronics:

- Integral PMT with EM Shielding
- High Speed DSP Circuitry with High SNR
- Ultra Stable High Voltage (1.0 Volt steps)
Software Adjustable
- Controller with CPLD Technology

Embedded PC Specifications:

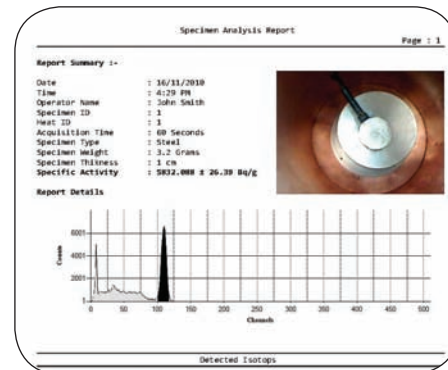
- Internal Memory: RAM 1 Meg
- Hard Drive: 160 Giga Bytes
- Serial Ports
- Two USB Ports (2.0)
- RJ45 10/100 Network Ports
- 12.1" High Resolution Touch Sensitive LCD Display
- 110/220V 50/60Hz Auto-Selectable

Software:

- Windows™ Based Operating System with Pentium Processor
- Windows™ Based RADLAB Application Software
- Easy to Use Menu Driven Interface with Touch Screen Applications
- Configurable Data Storage with Backup
- Emailing Capability with Network Connection
- Historic Sample Tracking and Comparison
- Fully Remote Access with Software and Hardware Service Capability

Spectrometer Specification:

- Detection Material: 21 cubic inch (0.35L) Sodium Iodide, Thallium doped (NaI(Tl))
- Energy Resolution 8.5% or better for of 662 KeV
- Spectral Resolution: 256/512/1024 Software Selectable Depending on Application
- Energy Range: 30 KeV to 3.0 MeV (Gamma)
- Sensitivity calibration: Response is Calibrated for Specific Isotopes
- System Calibration Software Monitor with Operator Alert



RADLAB Options:

- Scale – used to weight sample and download directly into RADLAB system
- Digital Camera - photograph the sample and include a photo of the sample in question with the evaluation report
- UPS Backup – UPS battery back up
- Quick Scan Mode – Counts Per Second mode

