

CRICKET-LR Grapple Mounted Radiation Detection System



Find radioactive sources the other radiation detection systems miss with the Cricket, the world's leading, proven, highest sensitivity radiation detection grapple mounted system.

Fit to any grapple, in any application

The Cricket Grapple mounted radiation detection system will provide the highest degree of detection capability for small low-level radioactive sources buried in scrap material. The Cricket detection system comprises of 3 primary components; the RC2000 Control console, Microprocessor/Wireless and Battery Assembly, and the Detector Assembly. The installation of the components are very straight forward and can be installed typically in an 8 hour period. The system operates in three modes: continuous area scanning, selective grapple load scanning and a manual search-and-find scans. The Cricket is the only system of its kind in the world and has been proven to withstand the harsh environment of a scrap handling operation - regardless of the material being handled.

Get closer, scan longer

Mounting the Cricket in the grapple allows direct exposure to all the material being handled. There are three different opportunities to measure all scrap material during the handling process. Because the Cricket system scans on a continuous basis, material is scanned on the surface before the grab even picks up the load. Secondly, the grapple load is scanned for up to 10 seconds while in the grapple. Finally, the material is scanned as it falls from the grapple.

These three scanning conditions allow the Cricket to provide a high degree of detection capability for low level radioactive material. In addition, the Cricket's robust design provides greater impact-resistance than any manufactured grapple.

Find radioactive sources other systems may miss - highest sensitivity

- Get closer to the source
- Smaller volumes of scrap - less density shielding source
- Longer scan time
- Less ambient background impact

Proven, tested, leading edge technology

- 15 years development and field experience
- Rugged, durable, water resistant
- Independent evaluations and test results available

User friendly, easy to operate

- Multi-language, simple to use console
- Wireless, network ready and data-logging capabilities
- Manual scan and self-test capabilities – safety

Easy to install and maintain

- Modular design with four components - shield, detector, battery and wireless communication module, console
- Battery operated up to 72 hours
- Easily transferred to other grapples - add shield

Excellent customer references

- Over 1,000 systems in successful operation worldwide

CRICKET-LR SPECIFICATIONS

The CRICKET Grapple consists of four assemblies:

- The protective shield
- A controller
- The detection unit
- Battery pack



Detector Protective Shield

- Fits to any type of mechanical, hydraulic, electrohydraulic grapple
- The shields high strength and wear resistance design is capable of withstanding sever impacts on a continuous basis
- Easy to install and service
- Equipped with doors for easy access to the internal detector assembly(s)
- Detector occupies a small volume of the grapple that does not affect the scrap handling operations

Detection Unit

- The primary component of the detector system
- Size of the detection system is configured to the size of the grapple
- Contains the electronic and detection assemblies which are designed to withstand SEVERE repeated impacts and vibration associated with these applications
- The system electronics include several sensors that are used to monitor the operating conditions of the grapple such as temperature and motion
- The internal assemblies are mounted specifically so that they are isolated from the direct transfer of energy

Battery Pack for Grapples

- The battery pack measures 5.5"x3.75"x1.25" (13.97cmX9.53cmX3.17cm) and incorporates a rugged steel box housing measuring 8.25"x6"x5" (20.96cmX15.24cmX12.7cm)
- The box is welded in a protected area on the tube of the grapple center section
- A small 1/2" (13mm) hole is drilled in the tube to allow communication cable access to the battery pack connections
- Battery pack includes a shock mounted standard 8400mAh 7.4v Lipo Battery and wireless communication system
- Battery powers the detection unit's electronic circuits and wireless system

Cricket Control

- Wireless system utilizes a low powered digital non-licensed frequency that can transmit up to 1000ft (300m) line of sight
- Bluetooth available
- Touchscreen LCD display



Options

- NeuSpec NaI(Tl) technology for isotropic identification
- Supervisory Software
- Neutron detection
- OEM available on Liebherr grapples. Call for details

