

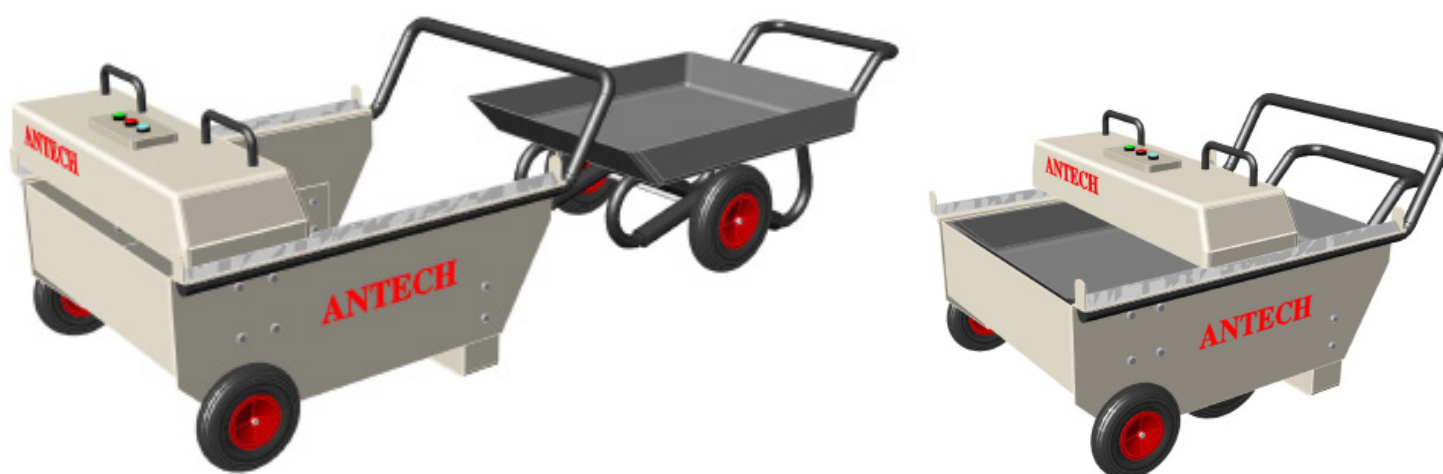
Previous model number: 3101-0100

G3101-0100

Small Quantity Gross Gamma Soil Measurement System

Introduction

This highly portable system consists of two wheel mounted sample trays that can be inserted into a portable measurement (docking) station for the measurement of potentially contaminated soil. The wheel mounted trays, each with a volume of 0.1 m³ (3.53 ft³), are loaded with soil or rubble to a uniform depth of 150 mm (5.91 in). The measurement is performed manually as the operator moves the detector over the surface of the soil. Hot spots can be identified for intervention by the operator. Once the measurement has been completed, the sample tray is tipped, refilled, and the process repeated.



Features

- Sensitive gross gamma measurement of small quantities of contaminated soil
- Adjustable pre-set sensitivity and detection levels
- Employs sensitive shielded plastic scintillator detector
- Micro-switches on the detector warn the operator if the manually controlled scan time is too short
- Audible and visible alarm of soil contamination
- Measurement system acts as a docking station for measuring wheel mounted trays

Benefits

- Cost effective small quantity soil remediation tool
- Identifies “hot spots” in soil tray for operator attention
- Portable battery operated instrument
- Simple decontamination of stainless steel wheel mounted trays
- Easily achieves UK free release clearance levels of 0.4 Bq/g
- Calibration based on use of small sources in soil - confirmed by Monte Carlo calculation

Specification

Detector	High efficiency shielded plastic scintillator gamma-ray detector with typical volume of 216 cc (13.8 in ³)
Battery	6 “D” cells for battery operation
Detection level	Typical level for ¹³⁷ Cs is less than 27.3 pCi/g (1.0 Bq/g)
Soil Throughput	Approximately 1 m ³ to 1.5 m ³ per hour (two operators)