



Lou Champagne Systems Inc.
Unit B6 - 1195 North Service Road West, Oakville, Ontario. Canada L6M 2W2

(905)338-1176
FAX (905)338-642

Email: lchampagne@louchampagnesystemsinc.com
Web: www.louchampagnesystemsinc.com

Waste Bag Monitor

Model #: 021-001



Photo courtesy of AECL research

Description:

The Waste Bag Monitor (WBM) is a highly sensitive radiation measuring instrument designed to quantify the radioactivity of waste bags. A lead shielded measuring chamber with a hinged door houses 6 plastic scintillation detectors mounted on the inside faces of the box. A rack mounted computer and electronics assembly attached to the right side of the measuring chamber displays the measurement. The computer keyboard is locked and hidden away in the rack to prevent unauthorized tampering. All user input is either from scanned bar codes or the rack mounted 7 button push button station. An audible annunciator sounds for various conditions alerting the user to check the screen.

The WBM will weigh and monitor waste bags, measure background radiation, correlate waste pickup data from bar code data manager units with scanned bar codes, and assemble measurement data into files. This data can be used to document waste and provide auditable records of the waste processed through the WBM. A database scanner feature searches the data files, allowing the user to find out waste pickup information even if the bag has already been monitored.

The core software is designed to be flexible in configuration; parameters such as detector number and layout, bar code layout, alarm set point, site zones, unit or building numbers are programmable for more flexibility in

creating a customized monitoring application. Configurable messages can be displayed to the user, changing the way the monitor reports alarms and messages. The system Minimum Detectable Activity (MDA) is calculated upon background measurement and is displayed on the screen. In the event that the system MDA is too high, a constancy check has failed, or has not been performed, or other problems are detected, the monitor will not allow itself to be used for waste monitoring.

A high degree of customization is possible during manufacture. Please contact us for a quote based on your specific requirements.

Specifications:

Specifications subject to change

Weigh scale capacity: 100kg

Overall Dimensions:

Tall: 56.5" (1435 mm)
Wide: 43.75" (1113 mm)
Deep: 40" (1016 mm)

Monitoring Cavity:

Tall: 29" (737 mm)
Wide: 27" (686 mm)
Deep: 24" (610 mm)

CPU Rack:

Tall: 49" (1246 mm)
Wide: 23" (584 mm)
Deep: 31.5" (800 mm)

Weight: 9500 lbs (2111kg)

Usage Environment: 10-35 degrees Celsius (20-80%RH)

Storage Environment: 0-40 degrees Celsius (20-95%RH)

Liner thickness: 20 ga. stainless steel

Shielding/Thickness: Lead / 1.75" (44mm)

Power supply: 1 phase 120 VAC 6A (less than 2A continuous) cord connected with 10 foot cable

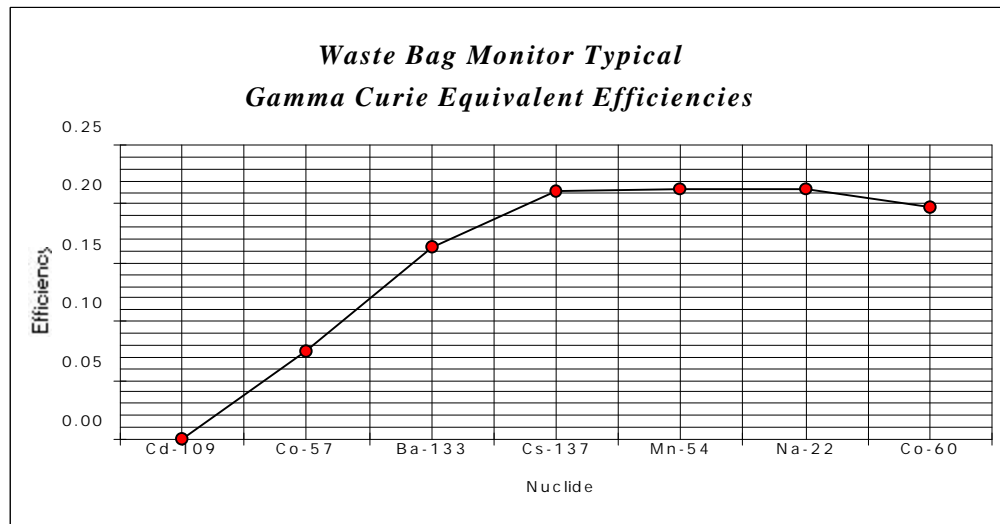
Detectors: 6 plastic scintillation detectors planar mounted to the sides

Radiation Detected: Gamma and very high energy Beta

Detection Range: Approximately 10 nCi up to 20 uCi (non linearity observed above 5000 nCi)

Geometric Response: Within +/- 35% of true dose rate with respect to bag orientation

Gamma Response:



Software Version:

Current Waste Bag Monitor software revision: WBM 3.7

WBM 3.7 is compatible with WTM 1.0 for use with Intermecc Trakker Model 2410 for waste data collection.

Customized versions of the software tailored to customer requirements can be provided.
