

Model HWM-1800C

Free Release Monitor – the Movable Solution for Gamma Emitting Radionuclides in Large Items and Containers

The Model HWM-1800C clearance monitor integrated in a standard overseas shipping container offers a clearance capacity in real industrial dimensions, for measuring goods of up to 1,000 kg (2,200 lb) in a chamber of more than 1,800 L (63.5 ft³). The concept enables a high flexibility in the varying demands of a typical dismantling site.



HWM-1800C
in a 5-foot
container incl.
conveyors on
the entrance
and exit side
(option)



The standard unit is equipped with the following features:

- 24 gamma plastic detectors for complete 4 π coverage
- 50 mm (2 in.) lead shielding
- Built-in weigh scale for up to 1,000 kg (2,200 lb)
- Powder-coated steel frame with easy to clean stainless steel lining inside and outside, integration in a coated overseas shipping container
- Electrically driven double-wing doors including safety devices to protect people accessing the moving door area
- Electrically driven chain-conveyor with jigs to fix standard grid-boxes and barrels
- Stand-alone control terminal incl. touch-screen display, PC, and keyboard
- Fully automated measuring process with user guidance
- Nuclide composition suggestion from detector-pulse-analysis
- Network capability for remote monitoring and supervision
- Integrated UPS to protect controllers and electronics



Office-container option

Key Features

- Fully Automated Measuring Process for Very High Throughput
- Fixing Points for Standard Containers on the Conveyor Allow Easy and Fast Loading and Unloading of Different Items
- Reduced Dead Zones: > 70% Coverage (Inner Chamber to Detector Size)
- Intuitive Operating Software That Is Easy to Use
- Export of Measurement/Parameter Data in XML Format via USB
- Energy Filter Settings to Optimize Discrimination of Background Radiation
- Access to Historical Measurement Data via Integrated Database
- Access to Ludlum Test Tool Software for Detector Analysis

Standards:	The monitor is compliant with the following standards: CE, CSA / UL or EMC, ISO11929
Detectors:	24x gamma plastic detectors Detector volume: > 319 L (11.3 ft ³) Direct connection of each detector to the PC via USB
User Software:	Intuitive operator software with touch-screen display, fully automated measurement process with user guidance, indications of results and measurement material position on the display. Web based for RPO remote access
Electronics:	Integrated illumination in the chamber, status-LED, interlock-relays with interface to external units
Housing:	Overseas shipping container, steel frame with stainless steel lining, electrically driven front-door incl. area-safety control, electrically driven chain-conveyor
Sensors:	Door-sensors, surrounding area scanner, integrated weigh scale
Ext. Dimensions:	2,591 x 2,438 x 2,991 mm (102 x 100 x 118 in.) (H x W x D), without conveyor
Chamber Volume:	1,210 x 1,120 x 1,380 mm (47.6 x 44.1 x 54.3 in.) (H x W x D), 1,870 L (66 ft ³)
Shielding:	Standard: 50 mm (2 in.) lead Option: 75 mm (3 in.) lead
Weight:	Standard: approx. 13,500 kg (29,760 lb) With 75 mm lead: 17,500kg (38,580 lb)
Power Supply:	230 V / 16 A / N / PE Uninterruptable power supply (UPS) to bridge loss of mains electrical power for controllers and electronics



Software Screenshots

Additional Options

Ludlum offers a range of additional options to enhance the capabilities of the monitor and to customize the instrument to your specific needs.

- Second door and conveyor on the exit-side
- Additional lead shielding (75 mm [3 in.] instead 50 mm [2 in.])
- Integration of a camera in the chamber



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