Radiological Instruments

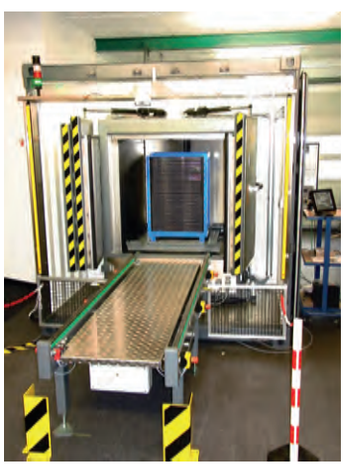
James Fisher Nuclear

HWM-1800 free release chamber

The next generation in large volume clearance monitors.

Product overview

Our HWM-1800 is JFN's largest clearance monitor boasting an impressive 1800L volume and up to 1000kg of material in one measurement. Equipped with highly sensitive detectors and a built in weigh scale, the HWM-1800 provides fast and reliable detection of gamma radiation. Chain-driven conveyors to the front and a material transporter supply material to the chamber for a range of container types.
A range of measurement modes are available with the capability of manual and automatic processing of material by the operator via PLC control panel.



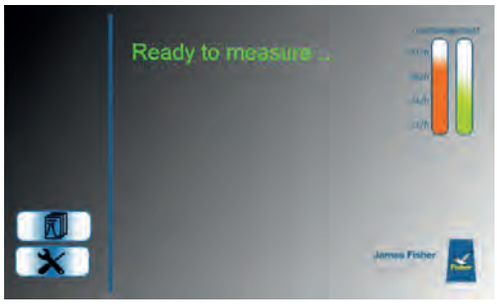
Key benefits

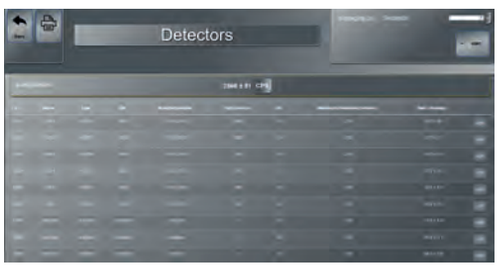
- Maximized detector sizes: Industry leading dead zone reduced design (>70% coverage)
- Leading industry design with modern components
- Excellent approximation of homogenous activity distribution using geometric calibrations
- Energy filter settings to optimise discrimination of background radiation
- Nuclide Tracker Module using multi-channel energy analysis
- Nuclide management according to international lists
- Graphic location of contamination hotspots
- Measurement of various container types
- Automatic conveyor system to the front and inside chamber
- Stainless Steel housing and lining for easy decontamination
- Authorisation levels to tailor access for users
- Modern Web based autonomous software
- Export of measurement data in XML format via USB
- Historical data access for all measurements via integrated database
- Network capability for remote supervision and monitoring
- Access to JFN's test tool software for detector analysis
- PLC controlled with intuitive graphical user touch interface panel
- Compliance with current standards: Analysis to ISO11929

Specifications

Standards:	The monitor is compliant with the following standards: CE, CSA/UL or EMC, ISO11929 and DIN25457.
Detectors:	24 Gamma Plastic Detectors 4π measurement geometry Detection volume: >319,7L Direct connection of each detector to the PC via USB
Lead shielding	Standard: 50mm Option: 75 mm
Container types:	200/400L Barrels, EU Grid Boxes and single components
Housing:	Automatic double front door
User software:	Intuitive and user friendly web based for RPO remote access User-selected measurement parameters: Container type, fill level, material type, nuclide fingerprint and disposal target Workstation with a touch operated display and control panel Automatic transition of calibrations for different containers/fill levels Supported by a basic calibration, energy calibration and geometry calibration
Electronics:	Internal chamber lighting and LED status indicators Linear motors with position sensors for exact door positioning and slow motion movement Uninterruptable Power Supply (UPS) bridges loss of mains electrical power
External Dimensions:	2223 x 1912.5 x 1765 mm (H x W x D)
Chamber Size:	1210 x 1120 x 1380 mm (H x W x D)
Weight:	Standard: 11500 kg Optional 75mm Lead: 15500 kg

Software screenshots





Additional options

JFN offer a range of additional options to enhance the capabilities of the monitor and are able to tailor the HWM-1800 to your specific needs.

Example options include:

- Automatic Rear Door
- Chain-driven exit conveyor
- Installation with 10ft Container, 20ft container and a separate office container
- CCTV Video observation of material

Support services

James Fisher Nuclear is able to offer a full suite of services from the provision of radiological monitoring products, instrumentation service, maintenance and calibrations to in-house design and expert project management with nearly 40 years of experience.

Our instrumentation team is able to provide essential calibration and maintenance services for a range of radiological protection instruments with a service hotline to provide support and advice for your new and existing instrumentation.

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