

Radiation Equipment Distribution Box



Overview

Storage & Transport Secure storage and transport solutions for radioactive materials, designed for safe handling in nuclear medicine, hospitals and laborat.

Key Takeaways

A Radiation Equipment Distribution Box is a shielded container designed to safely store, handle, and transport radioactive materials while protecting operators and the environment from radiation exposure.

Overview

Radiation Equipment Distribution Boxes are specialized containers used in nuclear medicine, laboratories, hospitals, and industrial settings to manage radioactive sources. They are designed to attenuate alpha, beta, gamma, and neutron radiation, ensuring safety during storage, handling, and transport. These boxes are often constructed from lead, tungsten, or steel, sometimes combined with acrylic or wood for structural support and usability.

Types and Features

Shielded Pass-

Through Boxes: Dual-access units that allow safe transfer of radioactive materials between controlled zones without direct exposure. Type A and Type B Packaging: Certified containers meeting IAEA Safety Standards for transport, providing containment during shipping and handling of radiopharmaceuticals or isotopes.

Rad-

Lock Boxes: Laboratory storage units made from heavy-duty acrylic with built-in locks and tamper-resistant hinges, suitable for beta-emitting isotopes like P-32, C-14, H-3, and S-35.

Lead-

Lined Wooden or Plastic Boxes: Custom-built boxes with internal lead lining (1/32" to 1/4") for shielding, often used for small sources or educational purposes. **Carts and Carriers:** Mobile solutions with lead or tungsten shielding for transporting radioactive sources safely within facilities.

Safety and Compliance

Radiation distribution boxes are designed to comply with international safety standards, including the IAEA Regulations for the Safe Transport of Radioactive Material. They undergo thermal, drop, and containment tests to ensure durability and protection during handling. Features like magnetic handles, locking lids, and tamper-resistant designs enhance both ergonomics and safety.

Practical Considerations

When selecting a Radiation Equipment Distribution Box, consider: Type of radiation (alpha, beta, gamma, neutron) and required shielding thickness. Size and capacity for vials, tubes, or larger sources. Mobility: stationary storage vs. transport carts.

Temperature control: some boxes allow ice or freezer storage for sensitive samples. Regulatory compliance: ensure the box meets local and international transport and storage regulations. These boxes are essential for minimizing radiation exposure, maintaining secure storage, and facilitating safe distribution of radioactive materials in professional environments.

Article Content

Storage & Transport

Secure storage and transport solutions for radioactive materials, designed for safe handling in nuclear medicine, hospitals and laboratories.

Radioactive Material Storage Containers | Fisher Scientific

Browse a full range of Radioactive Material Storage Containers products from leading suppliers. Shop now at Fisher Scientific for all of your scientific needs.

Shielded cabinet

Secure and lockable cabinets for the containment of all-energy radioactive sources used in conventional nuclear medicine services and PET units. Optimum radiation protection: lead biological protection

Shielded transport & storage containers for radioactive sources

These shielded transport and storage containers contain radioactive sources during transfer and storage operations, to protect operators and the environment from contamination and exposure to alpha,

Shielded Cabinets & Safes

These units are designed for secure, organized storage—whether for radioactive sources, vials, or small equipment—while maintaining operator safety and

Is there radiation in the optical fiber distribution box

Equipment in the box: Although the optical fiber distribution box may contain some auxiliary equipment (such as welding machines, adapter panels, etc.), the radiation generated by these devices under

Radiation Source Container, Carts and Carriers

Radiation Source Container, Carts and Carriers There are 34 products. Radiation Source Container, Carts and Carriers Sort by Item Number: 998-004 Shielded Storage Safe, with 4 Drawers Shielded

Radioactive Material Storage Containers

Built to meet strict safety and regulatory standards, these containers provide reliable containment and shielding against multiple types of radiation.

Meditronix Lead-Shielded Glove Box

The Meditronix Glove Box is a fully lead-shielded containment enclosure for safe handling and storage of radioactive substances in nuclear medicine departments

Electrical Distribution Boxes for Power Distribution

These Distribution Boxes enable decentralized installation of the electronics close to the load. The range of applications extends from pure energy distribution in

Understanding Distribution Boxes: A Comprehensive

A distribution box, also known as a power distribution box or electrical distribution box, is used to distribute electrical power safely to multiple

Faraday cage

Faraday cages are also used to protect people and equipment against electric currents such as lightning strikes and electrostatic discharges, because the cage

Radioactive Material Storage Containers

Our range includes radioactive waste containers and radiation storage solutions engineered with durable construction and lead shielding options to help reduce exposure and protect personnel. These

AERB RF RS SG-2 (Final)

Personal Protective Equipment (PPE) Refers to protective gears such as lab-coat, safety shoes, shoe-cover, goggles, respirators, gloves, helmets, etc. which are used by radiation workers to protect

Types of Transport and Exposure Containers | Waygate

What are the types of transport- and exposure containers in industrial radiography? Transportation and handling of sealed sources are subject to strict international safety regulations, as a source is

****Title:** Essential Guide to Nuclear Glove Boxes: Types and Applica**

Comprehensive Guide to Nuclear Glove Boxes: Types, Applications, and Features
Nuclear glove boxes are specialized containment systems designed to handle hazardous radioactive

Simulation of Dose Distribution of Radioactive Equipment in Nuclear ...

Abstract In order to accurately evaluate the radiation dose distribution around the radioactive equipment in nuclear power plants, this study used the three-dimensional radiation dose

Shielded Cabinets & Safes

Shielded Cabinets & Safes Secure Storage for Radioactive Materials
Shielded Cabinets & Safes provide robust, lead-lined containment for radioactive

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

