

# ELYSHIELD

## ELYSHIELD TAILORED RADIATION PROTECTION

### HIGH QUALITY, COST EFFECTIVE SHIELDING SOLUTIONS

- SPACE-SAVING
- REDUCE OPERATIONAL COSTS
- CUSTOM-MADE
- EASY MAINTENANCE



The Elyshield program was created to give customers access to cost effective, tailored solutions for protecting your teams. All systems combine best radiation protection and quality with a space- and cost-saving design.

Elysia proposes a complete range of solutions, from syringe shields to Isolators up to fully GMP- compliant isolators for daily production of radiopharmaceuticals.

Elysia is collaborating with different experts on the development and commercialization of radiation protection solutions. The products are designed and produced in Europe according to highest quality standards.

Our grade A isolator is designed for the routine production of radiopharmaceuticals with the use of a generator. It's designed around the synthesis module to reduce significantly its size without sacrificing radiation protection or working space for the preparation area.

The shielded isolator has 3 distinct areas:

- Synthesis areas at the top
- Splitting and measuring area at the top and front, accessible by two glove rings.
- Transfer area for syringes, needles and vials

This ergonomic design brought the working area to "man's height" while we have moved the elements that require little or no intervention below the workspace.

## 1. Isolators

The synthesis module is placed on a stainless-steel sliding tray allowing easy access to the module. The tray is perforated to allow the passage of the downward air flow. Once prepared, the module is simply pushed back.

The preparation area in the front is accessible by two glove rings, which are closed by shielded shutters.

The preparation area gives also access to the well of the dose calibrator for measuring the final product and to the hatch of the transfer chamber/outlet drawer of syringe for injection.

The generator area under the workspace is large enough to host 2 Ge/Ga generators placed on a sliding tray for easy installation or removal.

To optimize the protection of the user without making the isolator too heavy, we applied the ALARA principle by distributing the lead thickness differently according to the zones.

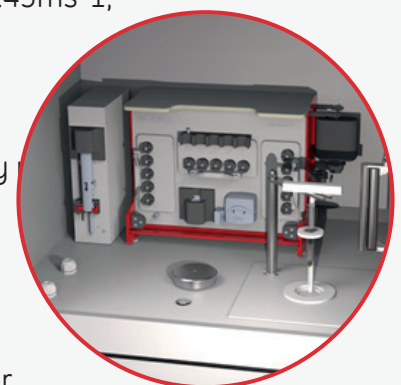
Synthesis and preparations zone is a watertight space made of PVC and stainless steel, easy to clean and decontaminate. Inside this sealed box, the synthesis and preparation areas share the same air. To achieve the biological protection the Isolator works with negative pressure around -90 Pa in the working area, permanently controlled by the manometer on the front panel.

The air Inlet is filtered by two HEPA filters, the outlet filtration by active charcoal and absolute filters. The laminar flow is maintained with an independent contains an absolute filter, an independent ventilation of 300m<sup>3</sup>/h, a return airflow capture for partial recycling (30%) and an electronic flow control unit in order to obtain a vertical air speed of 0.45ms<sup>-1</sup>, guaranteeing class A air quality.

Extremely low maintenance costs by making filter access and exchange by the users possible. No need for tools, simply hatch thumb wheels by hand, exchange filters and close hatches.

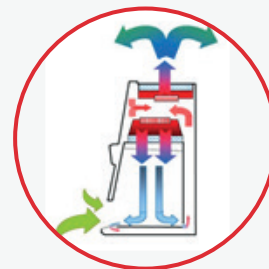
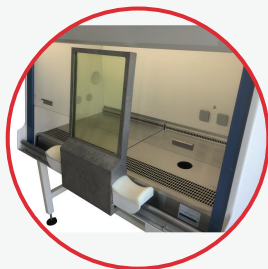
No need for tools, simply unscrew by hand the thumbwheels of the filter access hatches, remove the access hatches, and replace the filters.

Depending on available lab space and layout, front-door or side-door access models are available.



## 2. Shielded Laminar Flow Workstations

We propose different shielded workstations, open or laminar flow, adapted to specific needs with different levels of shielding and optional features.



Our Labelling BioSafety Cabinet is shielded by 10 mm of lead on 4 sides, and equipped with a sliding lead glass working shield.

All cabinets are equipped with :

- Class II Microbiological Safety Post
- LED worktop lighting and UV germicidal tube
- ventilation and laminar flow
- available in 90 cm and 120 cm width

Our 99mTc and the Ga68 models also have a generator- and a built-in dose calibrator compartment

## 3. Shielded Storage

For the storage of radioactive products or contaminated material we propose small (tabletop) and medium size (under bench) storage cabinets.

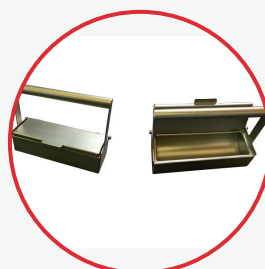
Depending on your needs, they can be delivered with a key lock to secure the contents and to manage access, and a height adjustable shelf that allows to optimise the storage space.

We propose a complete range of shielding thicknesses with 5, 6 mm, 10, 15, 16 mm or 20 mm lead. We also propose a version for storage of liquids with a built-in canister trolley, easy to pull out.



## 4. Syringe and Vial Carrier & -Shielding

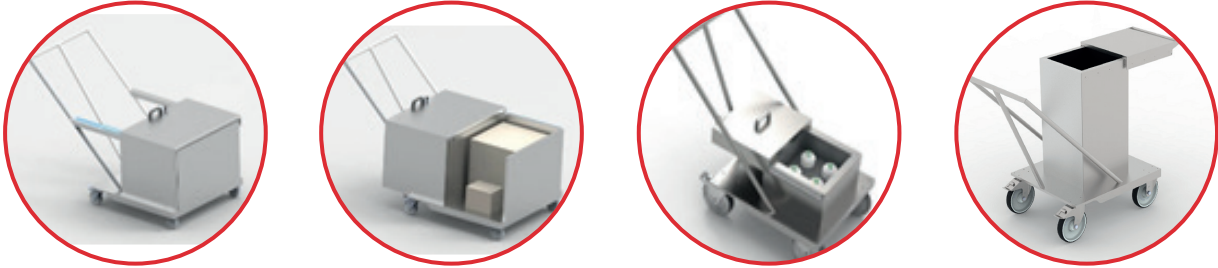
Different sizes and shielding (3, 5 or 10mm) are available. All are made of stainless steel and have an ergonomic handle.



## 5. Syringe and Vial Transportation

We propose different trolleys for container, source, generator or waste transport. Depending on the use we propose different shielding (5, 10, 20 mm or 30mm lead) and openings to adapt the trolley to the specific needs. All trolleys have 4 wheels for good stability and are made of stainless steel.

The waste container trolley is designed to transport and receive contaminated solid waste from preparation and injection of radiopharmaceuticals, and is available 30 or 60 liter version.



## 6. Other Shieldings and Solutions

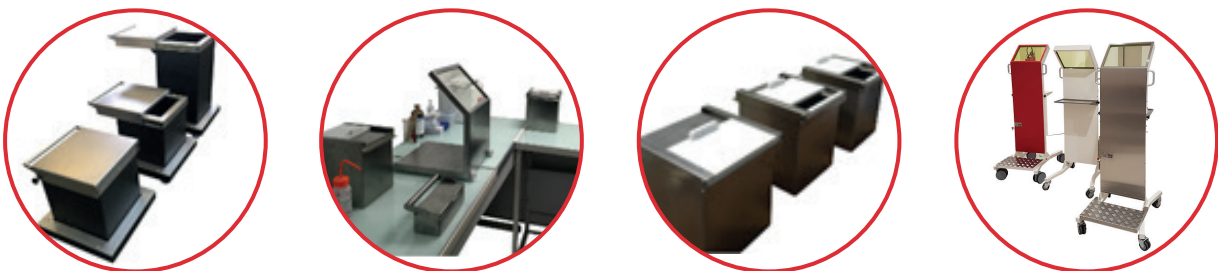
We also have :

- L-Block shields
- Table-top shields
- Mobile shields
- Injection shields



For your radioactive waste, we propose :

- waste transport trolleys
- scrap containers
- decay drums
- tabletop waste containers
- low, high and medium waste containers



For more information on radioprotection, you can contact our Business Development Manager - Radioprotection Solutions at :  
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