

**Murphil-MIX** is a shielded isolator suitable for the manipulation of radiopharmaceuticals emitting low and high energy.

The unique design makes it ergonomic, functional and ideal to simplify all routine operations performed in a Nuclear Medicine facility, in compliance with Radioprotection and GMP rules, with the possibility to be used for the fractionation of PET radiopharmaceuticals, due to the adequate shielding of the working area.

Murphil-PET is not just for gamma emitting isotopes; thanks to a “β- shielding” upgrade kit it is also a valid solution for the manipulation of the Beta emitting therapeutic radiopharmaceuticals.

The Isolator adopts a constructive standard named *ELS® (Encapsulated Lead System)* that consists in encapsulating the lead shieldings inside of closed frames avoiding lead contamination of environments.

Also available with FastDose, a plug & play dispensing system for syringes.



#### SHIELDINGS

- Frontal door Pb 50 mm
- Internal Methacrylate frontal panel 20 mm
- Lead glass window 50 mm Pb
- Hand passages Pb 50 mm
- Side and back panels Pb 50 mm
- Worktop Pb 50 mm
- Pre-chambers Pb 50 mm

#### EQUIPMENT

- Class “B” pre-chambers
- N. 2 ergonomic hand passage with gloves
- Multifunction touch-screen operator panel, with different password levels with different privileges
- Internal methacrylate air tight panel
- Internal GM probe with high range and long life capabilities
- UV lamp with programmable digital timer

### WORKING AREA

Completely laminar air flow box in AISI 316L stainless steel with mirror finish.  
Full flat working surface with active drip recovery technology.  
Airtight system with inflatable seal.  
Oval shape hand passages allows the arms of the operator to move vertically.

**Main chamber: EEC GMP CLASS "A".**

Input prefilter: HEPA

Absolute filter: HEPA

Output filter: HEPA + active carbon



### SEALED INTERNAL PANEL FOR "COLD" OPERATION

The methacrylate internal panel allows to perform all the operations of "cold" preparation, with the shielded door opened, ensuring airtight.

Latex gloves

Interlocked electric sockets.

Lighting system with LED cold lights modules.



### PRECHAMBERS

Complete system with class B prechambers.

Inlet/outlet raw materials Prechamber

Outlet Prechamber

Waste Prechamber

Generator Pre-chamber made for housing 2 Tc99m generators (cylindrical or parallelepiped shape)

All the prechambers respect **EEC GMP Class "B"** rules

- Input filter: HEPA

- Output filter: HEPA



### TOUCH SCREEN OPERATOR PANEL AND DOSE CALIBRATOR

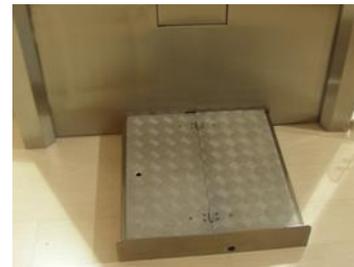
The hot cell is equipped with a touch-screen operator panel suitable to be handled with gloves. All the functions can be performed and stored on the operator panel in order to have full traceability of operations. Traceability of operations and traceability of operators. The dose calibrator is integrated in the touch screen operator panel and its control software has all the functions required by the GMP rules. (daily quality control, data saved permanently). In addition to those in the database, unlimited isotopes can be stored with unlimited geometries. Printing of customizable labels. Accuracy:  $\pm 2\%$  on all the measure range. Range: 8 Ci



### ACCESSORIES

A full range of optionals enhance the already complete set.  
Among these:

- Retractable platform
- 4 generators carousel
- Additional Inlet/Outlet prechamber with elevator
- Automatic Leak-test
- Automatic valve closure of the ventilation
- Continuous speed meter of the laminar flow and the particle count
- $\beta$ - shielding Kit



### DIMENSIONS and WEIGHT

External Dimensions: (w x d x h) mm 1341 x 799 x 2400

Internal Dimensions: (w x d x h) mm 1095 x 544 x 724

Weight Kg 5.500