

# SHIELDED FLOW CABINET



#### Our starting point:

- To produce a working space with a laminar flow cabinet with an integrated place for dose calibrator and a 2 litre waste unit shielded with lead incl. 1 moveable lead windows.
- Good Manufacturing Process.
  - 1. The European harmonized standards: EN 12469, CEN EN 475; CEN EN 1281-CENELEC EN 60601-1 und 60601-1-1: CEN EN 46001 and 46002 (CEN = European Norm Institute) PIC'S 2014
  - 2.Acc the standard: DIN 12950, till part 10 (for Microbiological and Biotechnical work, demands and certifications.)

## SAFETY CABINET CLASS II for the use of Tc-99M & Gallium-68 (Biological safety Cabinet)

acc. EN 12469

Dim. working area chamber: see brochure

Outside dim+/-: see brochure (w x d x h)

Lead shielding: 2 - 50mm Pb

Material: - complete inside stainless steel 3.16

Standard:

- 1 x glass window, arranged to slide vertically
- alarm system for air-mistakes inside working area
- see technical information

#### Most essential qualities

- guaranteed current of air over the whole working area
- a guaranteed depression up to the pressurechamber caused by leaving out an inlet-filter
- by building in an extra stainless air-gauze, an absolute equal air-flow is guaranteed.
- Main- (HEPA) and exhaust-filters will be choked equally.
  - In case of normal B-lab. use renewing of the filters has to take place after min. 5 years.
- I is a recirculation-cabinet: 70% of the air circulates and 30% outlet resp. inlet
- Continuous under pressure measurement
- Lead shielding on right-, left-, under & backside **2 50mm** up till the filter high.
- aerosols, caused by the eluting will be sucked off immediately
- building in of a 1 x 2 litre waste-container, shielded with 2 50 mm lead.
- Material : steel powder coated
- building-in and mounting of <u>1 x dose calibrator</u> incl. ionisation-chamber incl back wall display. Lead shielding of Ionisation chamber is **2 50**mm
- 1 x moveable lead glass 350mm x 500mm, Pb-2 30mm 140-511 keV
- Incl. 1 x laboratory chair



#### **Option 1.1 Active Carbon - Iodine filter.**

This filter has to be placed between the exhaust of the laminar flow cabinet and for example the exhaust- air back into the room or into the house ventilation system

Complete housing stainless steel. The filters are made from aluminium and can be changed easily.



#### **Option 1.2 Pharmacy cabinet**

These furniture cabinets are specially made to place in all syringes boxes and all digital equipment, (Computer, printer, disposables etc....)

#### **Option 1.3 Waste separation.**

This cabinet is standing next to the cabinet. Material partly steel powder coated. The higher part is a Standard cupboard and the lower part is completely surrounded with **2 - 50mm** lead shielding. Inside there is place for 2 x 60 litre containers for plastics & non plastics or glass & non glass products waste. You can separate the waste directly from the working area inside the cabinet to the waste system. It is also possible that you place 4 x 30 litre containers instead of 2 x 60 lit. The containers are standing on a sliding screen. Inside material complete stainless steel.





### **Option 1.4 Dose calibrator Isomed 2010**

consisting of:

- mini-PC-system (or micro-tower)
- Windows-software licence
- dose calibrator-software ISOMED 2010 with special quality check acc. to DIN
- integrated database with measuring value storage
- Measuring chamber, complete well-type ionization chamber with 4 mm lead shielding, incl. electrometer amplifier, type 638200
- sample holder / vial and syringe dipper
- Operation manual Supplied with English software and product documentation
- Cable length from chamber to device: 2.5 meters
- Display 19" monitor build in on the back side of the cabinet (working area)

#### Option 1.4.1 Test source Cs-137 5MBq with storage box

Please note that a test source is <u>necessary for periodical quality check</u> according to EN 61303.

Only a Cs-137 test source can be used (5 MBq).

If you already have such a source, MED is pleased to help by entering the test source data into the system (e.g. by phone, e-mail or team viewer).

We can only supply if the user has to confirm that he has a handling and stock licence!

**Option 1.4.2 Numeric keyboard** with integrated touch-pad, for operation inside box complete closed keyboard. (GMP) and is for every type of glove, workable.



- rechargeable
- no cables inside cabinet
- complete flat, 10mm thick

#### Option 1.4.3. Printer für Isomed

Typ Label printer Seiko SLP 440 or equivalent, incl. 10 rolls of paper

For more info please look at our website (chapter measurement)