NMC Ga-68

GALLIUM 68 HOT CELL

The NMC Ga-68 hot cell is specifically designed to accomplish the latest GMP guidelines for the Ga-68 complete preparation cycle:
- Elution
- Synthesis
- Dispensing

The NMC Ga-68 is a GMP grade A hot cell, with n. 2 GMP grade B pre-chambers, n. 2 gloves, tray for Synthesis Module, dose calibrator area and waste container. This equipment and its ergonomy has been conceived for the Ga-68 complete preparation cycle.

Model	Lead shielding mm			Weight	Emitter
	Main door pre-chambers dose calibrator area	Work floor back side lateral sides	Filters area (on top)	Kg	Type
NMC 50 Ga-68	50	50	30	4.000	γ
NMC 30 Ga-68	50	30	30	3.000	γ

The working area (**Image 1**) is made of AISI316L stainless steel, Mirror Brite finishing. All bending and corners have a radius of 12mm for easy cleaning operations. The weldings are polished and smooth to avoid any liquid penetration. The work floor has raised edges to prevent any leakage of possible liquid spilled.
The hot cell is **fully GMP compliant** and the operator has a large variety of possibilities, thanks to its equipments:
- N. 2 pre-chambers
- N. 2 gloves
- Tray for Synthesis Module
- Dose calibrator shielded area
- (Optional) Dose calibrator automatic up/down lift
- N. 1 integrated waste container
- U.V. antibacterial lamp
- Main double door: Shielded and Polycarbonate

Unique Feature: absolute control by Operator Panel Touch Screen PC
(**Image 6**) A single interface for operations handling, system control, data saving and display. No additional device is required for the control of the hot cell. This unique feature makes the system store-save-trace any event and alarm concerning the hot cell work. Among others:
- GM for door interlock (n.2 thresholds), alarm set up and visualization
- Time saving solution: automatic on/off programming for ventilation and U.V. lamp
- **N. 3 safety passwords** (programmable): user, maintenance and RSO password.

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DIMENSIONS
- External dimensions: 980(w) x 920(d) x 2.480(h) mm
- Internal dimensions: 740(w) x 580(d) x 730(h) mm

SHIELDING
- The lead is mounted in different combinations: please check the chart on the front page
  OPTION: - The shielding thickness of the hot cell can be changed according to customer needs

INTERNAL VIEW
- Lead glass windows 170(w) x 250(h) x 30 or 50 mm Pb Eq.
- 10° inclination for a better view ofthe working area
- N. 2 LED lights (IP54) > 500 Lux each

ACTIVE SAFETIES
- AIS: GM tube for door interlock system that prevents the main door opening when the activity level inside the cell overcomes the alarm threshold (the threshold can be set by the operator)
- Software control for cell parameters (negative pressure, filter clogging, ventilation status, UV light timer, etc.)
- N. 1 manometer for continuous pressure status visualization (**Image 7**)
- N. 1 U.V. antibacterial lamp
  OPTION: - CES: radioactive gas radiation monitor on hot cell exhaust air. In case of alarm the system isolates the hot cell until complete radioactivity decay.

VENTILATION
- Working area air quality classification: GMP grade A
- Laminar Air Flow
- Inlet filter: HEPA H13
- Main filter: ULPA U15
- Outlet filter HEPA H13 + active charcoal
- N.2 pre-chambers air quality classification: GMP grade B

AIR-TIGHT
- The inflatable seals grant a Class II air tightness (ISO 10648:2). This feature classifies the hot cell to the range of an isolator

EQUIPMENT
- Generator pre-chamber (left-side) far max 2 units. Suitable far housing 2 square or 2 cylindrical shape generators. Airtight and electrical interlocked (**Image 2 - 4**)
- N.1 disposable and syringe pre-chamber (right-side). Airtight and electrical interlocked (**Image 5**)
- **Operator Panel Touch Screen PC**: operator software interface for handling, system control, data saving and display, **data traceability GMP compliant** (**Image 5**)
- N.2 gloves fixed on the Polycarbonate door **(Image 9)**
- Dose calibrator shielded area
- N.1 waste bin integrated below the working surface
- Main double door: Shielded Door for radioprotection and Polycarbonate Door for air-tight and gloves mounting. The 2 doors are independent and open separately (**Image 9**)
- Multi diameter sealed pass-through system far cables (Roxtec)
- Special stainless steel flange with air-tight passages for capillaries and technical gases
- Arm-tray to support laptop and/or dose calibrator control unit
- AIS GM tube (for door interlock) connection to the ENVIRO area monitoring net
- Dose calibrator automatic up/down lift
  OPTION: - µDDS-A automatic dispenser

EXTERNAL FINISHING
- External finishing in AISI 304 Stainless Steel, Scotch Brite finishing, from floor to 2.480 (h) mm an the front, left and right sides.
  OPTION: - The external finishing in AISI 304 Stainless Steel can be extended until the contact to the false ceiling


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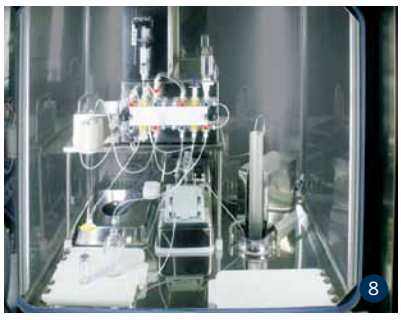
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