

# GAMMA CHAMBER 5000



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## Features :

- The Gamma chamber 5000 is a compact self-shielded cobalt - 60 based research irradiator.
- The design of Gamma Chamber conforms to American National Standards, ANSI-N433.1-1977 for safe design and use of self-contained dry source storage gamma irradiator (Category I). It is having Type B(U) package certification which meets the requirements of safe transportation of radioactive materials as per AERB safety code No. SC/TR-1, 1986 of Atomic Energy Regulatory Board of INDIA as well as of IAEA safety standard ST-1, 1996 (as amended TS-R-1, 2000).
- It is having PLC based control system and can be operated both on Auto and Manual Modes.



Control Panel Operation

## Specifications

- Maximum Co-60 source capacity : 518 TBq (14000 Curies)
- Dose rate at maximum capacity : ~ 9 kGy/hr (0.9 Mega Rad/hr) at the centre of sample chamber
- Dose rate uniformity : +25% or better radially;  
-25% or better axially
- Irradiation volume : 5000cc approx.
- Size of sample chamber : 17.2 cm (dia) x 20.5 cm (ht)
- Shielding material : Lead & stainless steel
- Weight of the unit : 5600 kg. approx.
- Size of unit : 125cm (l) x 106.5 cm (w) x 150 cm (ht)
- Timer range : 6 seconds onwards.
- Weight of the package : 7000 kg.
- Size of the Package : 139 cm (l) & 130 cm (w) x 138 cm (ht)

## Installation Requirements

- Power requirement : 220/230 V, 50 Hz, 10 Amps, single phase.
- Room
  - a) size : 4 M x 4 M x 4 M
  - b) door size : 1.2 M clear width x 2 M height
  - c) pit size : 32 cm dia x 70 cm depth in the floor
  - d) floor loading capacity : 10 MT per sq. M

*Note : Permission of Regulatory Body (AERB, India) is needed for use of the unit.*



**BOARD OF RADIATION & ISOTOPE TECHNOLOGY**

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