



Radiation table including the option of sideways movement and rotation

The Universal Dose Calibrator is a standard machine for individual calibration and verification of gamma radiation measurement instruments.



It consists of a number of gamma radiation sources (maximum 11 sources), located in a carousel, shielded by a lead castle. The heart of the calibrator is an industrial PLC, used to control source manipulation, trolley displacement and an extended set of safety precautions. The operator console gives direct access to the dose calibrator for interactive operation. It displays the requested source, the source in irradiation position, the irradiation time and the source-trolley distance.

A Windows application program, running on a PC, allows full automatic control for all kind of dose, dose rate and alarm calibration procedures.

Features for the standard system

- maximum capacity of 11 sources and 1 dummy position
- maximum activity Cs¹³⁷ is 200 Ci
- maximum activity Co⁶⁰ is restricted by the dose rate, specified in contact with the shielding for closed position and limited to about 2 Ci
- standard lead shielding is overall 20 cm
- standard collimator opening is 16 or 20° (designed according to ISO 4037)
- standard trolley movement between 600 mm and 3000 mm
- radiation table adjustable in height
- class II laser system for beam centre indication
- closed video system for instrument readout
- operator console for manual operation
- extended safety precautions
- personal computer with UCS (Universal Calibrator System) - software

Software features

- users data base
- source configuration
- automatic decay calculation
- calibration modes:
 - dose rate calibration
 - dose rate alarm calibration
 - dose calibration
 - dose alarm calibration
 - instrument procedure calibration mode
- report generation

Options

- special versions for higher dose rates are also available
- radiation table that can move sideways and rotate

