

# MQIR 225 Irradiator



## MQIR 225 Irradiator at a glance

- ▶ Standard Energy : Up to 225 kV
- ▶ Maximum Power : Up to 4500 W

## Key Features

- ▶ Easy to use with a GUI based touch screen control panel
- ▶ Optional internal dosimeter for exact dose measurement and control
- ▶ Interchangeable beam conditioning filters
- ▶ Programmable Motorized sample shelf
- ▶ Adjustable Beam Collimator
- ▶ Automatic X-ray tube warm-up

## Built for safety & speed

- ▶ Designed as per AERB safety guidelines (AERB / RF-IR / SC-1) with certified low leakage ( $\leq 0.1$  mR/hr) levels
- ▶ Steel / Lead / Steel sandwich construction

# MQIR 225 Irradiator

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MQIR Series X-ray Irradiators are designed for irradiating samples to desired energy and dose in a standard laboratory environment. The X-ray tube along with the high power x-ray generator provide consistent X-ray dose at a set energy with stability and accuracy at par with industry leading irradiators.

The shielded cabinet of the irradiator meets safety standards of AERB and has adequate cooling capacity to operate continuously for long duration.

The irradiation chamber of 60cm (H) x 42cm(W) x 43cm(D) is made of stainless steel and has adjustable sample shelf to vary SSD.

## MQIR 225 kV Irradiator System Product Specifications

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- ▶ Nominal Energy : Up to 225 kV
- ▶ Maximum Power : Up to 4500 watts
- ▶ Focal Spot (as per EN 12543) : Small Focal spot – 1.2mm, Large Focal Spot – 5.5 mm
- ▶ Inherent Filtration : 2.0 mm Be
- ▶ Radiation coverage : 40°

## X-Ray Control & Interface Features

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- ▶ GUI based touch screen interface for ease of use
- ▶ Exposure settings of kV from 5-225 kV, mA from 0.1 - 30 mA and time from 1 - 99999 sec.
- ▶ Unlimited Preset memories with password protected user login for multiple users.
- ▶ Option provided for Data Transfer to External Devices
- ▶ Safety Features : Warning flash lamp, X-ray ON alarm, Key activated door lock, Key for X-ray ON
- ▶ Power Requirements : 220VAC  $\pm 10\%$ , 50/60Hz, single phase

## Dose Output

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- ▶ Max dose output  $\geq 12$  Gy / min at 225kV, SSD of 30cm - unfiltered beam
- ▶ Max dose output  $\geq 6$  Gy / min at 225 kV, SSD of 30cm - filtered beam

## Accessories

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- ▶ Inbuilt CCTV for continuous monitoring of the specimen
- ▶ Programmable motorised rotator shelf
- ▶ Automatic adjustable collimator to provide square / rectangular field with coincidental light field for precise placement of samples.
- ▶ Additional circular collimators
- ▶ Restraints / shielders for tumor targeting
- ▶ Autoclavable mouse disk
- ▶ Mouse Pie cage
- ▶ Digital Imaging System (Optional)

## NDT Services

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- ▶ Radiographic Inspection Training
- ▶ Radiographic Inspection Services
- ▶ AMC, Repair & Maintenance Services

AMC, Repair & Maintenance Services – Due to our extensive experience in the field of servicing, repairing and maintaining industrial and healthcare equipment, we are perfectly positioned to offer AMC & Repair services for Industrial X-Ray systems, Manipulators and Handling systems, of any make. These services are beneficial for users, who operate out of warranty or discontinued equipment, as it helps increase the useful life of the system and also minimizes the cost of operations.



For Designing Irradiators of other energies ranging from 20 to 450 kV with chambers of any sizes **call or write to us**

## Our Clients



## About MQS Technologies

MQS Technologies (formerly MedeQuip Services) is a diversified firm with Design, manufacturing & maintenance capabilities that offers custom solutions for engineering & healthcare applications.

Focused on three business lines - Non-Destructive Testing, Aerospace & Defense and Healthcare, our USP lies in leveraging decades of multidisciplinary expertise in electronics, electro-mechanical, mechanical and software domains, to provide user-friendly products and services for a wide range of industries.

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