

XSTRAHL CABINET IRRADIATORS

Effective and accurate X-Ray dose delivery for pre-clinical research.

Xstrahl supports lab-based in-vitro and in-vivo irradiation studies by providing a range of free standing, self contained X-Ray irradiators. The irradiation research cabinets enable safe irradiation of biological samples within a laboratory environment.

The RS225 and RS320 X-Ray research irradiator cabinets each consist of:

- Lead shielded irradiation chamber
- Movable operator control panel with an intuitive touch screen interface
- Beam hardening filters, to tailor the maximum depth of an X-Rays to suit the research
- Unique motorised vertical movement access door, resulting in a smaller footprint and safe, easy access to specimens

Meeting the needs of medical and biological research, the RS225 and RS320 are self-contained cabinets incorporating the irradiation chamber and system electronics in one enclosure. The software interface allows for multiple user logins, while X-Ray exposures can be programmed and executed automatically. In addition to removing the health and safety burden associated with the use of radioactive sources, the Xstrahl RS225 and RS320 provides a safer, simpler and less costly alternative to radioisotope irradiators for radiation exposure studies.

Research Applications

- In-vivo irradiation
- In-vitro irradiation
- Oncology
- Radiobiology tumour micro-environment
- DNA repair
- Bystander effects
- Radiosensitivity of normal tissue
- Preclinical studies
- Radiosensitizers



Bespoke Commissioning

Bespoke commissioning of the cabinet based on your research needs in order to provide the most accurate dosimetry data for your research.

Optional Items

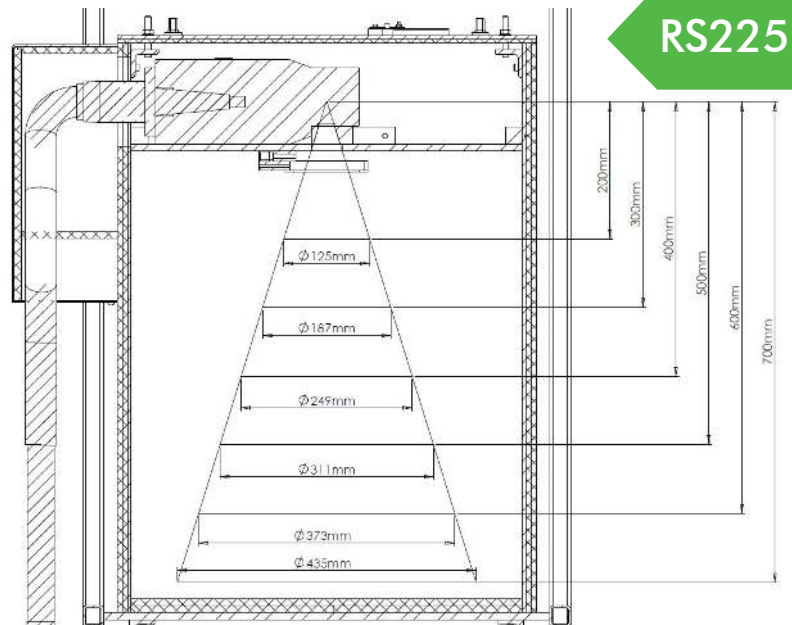
- Additional collimators to vary irradiated size area
- Alignment laser system for easy specimen setup
- CCTV (camera) for internal observation of the chamber during operation/exposure
- Hypoxia gas control chamber for in-vitro studies
- Independent dose measurement systems
- Touch screen controlled specimen turntable option



DEVICE SPECIFICATIONS

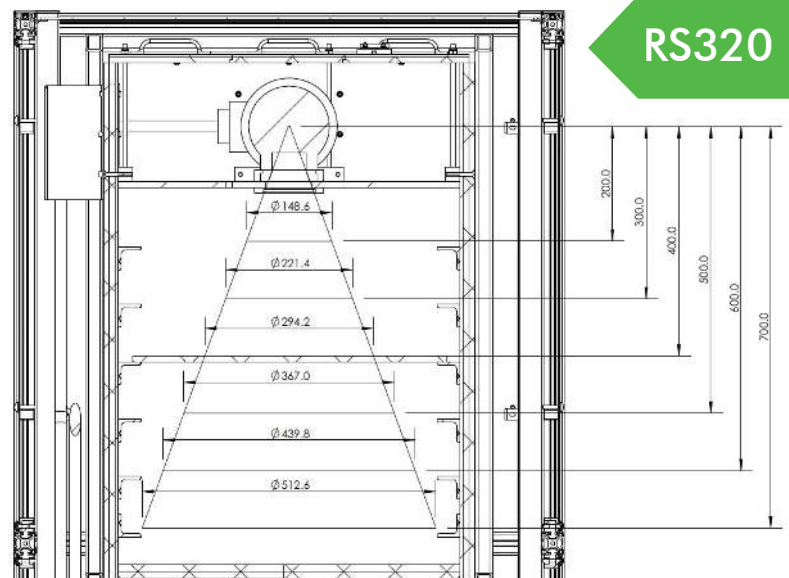
X-Ray Tube Output Limits	
Voltage	Up to 220kV
Current	1.0mA to 30mA
Power	3000W (broad focus for designated stability)
X-Ray Cabinet Dimensions	
Height	2010mm
Width	1105mm
Depth	960mm
Weight	1100kg
Lead Shielded Irradiation Chamber Dimensions	
Height	650mm
Width	570mm
Depth	600mm

Shielding of cabinet to $\leq 2\mu\text{Sv}/\text{hour}$ at 5 cm from any accessible surfaces as per IRR'99 guidelines.



Focal Spot Distance and Irradiation Field Size (Dimensions in mm)
RS225 (above) and RS320 (below).

X-Ray Tube Output Limits	
Voltage	Up to 300kV
Current	Up to 30mA
Power	3.2kW (broad focus for designated stability)
X-Ray Cabinet Dimensions	
Height	1935mm
Width	960mm
Depth	960mm
Weight	1450kg
Lead Shielded Irradiation Chamber Dimensions	
Height	640mm
Width	595mm
Depth	650mm



For more information: visit www.xstrahl.com or contact us at support@xstrahl.com

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