

Gamma irradiation services

Institute of Isotopes Co. Ltd. operates an OB-SERVO W type panoramic Co-60 irradiator. The Category IV. facility is a controlled access irradiator in which the sealed sources are stored in a water filled storage pool when it is not in use. The sources are kept in a cylindrical cage raised and lowered by a pneumatic hoist system. Adjustable source to product distance guarantees the good dose uniformity for different density materials and Thermal Boxes of various sizes provide the necessary temperature for testing (25°C to 80°C). The equipment can be also used for high dose research irradiation and sterilization.



Irradiation for research purposes

We offer radiation (aging) test services for experimenting and testing at various dose rates based on customer preferences. We also collaborate with various companies from the food and medical industry providing the irradiation for test items like spices and medical devices.

Sterilization

We provide sterilization services for in vitro medical devices, laboratory equipment.

Radiation hardness assurance tests

We undertake irradiation of various items, components and materials that could be exposed to extreme conditions and radiation (i.e. in Nuclear Power Plants, Radiation Technique, Space Industry, etc.):

- different materials and coatings,
- plastic test samples,
- lubricants,
- electric components: cables, circuits, switches, sensors, valves, motors, actuators

We have thermoboxes with different sizes and can provide testing temperatures up to 80 °C (higher temperatures may also be possible upon request).

Experimental irradiation

We collaborate with numerous research organisations, teams and other companies providing them the required dose rates and environment for various experiments: waste water management, degradation, etc. We also offer our services to carry out experiments, gathering the analytical data, continuous diagnostics etc.

Testing radiation detection systems

Detectors, measurement systems, probe irradiations, etc.





Technical details

Source details

Sealed Source Co-60

Maximum Activity 4 440 TBq (120 kCi)

Source Cage Type Cylindrical

Actual Radiation Details

Dose Rate For Big Volume Items 0.01 to 2 kGy/h

Dose Rate For Small Volumes (Ø210×500 mm) 3 to 21 kGy/h

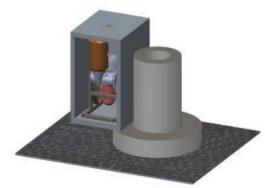
Dose 0.001 to 100 000

(Depends on Dose Rate and Time) kGy

Volume and Weight Details

Maximum volume of a single package (W x L x H) $0.7 \times 0.9 \times 1.8$ m

Maximum weight 1000 kg



Technical support and ordering process:

Please, contact our experts for further information at: sute@izotop.hu

