

## IRRADIATION SERVICES

When companies require irradiation and sterilization services, they turn to Nordion's Gamma Centre of Excellence (GCE).

GCE is a world-class applied research and specialty irradiation gamma processing facility. We are proud to provide a reliable gamma service to polymer producers, food processors and medical device manufacturers. The GCE facility offers timely irradiation of your product with flexible scheduling and both high and low volume irradiation capability.

### Non-standard and High-precision Gamma Processing to Meet Your Unique Requirements

- **Quality.** We deliver the right dose at the right time, according to your schedule.
- **Regulatory compliance.** We ensure your products meet specific regulatory compliance requirements.
- **Manufacturing Process.** We complete manufacturing process requirements to your unique specifications.
- **Research.** We collaborate with companies to determine gamma compatibility and to develop highly effective gamma processes.

### What is Irradiated and Sterilized with Gamma Rays?

Hundreds of materials have been irradiated and sterilized at GCE. Here are a handful of examples:

- Spices
- Medical devices
- Packaging components
- Nuclear reactor parts
- Specialized orthopedics
- Medical tissue

### Unsure whether your product is gamma compatible?

We collaborate with companies to determine the gamma compatibility of any material. We invite you to contact us to learn more about our Sterilization Science Group.

Contact GCE at  
[gamma@nordion.com](mailto:gamma@nordion.com)





## The Nordion Advantage

Our state-of-the-art irradiation systems and world-class gamma processing knowledge and expertise offer our partners many advantages.

- **Precision and scale.** We maintain underwater precision dose systems for small-scale sample testing and a full-scale irradiator capable of processing high volumes of product with exceptional flexibility. The irradiators feature computerized monitoring systems that govern operations, control timing and generate accurate, detailed documentation.
- **Uniformity.** Our full-scale, carrier irradiator features automatic, speed-controlled, floor-to-ceiling carriers that transfer products around the cobalt-60 source to ensure uniform dose.
- **Expertise.** Because we are the authority in gamma processing, you are assured world-class expertise in dosimetry, calibration and precise dose delivery.
- **State-of-the-art facility.** We offer a warehouse space for sample storage, including refrigerated storage space.

**Nordion is a world leader in gamma sterilization technologies offering a full suite of gamma-enabling products and services: a reliable supply of cobalt-60, complete cobalt lifecycle support, expert design, construction and maintenance of commercial irradiators, technical training and new application research and development.**

[www.nordion.com/gce](http://www.nordion.com/gce)

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## State-of-the Art Systems

### Carrier Irradiator

Capable of processing high volumes of product with exceptional flexibility, GCE's full-scale carrier irradiator features an automatic conveyor that transfers product carriers into the irradiation room and around the unit's cobalt-60 source. Each carrier has two internal compartments in which products may be stacked. The carriers can be loaded and unloaded in either a horizontal or vertical position. The carrier irradiator has three operational modes—continuous, batch and incremental-dose. This offers flexibility of processing for industrial or research purposes. GCE is ISO 9001:2008 certified and Controlled Drug Licensed/Drug Establishment Licensed.

Specs:

- Carrier compartment dimension:  
Length is 120 cm (48"); width is 60 cm (24");  
and height is 137 cm (54")
- Maximum weight per carrier: 1,958 kg (4,308.5 lbs)
- Capacity: 3.0 million curies

### Underwater Precision Dose System

The GCE maintains small-scale irradiators for applied research and development and sample testing.

## Benefits of Gamma

- **Efficient.** Unlike other modalities, products irradiated and sterilized with gamma can be sent from the GCE facility directly to the end customer—no wait times.
- **Proven.** Used by polymer producers, medical device companies and food processors for over 40 years, gamma processing is a well understood, well controlled and validated process.
- **Safe.** While some modalities leave traces of toxic substances, gamma rays do not.