What is Gamma Irradiation?

The gamma irradiation process uses cobalt-60 radiation to kill microorganisms on a variety of different products. Gamma radiation is generated by the decay of the radio isotope cobalt-60, with the resultant high energy photons being an effective sterilant. Gamma irradiation equipment range from flexible batch irradiators to large-scale pallet irradiators.

A key characteristic of gamma irradiation is its high penetration capability, which enables dense and bulk packaged products to be processed with relative ease and facilitates treatment of palletized product.

This simple, proven process is safe, reliable, and highly effective at treating a variety of products with varying densities. Gamma irradiation supports the manufacturing and distribution process by facilitating final packaged product as well as raw materials, while ensuring full sterility of the product.

What is Gamma Irradiation Used For?

The gamma process can effectively sterilize a wide variety of products composed of different materials, with varying densities, configurations and orientations. Some examples of products processed include:

- Medical devices
- Pharmaceuticals
- Combination drug/device products
- Animal husbandry
- Archives
- Cosmetics and toiletries
- Horticultural supplies
- Packaging
- Polymer modification
- Food phytosanitization

(Cobalt-60 Gamma Radiation Source Racks)