

# GAMMA IRRADIATION FOR BIOBURDEN REDUCTION

## DESCRIPTION

Many industrial products have regulatory limits for microbial load (bio-burden). When natural bioburden or bioburden induced in the manufacturing process is high, gamma irradiation can be used for bioburden reduction. This applies for final products but also for raw materials, packages and other additives. Irradiation dose is lower than for sterilization of medical devices. IRASM tote-box irradiator can accommodate a large range of products in various packages (carton boxes, bags, plastic bottles, etc.)

#### **APPLICATION DOMAINS**

The control of bioburden by radiation processing is used to a wide range of materials like primary products for pharmaceutical industry (titan oxyde, magnezium lactate etc), foodstuff for animals, organic support for micro and micro-organisms, dry herbs (tea), dietary supplement (capsules, tablets) and packaging products (cups, bottles, foils etc).

Complex or high volume devices can be processed for disinfection (water purification equipment, cleaning and protection equipment, beehives, etc).

# **MAIN ADVANTAGES**

Cost-effective technique can be applied to bulk materials.

Applicable when other sterilization method cannot be used (heat sensitive or adsorbent materials).

IRASM multipurpose irradiator applies for bioburden reduction the same Quality Management System as for medical devices and pharmaceutical sterilization.



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# POTENTIAL CUSTOMERS OR COMMERCIAL APPLICATIONS

The service addresses customers from medical, pharmaceutical and cosmetic domains, food industry, dietary supplements manufacturers, packaging domain and any other industry where microbiological safety is a requirement.

#### **KEYWORDS**

industrial irradiator, gamma radiation processing, microbial control, decontamination