



One of a series of Gammacell irradiators produced by AECL. This model is the Gammacell 220, the most popular general purpose research irradiator in the world.

### Gamma Sterilizers

Control of disease-spreading bacteria and viruses is critical in health care, especially in hospital environments where thousands of tonnes of disposable medical supplies require sterilization.

A full third of all such surgical supplies in the world are now being sterilized with gamma radiation from cobalt-60. Not only is Canada the major supplier of this radioactive source, it is also a manufacturer and exporter of industrial irradiators precisely for this purpose. More than 70 large scale Canadian-made irradiators are now in use in a number of countries for sterilization of medical supplies. A Japanese customer has the largest of AECL's sterilizers. The unit has a total processing capacity of 200 000 cubic metres of supplies a year.

AECL also produces the Gammacell 220 research irradiator, of which over 200 are in operation in laboratories abroad. They are used in many areas of study in medical product sterilization, biological and genetic effects, food preservation, chemistry, pollution, growth stimulation, male sterilization techniques for insect control and irradiation of semi-conductors.

One of the uses of AECL's Gammacell 1000 irradiator is to destroy antibodies in donor blood prior to transfusing it into patients suffering from immunological deficiency diseases.