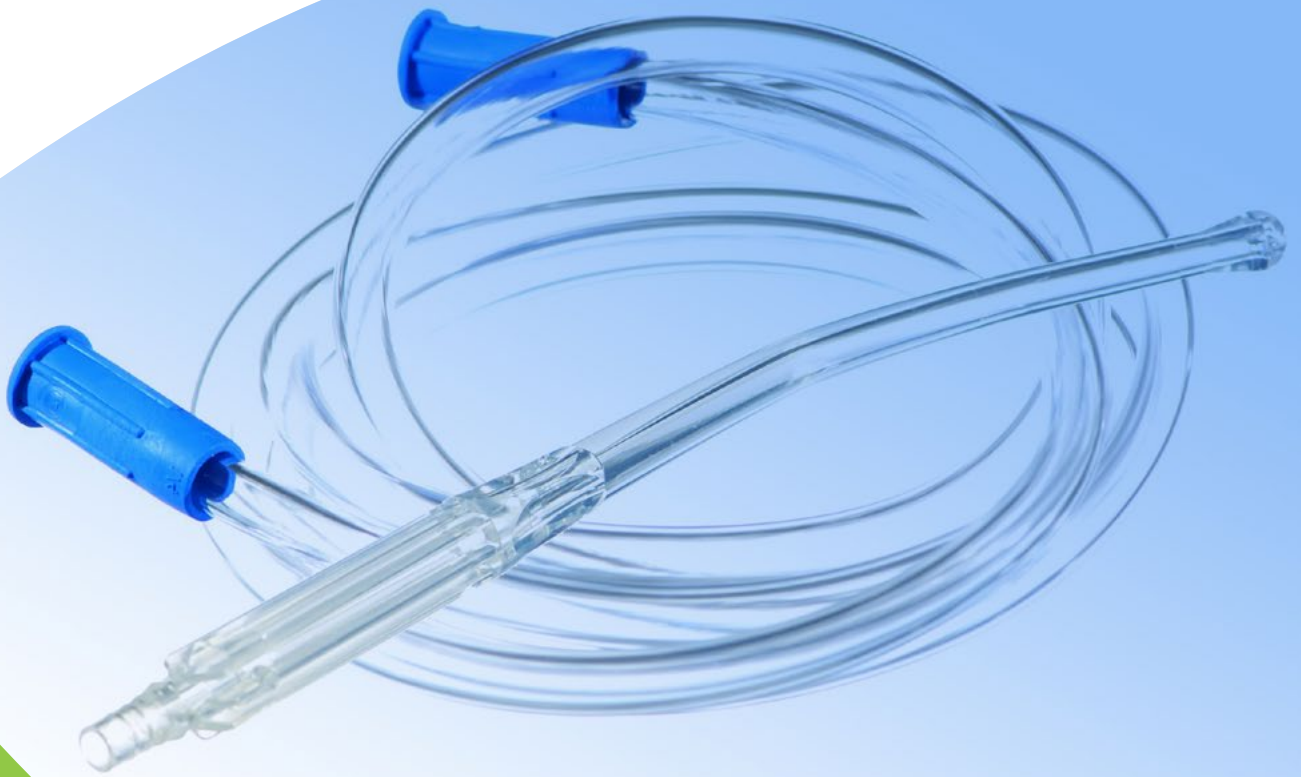




**Sterigenics**<sup>®</sup>  
A Sotera Health company

# Electron Beam



The Global Leader in Comprehensive  
Sterilization Solutions

[sterigenics.com](http://sterigenics.com)

# Electron Beam

E-Beam radiation is a form of ionizing energy that is characterized by its low penetration and high dosage rates. The Beam – a concentrated, highly charged stream of electrons – is generated by accelerators capable of producing continuous or pulsed beams. As the product/material being sterilized passes the E-Beam, energy from the electrons is absorbed, altering various chemical bonds, damaging the DNA and destroying the reproductive capabilities of the microorganisms.

## Best Suited for:

- Low density, uniformly packaged products
- Polymer modification
- Cross linking/branching
- Semiconductor enhancement
- Low dose or tight dose ranges
- Product, biologics and tissue

## Key Benefits:

While most materials manufactured for use in the sterile healthcare products are formulated for radiation stability, some materials – certain polypropylenes, for example – experience less breakdown and long-term aging effects as a result of E-Beam's shorter exposure time. Other benefits include:

### High Speed, High Capacity Accelerators:

Sterilizes low-density, uniformly packaged products quickly and effectively.

### Dosimetric Dosing:

Eliminates post-sterilization testing and expedites distribution logistics.

### Material Modification:

Electron Beam processing can be used to modify polymers, improve semiconductors switching speeds and change or enhance many other material properties.

## Electron Beam Facilities



**NORTH AMERICA**  
San Diego, CA



**SOUTH AMERICA**  
Jarinu, Brazil



**EUROPE**  
Espergaerde, Denmark

**ASIA**  
Shanghai, China  
Bangkok, Thailand

## Comprehensive Sterilization Solutions

We are over 1600 engineers, scientists, safety specialists and solution providers focused on eliminating threats to the health of humanity. We have global breadth and more than 90 years of deep expertise across Gamma, EO, E-Beam and X-ray sterilization. Our operations span 46 facilities in 13 countries to ensure we are the "point of safe" for our customers.

**Safeguarding Global Health™ – with every product we sterilize.**



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For more information:  
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