



ION BEAM IRRADIATION

What is Ion Beam?

Ion beam treatment uses either protons or helium ions. A unique feature of processing with this technology is the ability to selectively target a very small area.

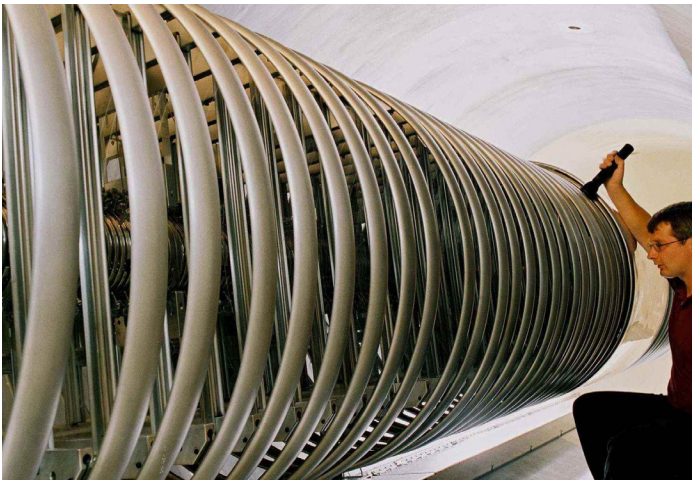
The ion beam's 5MV Tandem accelerator is a flexible system that can produce many different ion species, but is particularly well suited to light ions, such as protons, deuterons and helium ions (alpha particles). An advantageous feature of the ion beam is the ability to change energy rapidly, typically in a few seconds, for shipments of mixed products.

For semiconductor processing using ion beam, STERIS AST utilizes our in-house cleanroom to handle the wafers, allowing them to be treated and repacked in a controlled environment.

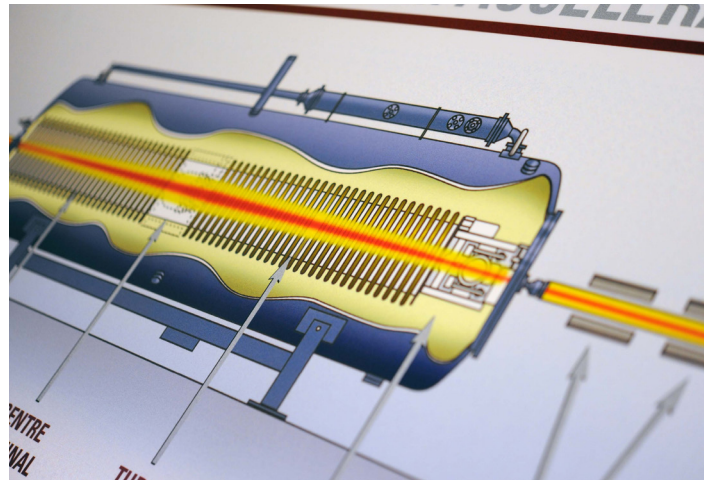
Our ion beam facility at Harwell (UK) provides a technique that addresses a host of requirements across many different sectors:

- Simulation of the naturally-occurring space radiation environment, especially the component dominated by solar protons and affecting the external surfaces of a satellite
- Semiconductor processing for carrier lifetime control
- The production of trace levels of radioactivity in engineering components for thin layer activation and real-time wear measurement
- Materials analysis

(Ion Beam Interior)



(Ion Beam Schematic)



FOR MORE INFORMATION

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