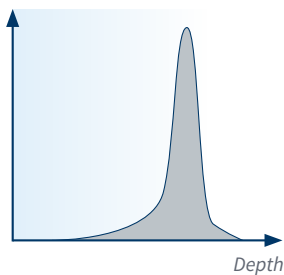


NEXT-GEN SiC ION IMPLANTATION EQUIPMENT

EFIITRON - ENERGY FILTERED ION IMPLANTER

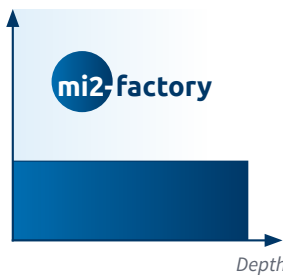
Energy-filter (EFII) converts a monoenergetic ion beam such that box-like depth profiles are generated with just one single implantation step.

Ion Distribution



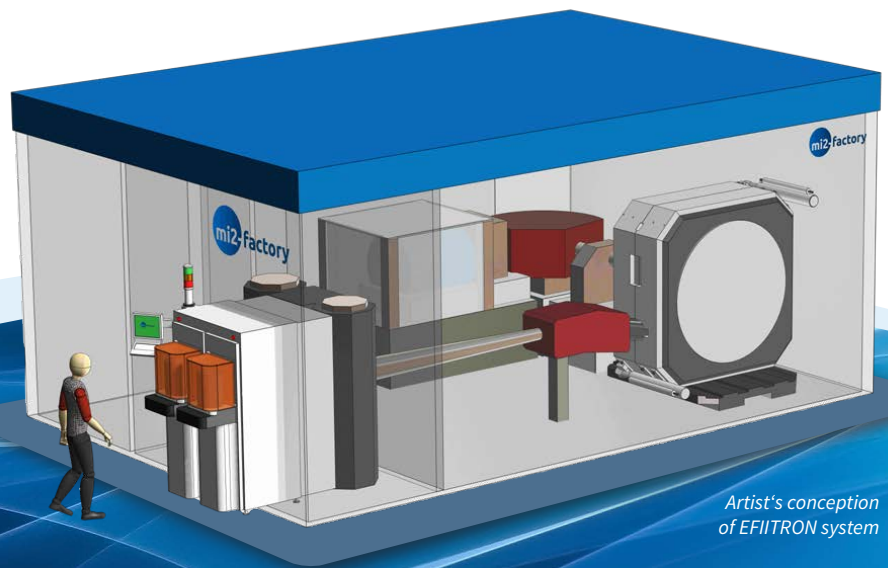
Conventional Ion Implantation
The conventional method only permits a Gaussian distribution with no deep drive-in.

Ion Distribution



Energy-Filtered Ion Implantation
Our technology facilitates both depth-distributed box & customized doping profiles.

We are developing a SiC-dedicated, novel ion implanter which features the Energy Filter Ion Implantation (EFII) with very high ion energies provided by a compact and robust Cyclotron accelerator: „EFIITRON“



Artist's conception of EFIITRON system

EFIITRON - FEATURES

Ion Species: **Nitrogen** (and/or Aluminium)

Box Profile Depth in SiC: **up to 12µm**

Doping Precision: **< 1%**

Accelerator: **Cyclotron**

Endstation: **Equipped with EFII**

Wafer Sizes: **150mm and 200mm**

SiC- Applications: **Drift Zone Doping, BPD Pinning**, (Superjunction)

- ✓ 2027 available for Purchase
- ✓ Customization available on Request

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