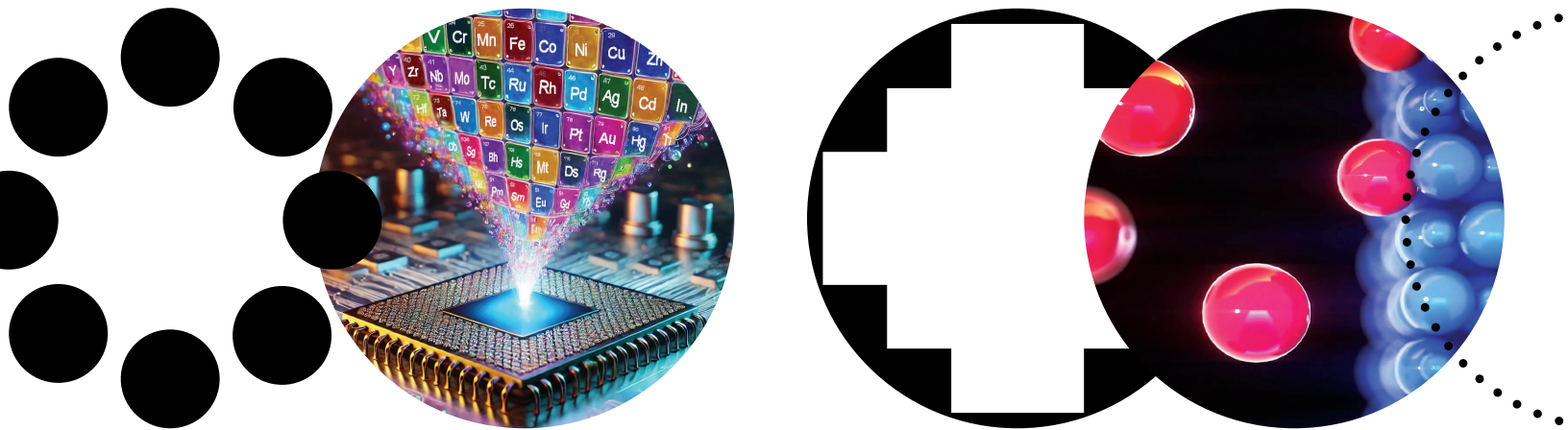


# ION IMPLANTATION & DISK REFURBISHMENT



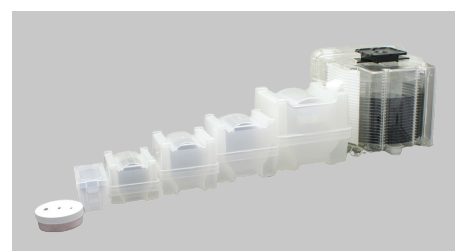
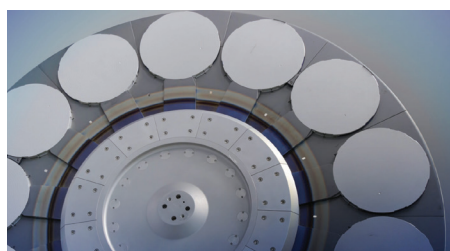
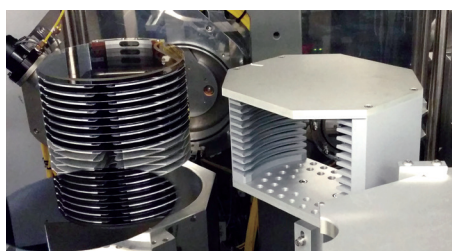
## Ion Implantation Foundry

Coherent is a full-service partner, with high quality and reliability. We can support any volume and any type of ion implant demand including:

- Production of full or partial substrate volumes on all common wafer sizes and even pieces.
- From cryogenic to high temperature applications.
- Process development & simulation services.

Resource limited and footprint-constrained customers rely on our expertise to:

- Take advantage of rapidly developing and expanding market demands.
- Leverage an extensive portfolio of ion implant capabilities including:
  - keV to MeV energies.
  - E9 to E17 ions/cm<sup>2</sup> doses.
  - 0 to 90 degree tilt angle.



### Unmatched experience

Delivering fastest industry-leading and most cost-effective solutions to drive customer success with:

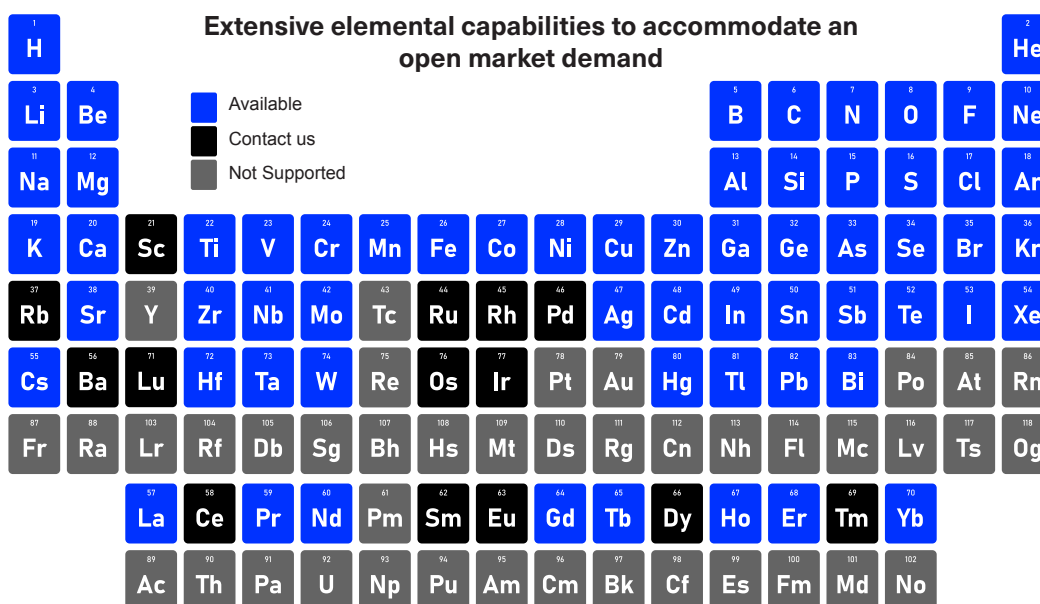
- Silicon and compound semiconductor substrates.
- Implantation simulation and process matching.
- Small wafer sizes including samples.

### Reliable partner

- To adapt to evolving markets.
- To recover quickly from unexpected internal system issues.
- To outsource partial or full ion implantation processes.
- To benefit from 48-hour turnaround support and ISO-9001-2015 facilities.

### Comprehensive substrate materials

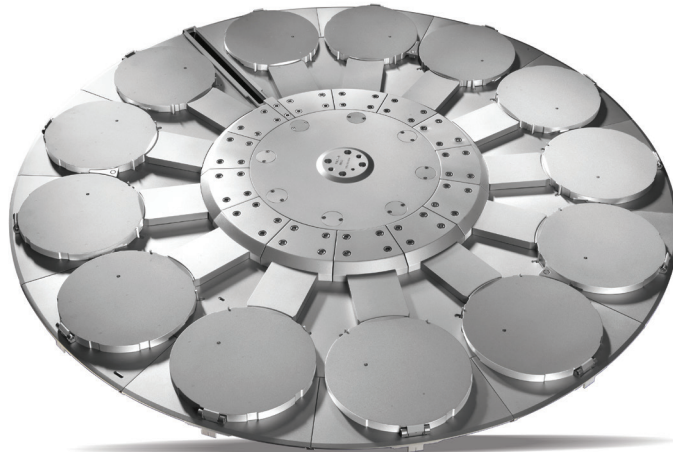
- Si, SOI, SiC, GaN, GaAs, InP, Ga<sub>2</sub>O<sub>3</sub>.
- InSb, ZnSe, Diamond, LiNbO<sub>3</sub>, LiTaO<sub>3</sub>.
- And many more...



## Disk Refurbishment Service

### Differentiated ion implant disk and heatsink insert refurbishment

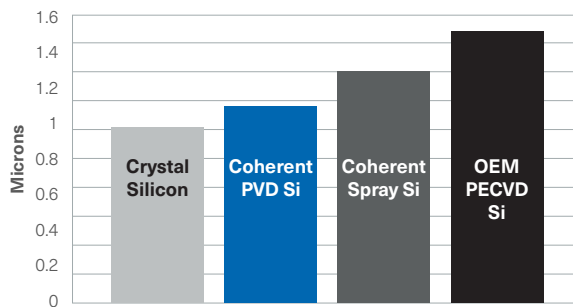
- Protects original capital investment by extending the life of implanters and lowering the cost of ownership.
- High quality, field-proven process with attention to detail.
- CIP upgrade options to resolve common problems or life-limiting design issues, some resulting in improved yield and/or device performance.
- Options to improve reliability and extend compatibility across a wide range of semiconductor substrates including thin-wafer and Taiko ring handling requirements.



### Extend the lifetime, lower the cost-of-ownership, and improve the performance of ion implant tools with Coherent disk refurbishment and coating services.

Coherent has extensive capabilities for the repair, refurbishment, and remanufacture of any ion implanter disk or heat sink. This includes all makes and models of batch-processing ion implanters produced since the late 1970s to the present.

Coherent Si coating: 36% wear rate decrease



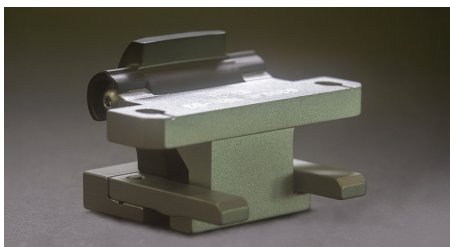
### It all adds up

Our industry-leading innovations enable a 2x lifetime improvement, a 99% decrease in wafer chipping, a 50% decrease in metals contamination, an 80% decrease in fence “wear-grooving” particle generation, and a 30% average cost-of-ownership savings.



### Ultra-low temperature elastomers

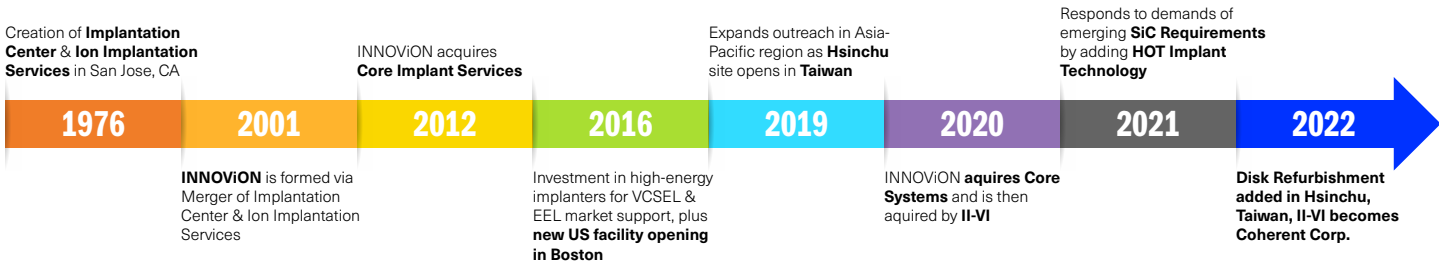
Coherent ultra-low-temperature elastomers increase wafer cooling performance, boost productivity, and improve pad-to-pad wafer temperature uniformity.



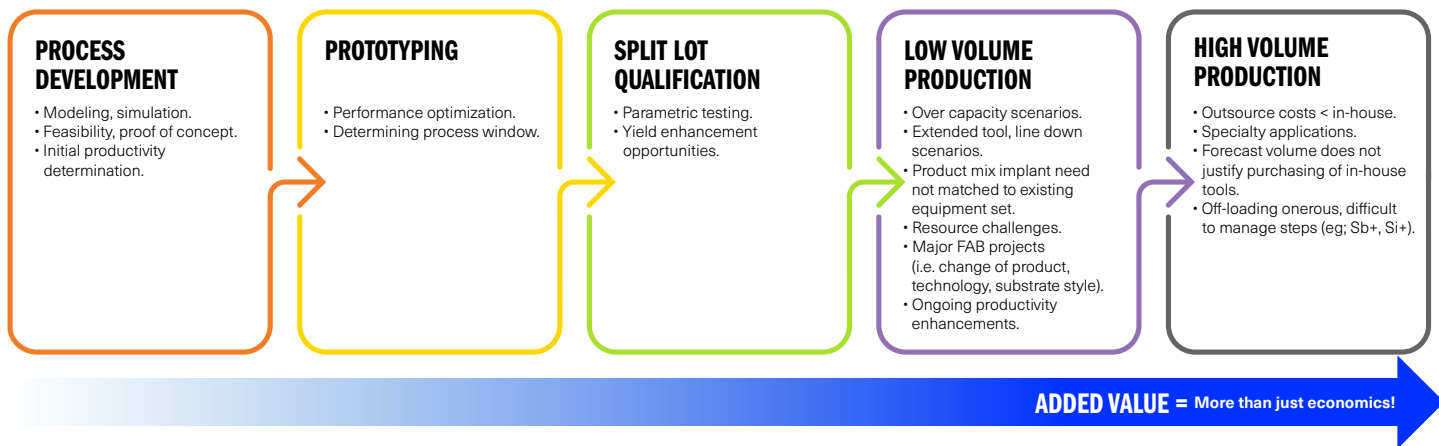
### Torlon fence assemblies

Utilize high wear resistance Torlon to dramatically improve fence and disk lifetime, substantially decrease wafer chipping, reduce fence wear-grooving, and lower metals contamination.

## Industry's largest and most established ion implantation and disk refurbishment services foundry

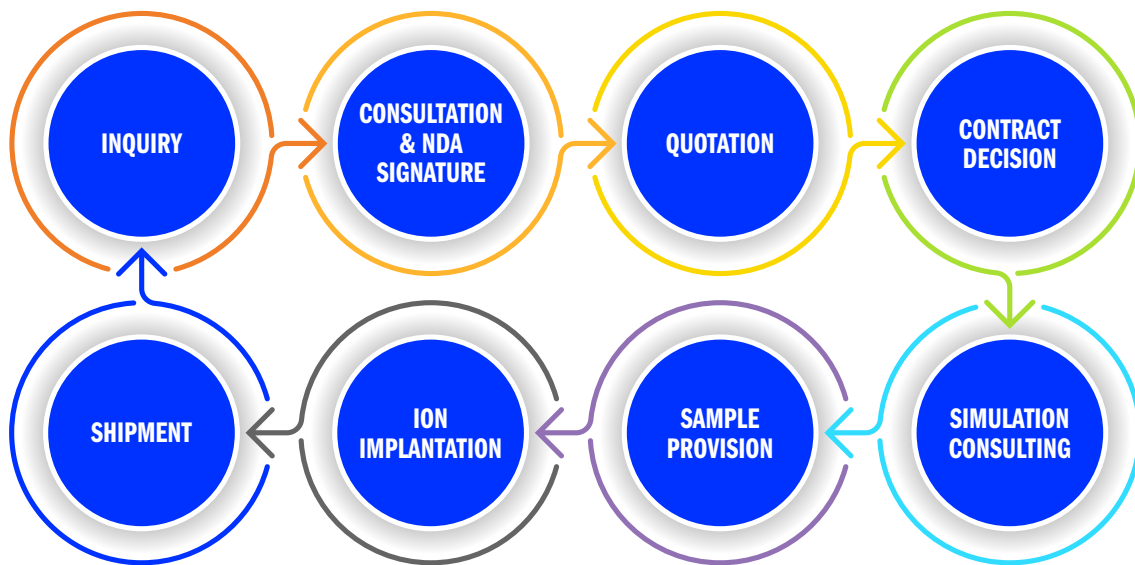


## Implant foundry services add value throughout the entire product life-cycle



## Working with us is easy

From inquiry to sample processing, we guide you through every step, ensuring a smooth and efficient experience.



Website