

STOP DEFECT PROPAGATION

Unlocking SiC Reliability with Proton Implantation

Suppressing defect propagation during device operation

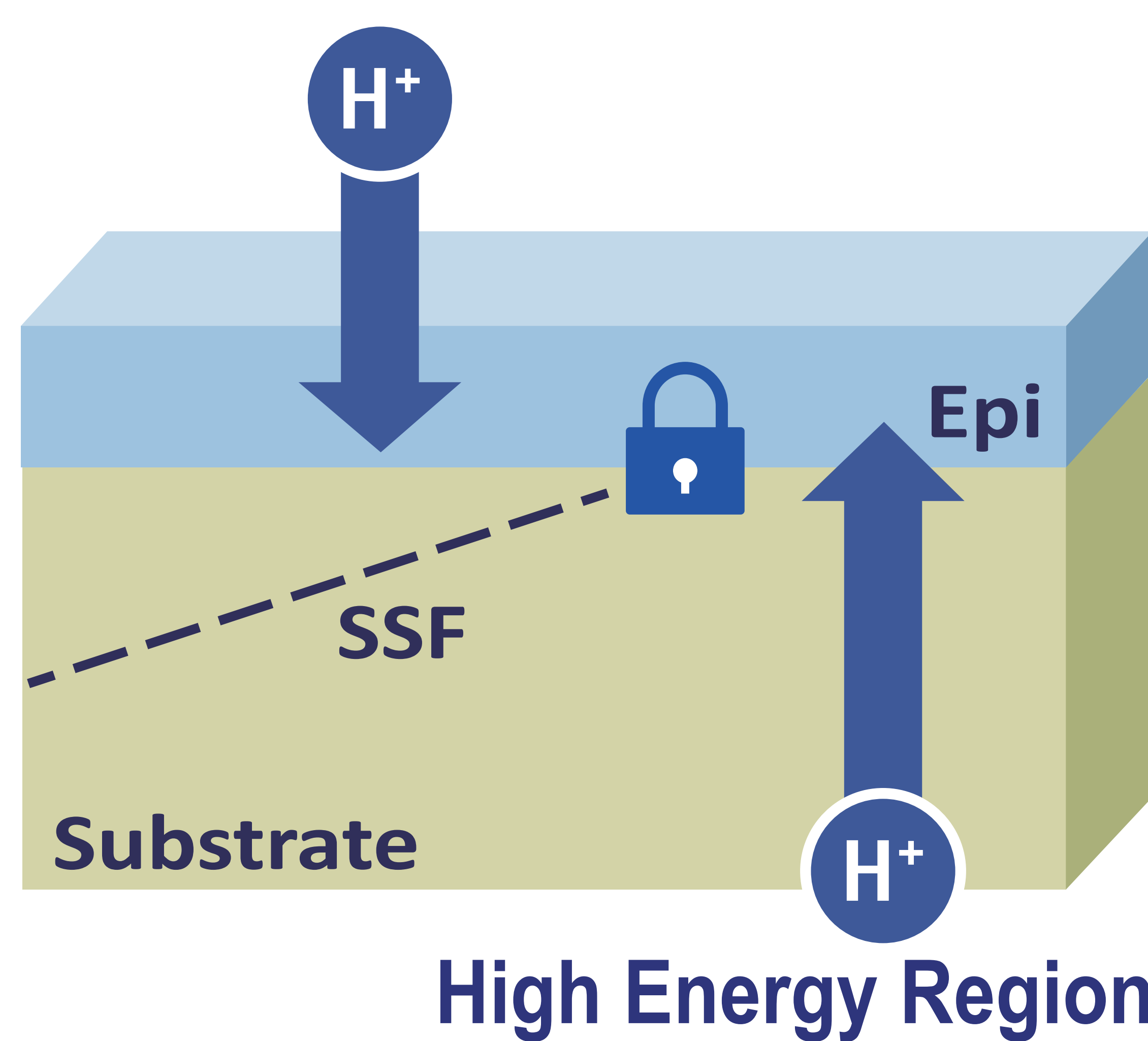
SF-KHII™

Stacking **F**ault **K**noocking-down
by **H**igh-energy **I**on **I**mpantation

- ✓ High-energy ion implantation (SF-KHII)
- ✓ Backside ion implantation capability
- ✓ Optimized for high-voltage SiC devices

Principle of Defect Suppression

Low Energy Region



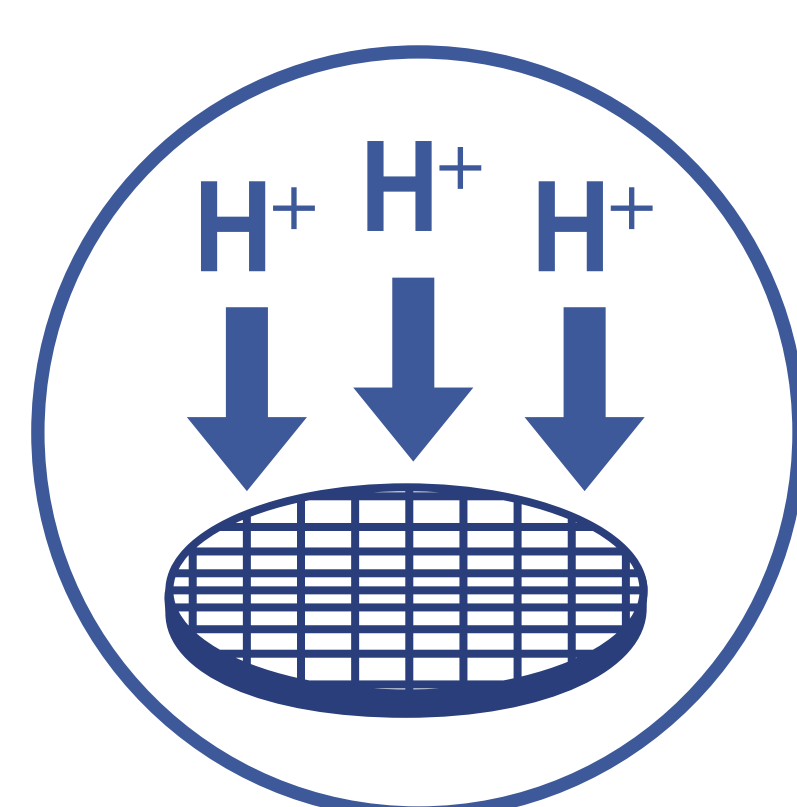
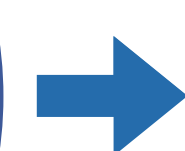
From Evaluation to Equipment Supply

SHI-ATEX

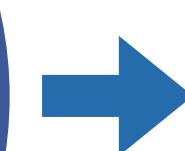
Proton Implantation Services



MEETING &
CONDITION
SELECTION



WAFER
RECEIVING &
IMPLANTATION



FAST
WAFER
RETURN

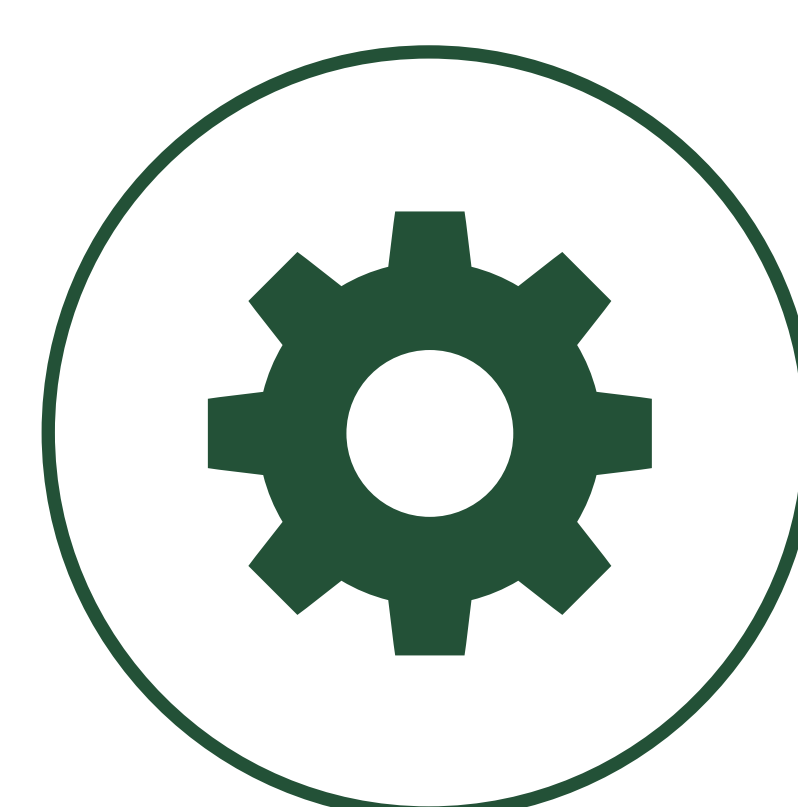
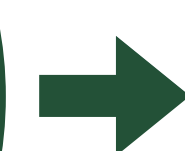
Quick and reliable process service
with fast wafer return.

Sumitomo (SHI) Material Solutions

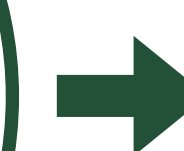
Proton Implantation Equipment



SPECIFICATION
REVIEW



START-UP



AFTER SALES
SERVICE

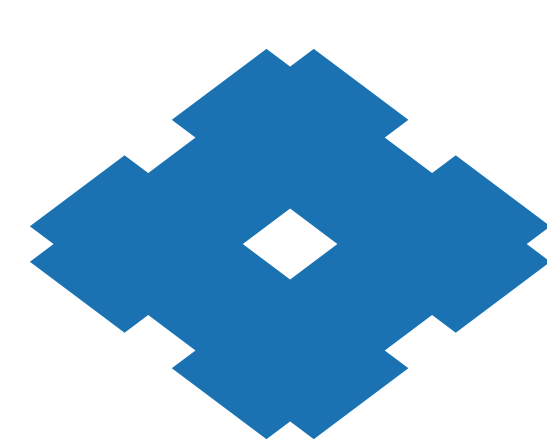
High-performance implanter systems
and comprehensive support.

Joint Development by

SHI-ATEX and Sumitomo (SHI) Material Solutions



SHI-ATEX Co.,Ltd



Sumitomo Heavy Industries
Material Solutions Co., Ltd.