

NMC508DTE DEEP SILICON TRENCH ETCH SYSTEM

System Overview

The NMC508DTE is a specialty etching system developed for silicon power devices which is predominantly used for deep trench etching of IGBT devices, MOSFET devices, and Super Junctions. NMC 508DTE equipment is aimed at a single-step smooth etching process to ensure the voltage performance of power devices.

| | |
|--------------------------------|----------|
| Substrate Size: | 200 mm |
| Applications compounds: | Silicon |
| Technology Markets: | Power IC |

Processes

- Deep silicon trench etch

Production Advantages

- Configured low frequency bias to achieve a single-step smooth silicon etching process up to 25:1.
- System achieves high etching selectivity and low plasma damage with specially designed lower electrode
- Magnetic shield ensures high plasma uniformity across the wafer
- Hardware & software control enable tight control of top/bottom profiles, sidewall angle, and high aspect ratios



NMC508DTE Deep Trench Etcher