Megasonic Wet Etching System

Wet Etching System can be used to etch wet anisotropic Si in bulk micromachining. Our system is designed simply and compactly. Especially the addition of the MEGAONIC holder can make the characteristics of Si etching be improved remarkably. Our system is adequate for the R&D and prototype production.

SPECIFICATIONS

- Wafer size: 4, 5, 6 inch
- Etching Solution: KOH, TMAH
- Megasonic Irradiation
  - Power Range: ~ 30 W/cm²
- Bath
  - Etch Bath: PTFE
  - Circulation Bath: PTFE
- Solution Temperature
  - Max. Temp: 100°C
  - Temp Uniformity: ± 1°C
- Etching Characteristics
  - Etch Rate: ~ 1 μm/min
  - Etch Uniformity: ± 2%
  - Average Surface Roughness: less than 70 nm (minimum: 2 nm)
- Solution Circulation: Teflon Circulation Pump
- Frame: 850(W)mm × 750(D)mm × 800(H)mm

APPLICATIONS

- Si Anisotropic Wet Etch
- PSL, Electroplating
- V-Groove, U-Groove, Cavity formation
- Membrane, microchannel formation