

Materials TEM sampling

금속/세라믹 TEM 시편 준비

PIPS (Precision Ion Polishing System)



Specifications

- Ion guns : Two penning ion guns
- Milling angle : +10° to -10°, each gun independently adjustable
- Ion beam energy : 100 eV to 6.0 keV
- Beam diameter : 350 μm FWHM at 5 keV - 800 μm FWHM at 5 keV for broad beam guns
- Ion current density : 10 mA/cm² Peak
- Beam modulation : Single or double

sector for exceptional cross-sectioning liquid nitrogen cooling stage ion milling monitoring system

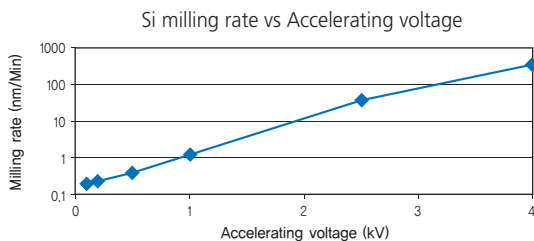
Location L5144 Tel.02-958-6972

Tripod Polisher



Precision metallographic angle lapping and thinning
 Sample preparation for : Light microscopy, scanning electron microscopy, atomic force microscopy, mechanical magnification of finite structural features, wedge sample preparation for TEM, mechanical slice sample preparation for focused ion beam thinning

Low energy ion milling



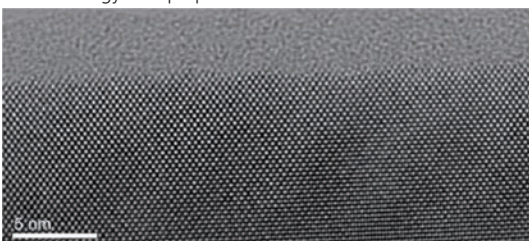
Beam energy (keV)	4.0	2.5	1.0	0.5	0.2	0.1
Milling rate (nm/min)	283	38.4	1.25	0.42	0.25	0.21

Low energy milling for cleaning up amorphous damage created by high energy milling

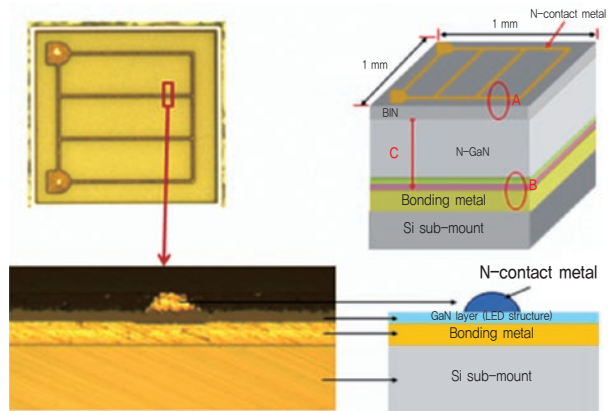
- Standard PIPS preparation



- Low energy PIPS preparation



Package chip, specific face sampling



Ion milling with LN₂ cooling

