

ELECTRON BEAM DEPOSITION

MANUFACTURER : Kurt J. Lesker

MODEL : AXXIS

Samples

- Samples size: maximum 152 mm (6 in.)
- Temperature : ambient
- Wafer uniformity : 5%

Characteristics

- Source 1: Electron gun with 4 automatically selected crucibles
- Source 2: Sputtering with a 75 mm target and an AC source
- Source 3: Ion source for pre-cleaning or enhancing evaporation
- Rotation with angle variation from 0 to 180 degrees
- In-situ control of deposited films thickness
- Pressure: about 10^{-6} Torr
- Sample holder cooled (~ 2 °C, no rotation)
- Non-normal incidence deposition; the sample holder can be oriented upward for sputtering, sideways for the ion source and downward for evaporation

ROUTINE PROCESS

Deposition

- Available materials : Au, Al, Ti, Cu, Cr, Pt, Pd, SiO₂, ...
- Thickness: from 10 nm to 1 μ m (depending on film stress)
- Special characteristics : Noble metals are billed by the nn