

**High Precision Wafer Flatness
Measurement Machine
Nanometro 300TT**

黒田精工株式会社

nanometro *TT* series

KURODA introduces following in-line inspection system

For 200mm wafer 200TT

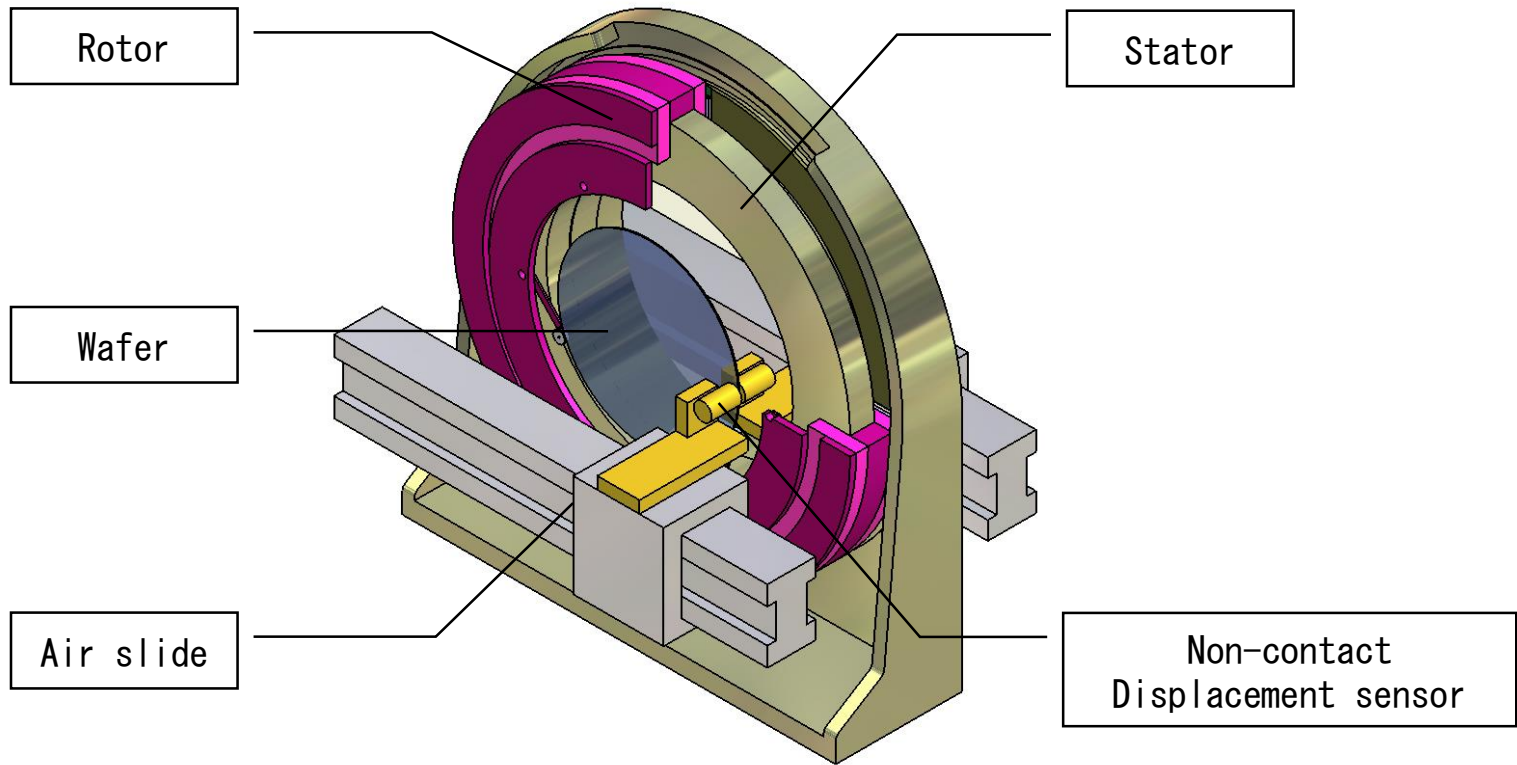
For 300mm wafer 300TT



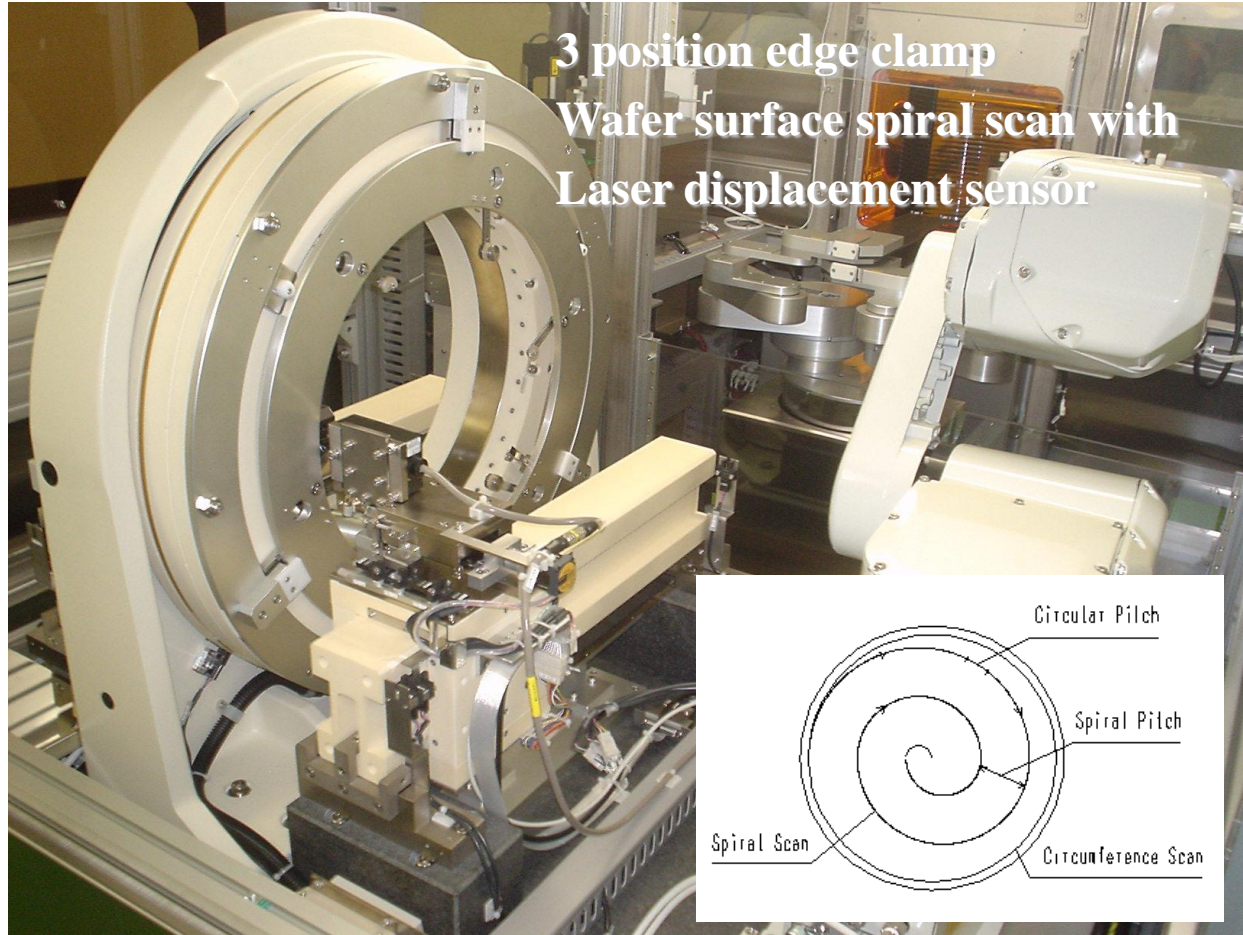
Characteristics of 300 TT

- High movement precision
- Edge exclusion Min. 1mm
- Conformable to on-line requirement
- FOUP. FOSB
- Various measurement modes
 - I Flatness, SORI measurement
 - II Radial measurement
 - III Edge area measurement

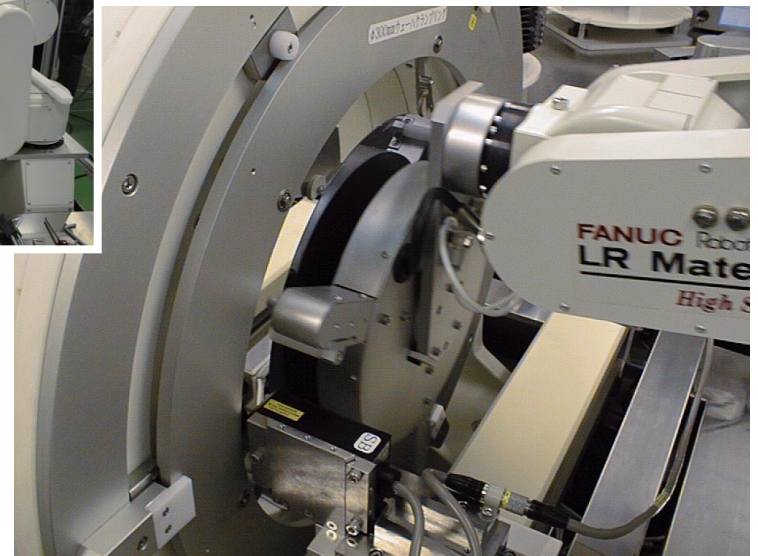
Construction of 300TT



Construction of 300TT

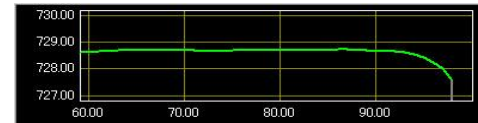
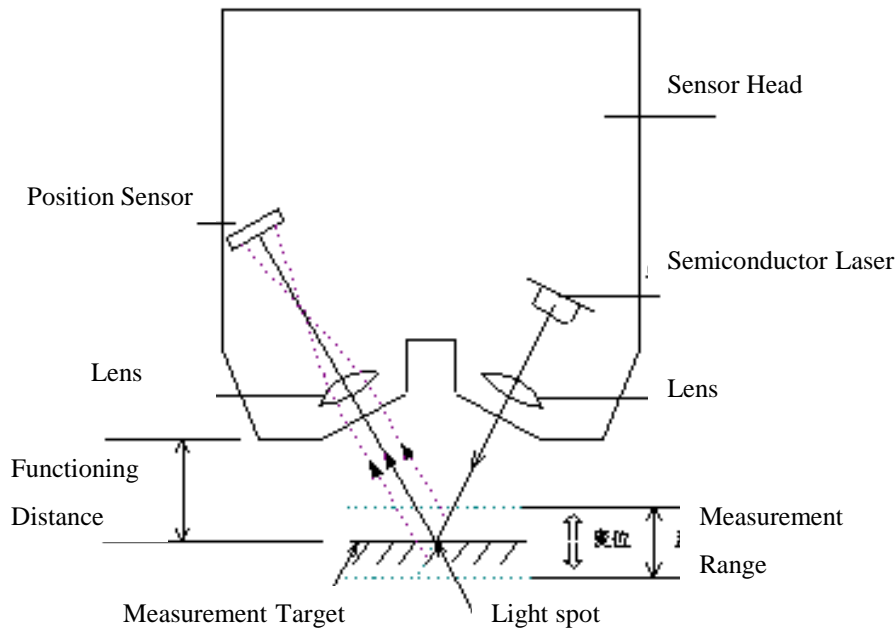


Stable Transfer System

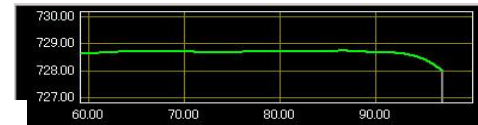
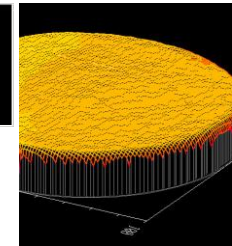


Edge Exclusion Min. 1mm

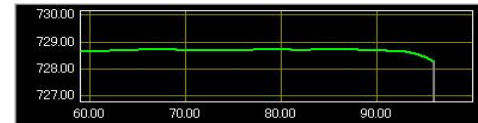
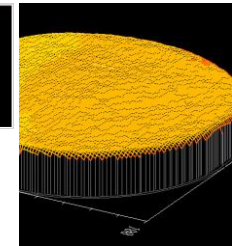
Small spot diameter for Laser displacement sensor



E. E. = 1 mm

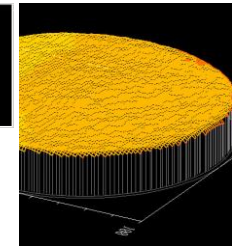


E. E. = 2mm



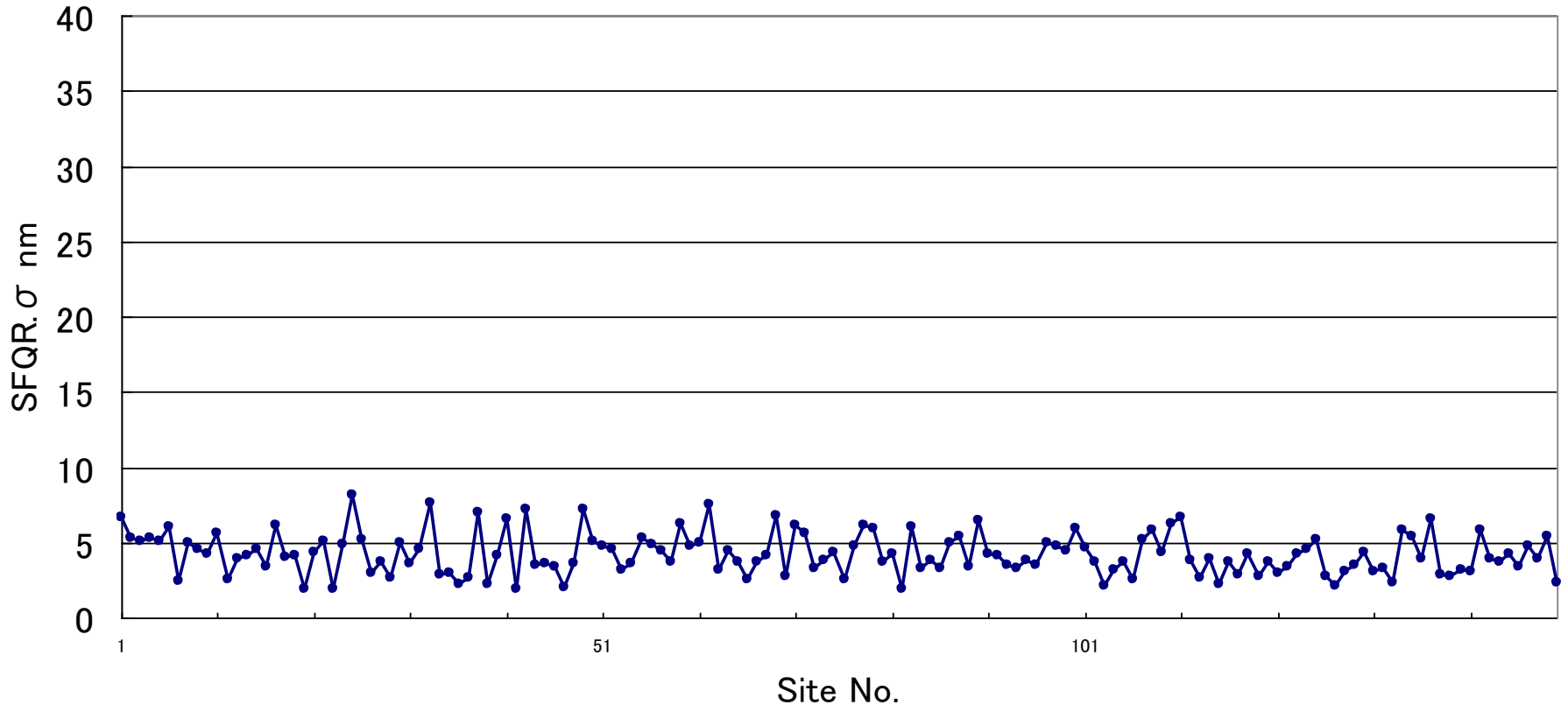
E. E. = 3mm

(E. E. = Edge exclusion)

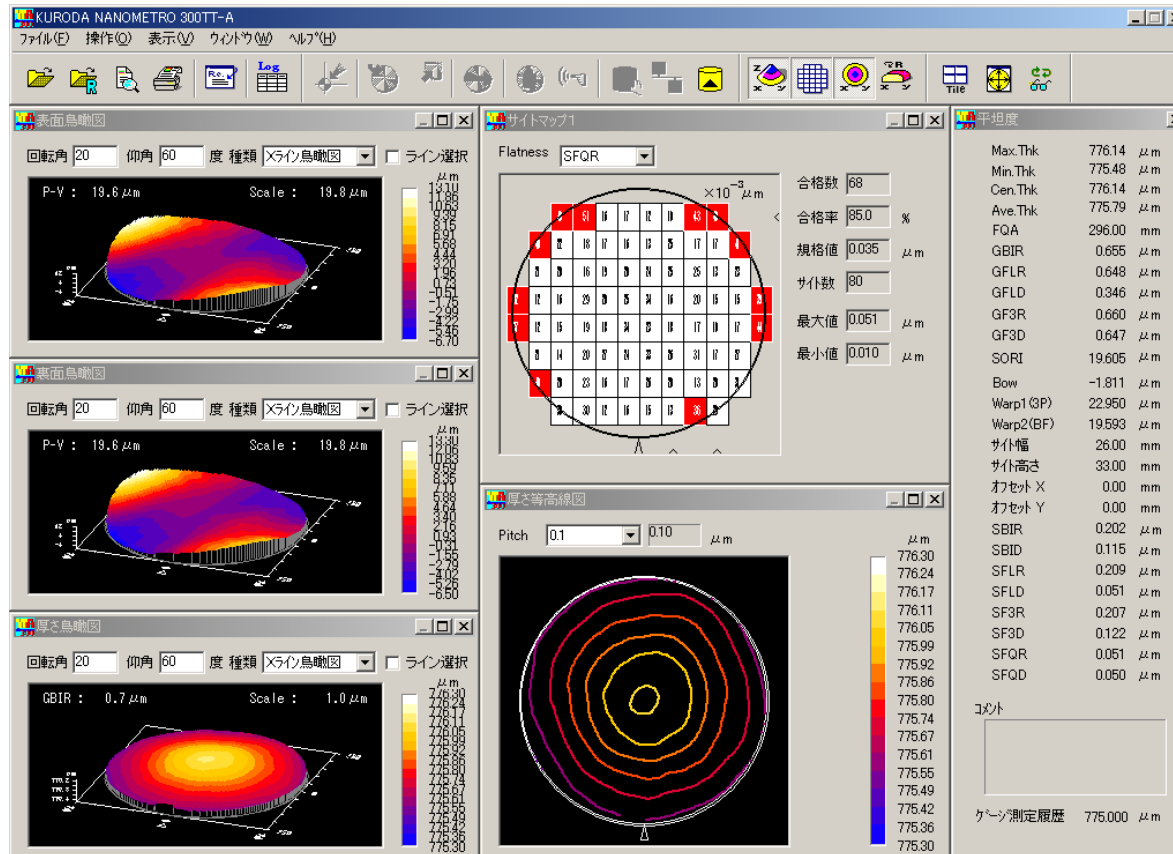


Repeatability 15nm(σ)

Repeatability, 10Times, KKS300Wafer
SFQR, SiteSize26x8, EE3



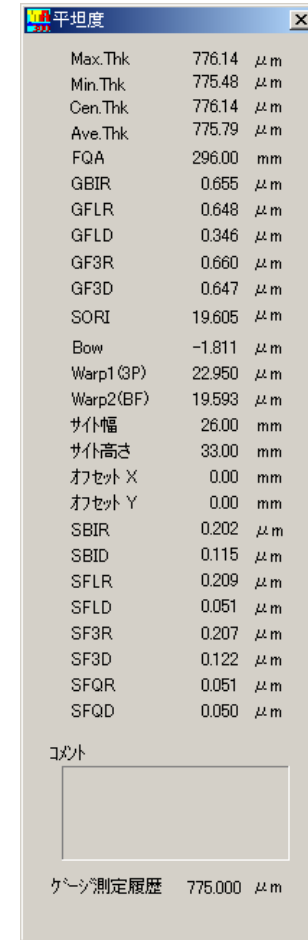
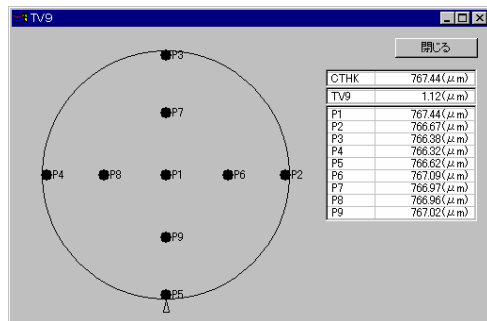
Example of Flatness Measurement



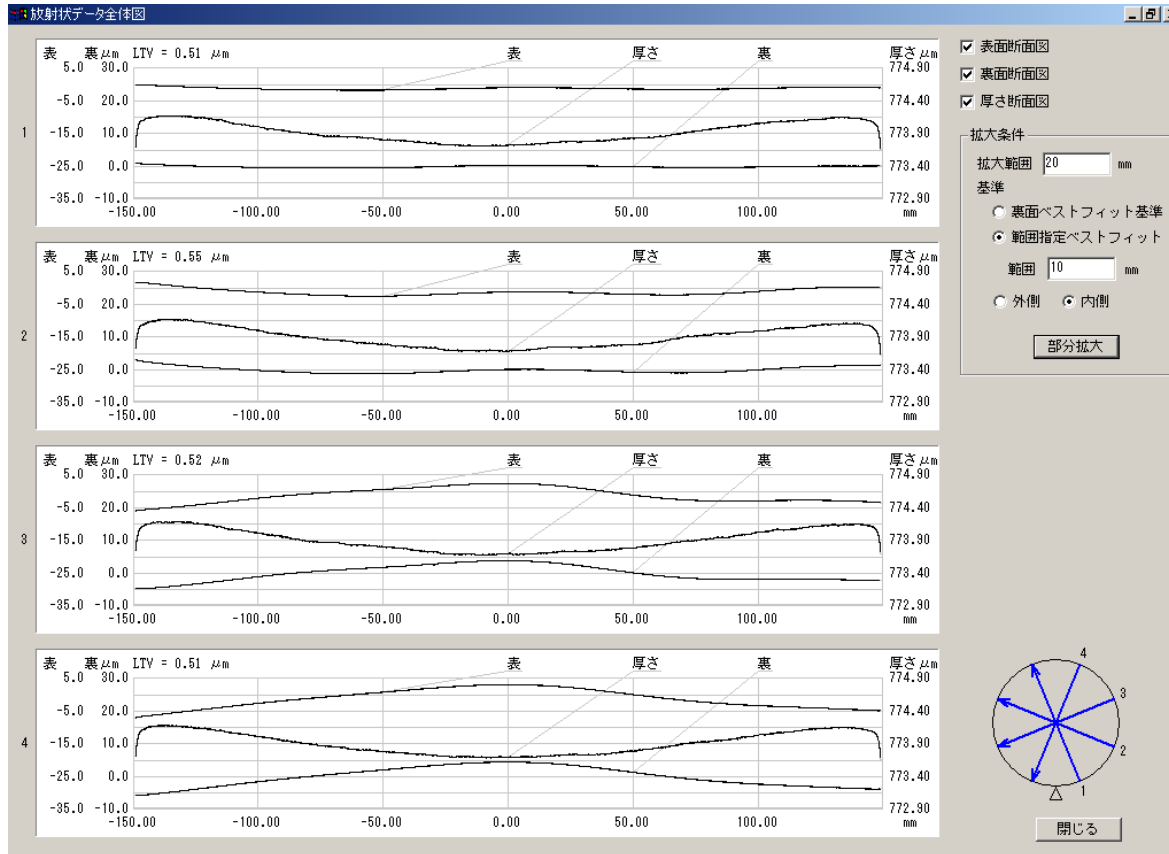
Flatness & Shape Measurement (Flatness & Shape)

Measurement parameter conforms
to SEMI Standard

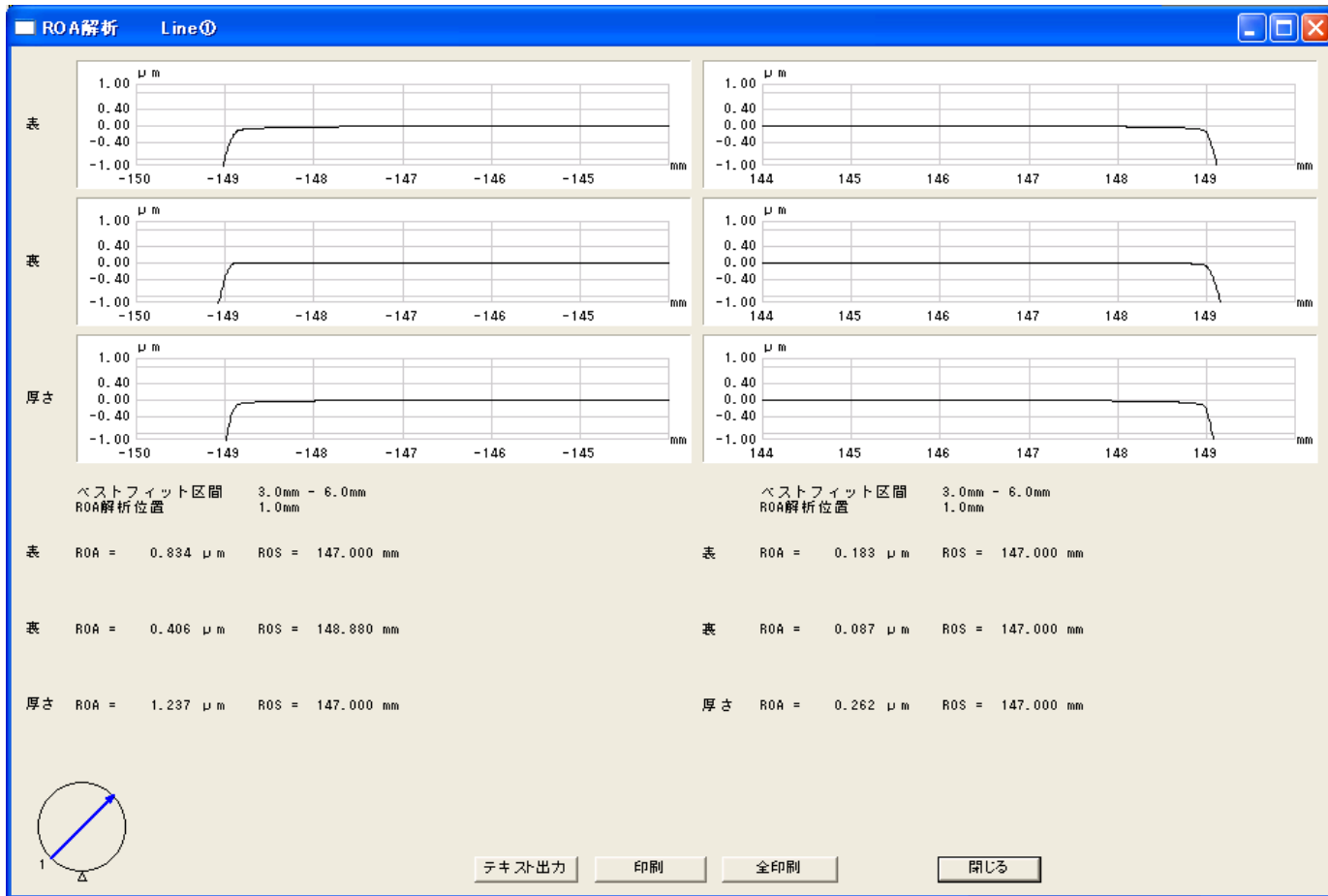
- Max.Thk, Min.Thk, Cen.Thk, Ave.Thk,
- GBIR(TTV), GFLR(TIR), GFLD(FPD), GF3R, GF3D,
- SORI, Bow, Warp-3P, Warp-BF,
- SBIR(LTV), SBID(SFPD), SFLR, SF3R, SF3D, SFQR(STIR), SFQD



Example of Radial Measurement

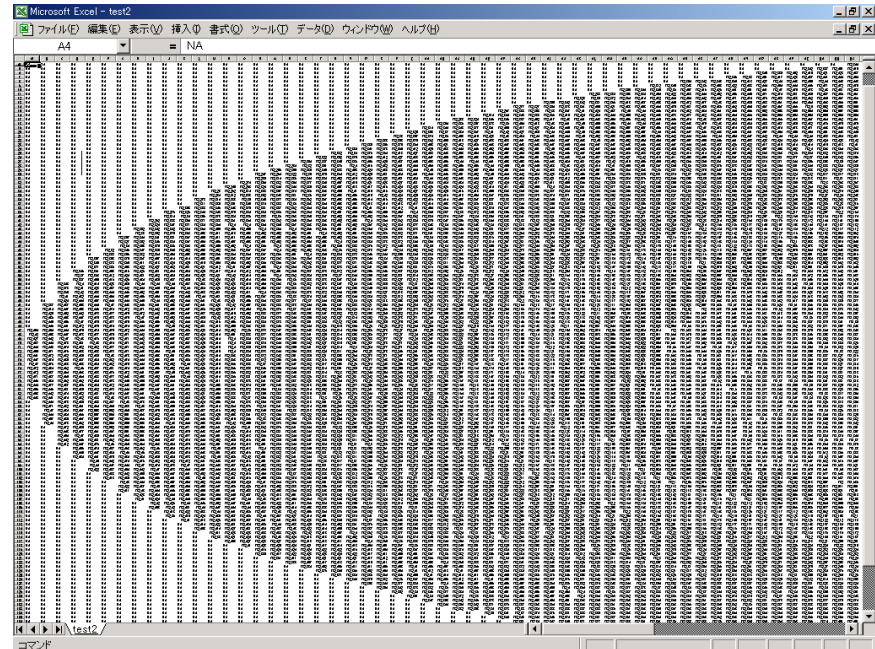


Example of Edge Roll-off

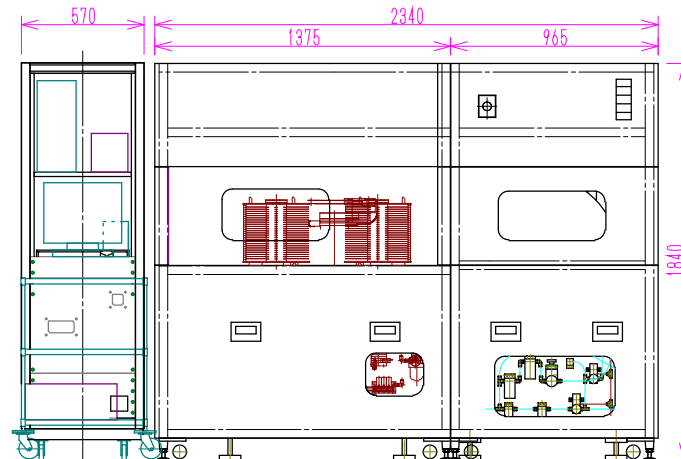
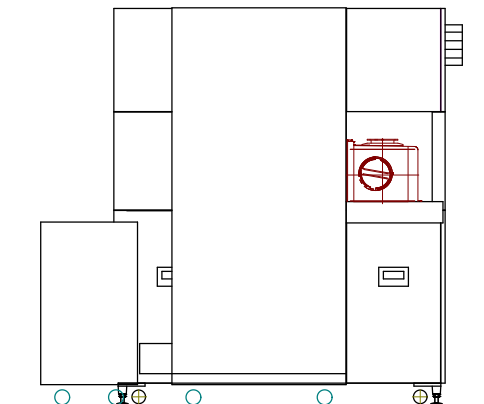
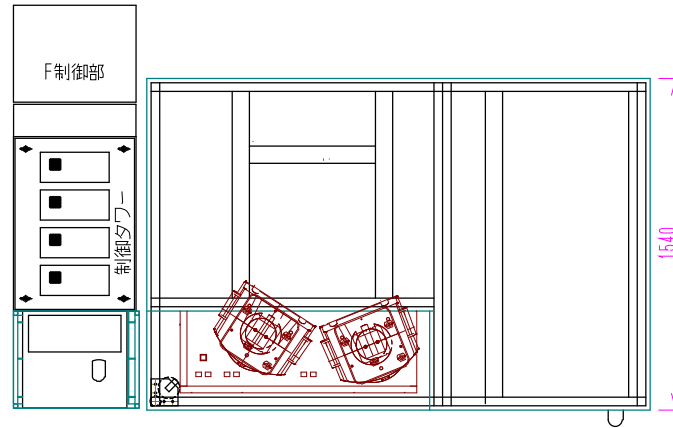


CSV out-put of lattice data

Raw thickness data can be out-put as CSV format



Drawing for Open cassette Spec.



Drawing for FOUP spec.

