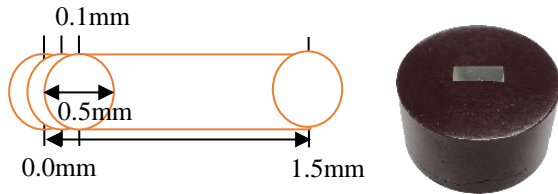


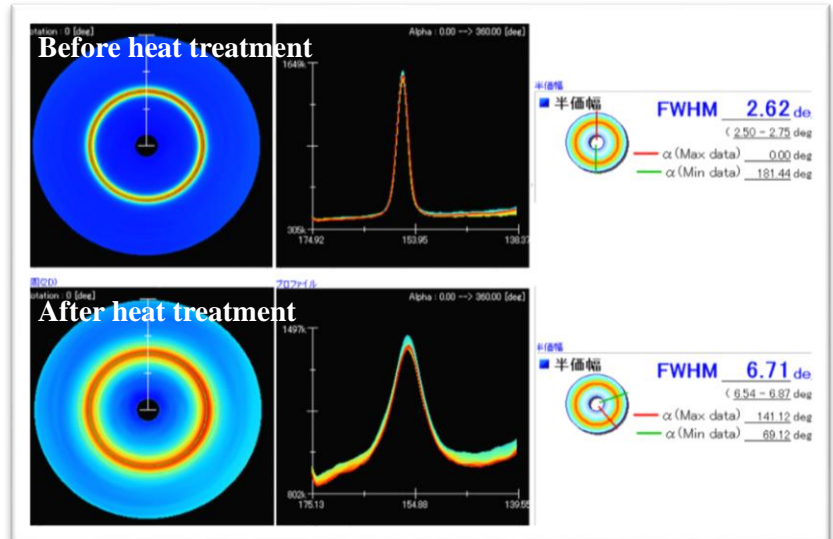
# Hardened-layer thickness measurement using FWHM by XRD

## X-ray spot size and measurement interval



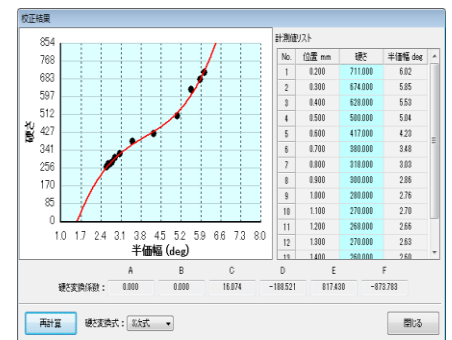
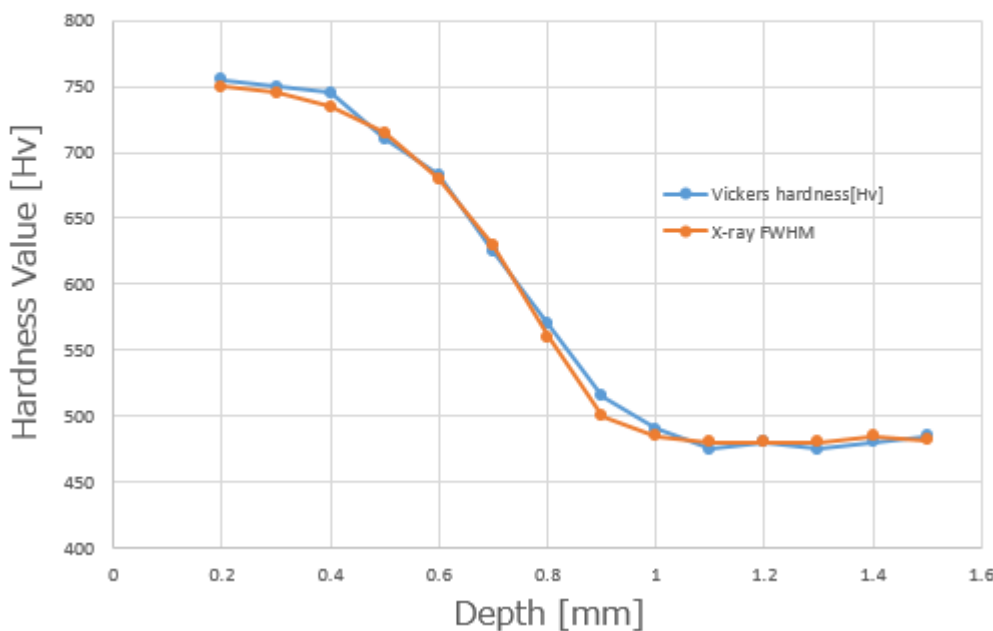
- ◆ Collimator size : 0.2mm
- ◆ Measurement point's positioning by microscope
- ◆ Automatic hardness curve output by controlling a stage and software
- ◆ OK/NG judgement by calibration between Vickers hardness and FWHM

## FWHM difference before and after heat treatment

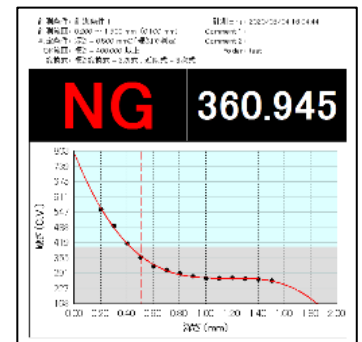


## Hardened-layer thickness curve (FWHM vs Vickers hardness value)

### Thickness of surface-hardened layers measurement



### Calibration



### OK/NG judgement