

## New Si-CheckIR for surface analysis:

Si-CheckIR is ATR accessory of FTIR for surface analysis of coating, thin film and organic pollution on silicon wafer, film, crystal and glass.

Si-CheckIR can analyze the surface of such as a silicon wafer or glass by the multiple reflection ATR measurement. This accessory has Germanium crystal which has high refractive index. This



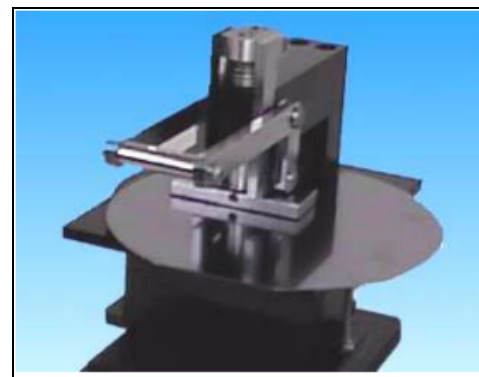
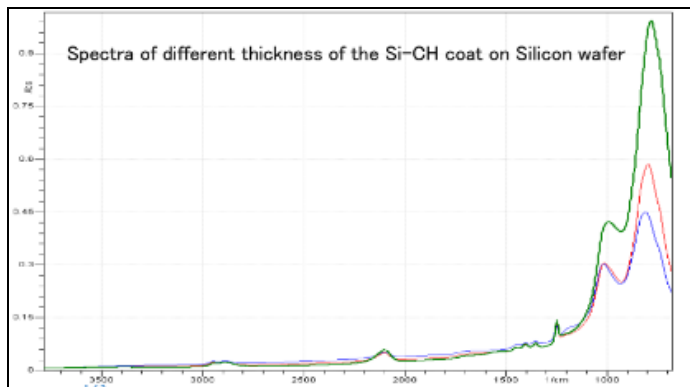
makes it possible to measure the surface of samples.

Two types of sample press heads are available including this accessory for various size of sample. Large sample press head is use for measurement large size sample size such as 6 inch wafer. The small sample press head for about 10 to 20mm circle and square sample\*1.

ATR method is an effective technique that makes easy to measure the hydrogen termination and oxidation state of silicon surface after washing by HF under ordinary pressure. One of the key things is

to measure the surface using ATR by making contact between sample and ATR crystal. Especially measuring the surface of silicon such as hard material is not easy to contact the sample and multi reflection ATR crystal.

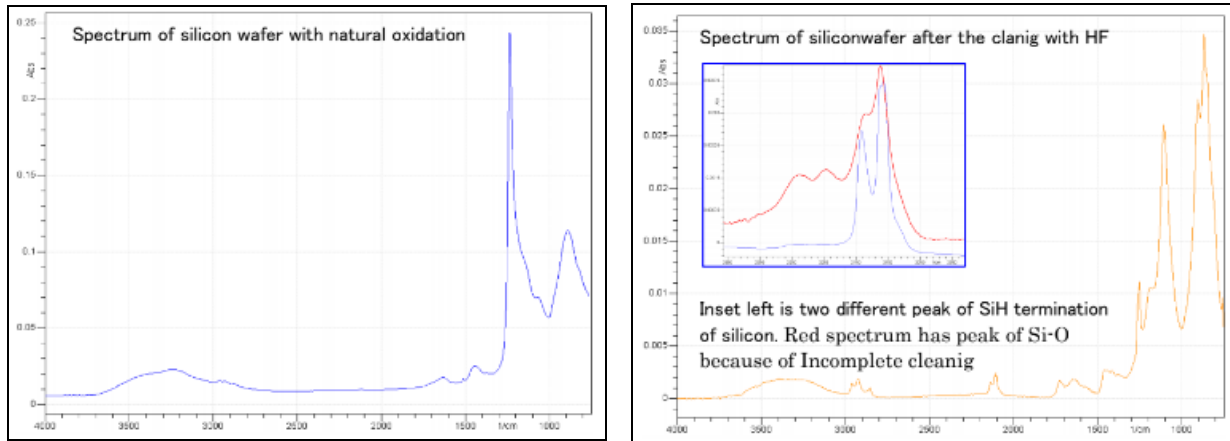
Result of conventional multi reflection ATR accessory is poorly-reproducible for quantitative measurement. Si-CheckIR easily produces a good result by unique pressurization press



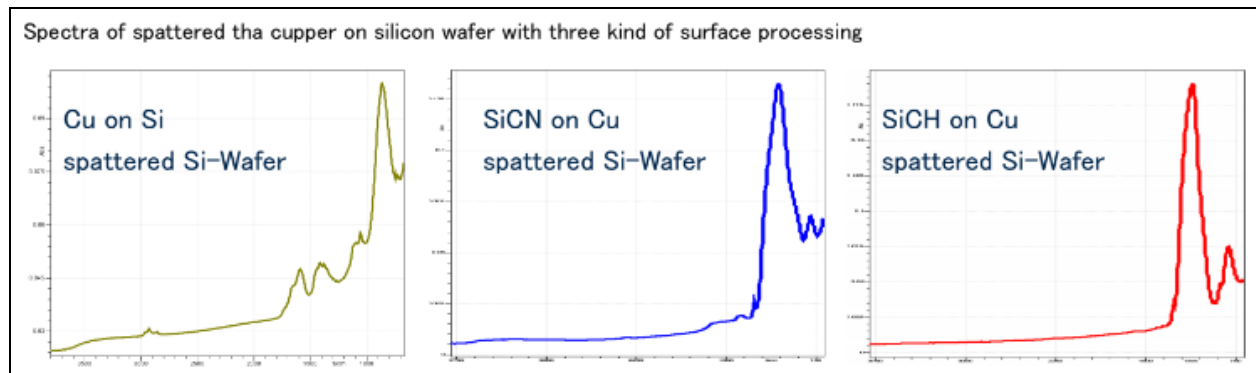
6inch wafer set on Si-CheckIR

mechanism and special crystal which developed equipment for this measurement. Therefore it gets result of high reproducibility for surface measurement of a hard material such as silicon wafer. In addition, multi reflection ATR is enhance sensitivity and can get the high peak intensity.

Si-CheckIR used special germanium crystal and uniquely optical design for high thru-put energy



to get good signal to noise of spectrum. The 12 inch Si-CheckIR can measure the large sample such as 12 inch silicon wafer. It is very easy to measure the large sample without cutting the sample. Si-CheckIR and 12 inch Si-CheckIR can install most type of FT-IR.



## Features:

- It consist of Unique Pressurization press to provide the uniform and constant pressure over the complete area of sample for high reproducible measurement.
- Large sample can be kept with an ease on the sample stage.
- Easy to clean the crystal surface by function of swing of pressure device.
- Two types of pressure heads enables it to measure the large sample to small sample.



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### ***Specifications***

ATR crystal: Ge  
Angle of incidence: 60deg  
Number of bounce: 7

\*1: \*When measure the smaller than 50mm x 20mm, there is a decrease of number of bounce to small sample.

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### **Part Number**

STJ-0157

STJ-0157-01

STJ-0157-12

### **Description**

Si-CheckIR

Ge crystal for Si-CheckIR

12inch Si-CheckIR

