

Sheet thickness monitor of the Infrared transmission absorption type

Features

1 Measures the thickness of translucent sheets, low-reflection films, silicon, etc., which was difficult with the optical interferometry^{*1}

2 Compact probe^{*2}

By adopting a small 30 mm reflective probe, it can be installed in a small space in equipment or production lines. In addition, since the probe is connected to the main body only with an optical fiber cable, it has excellent environmental resistance.

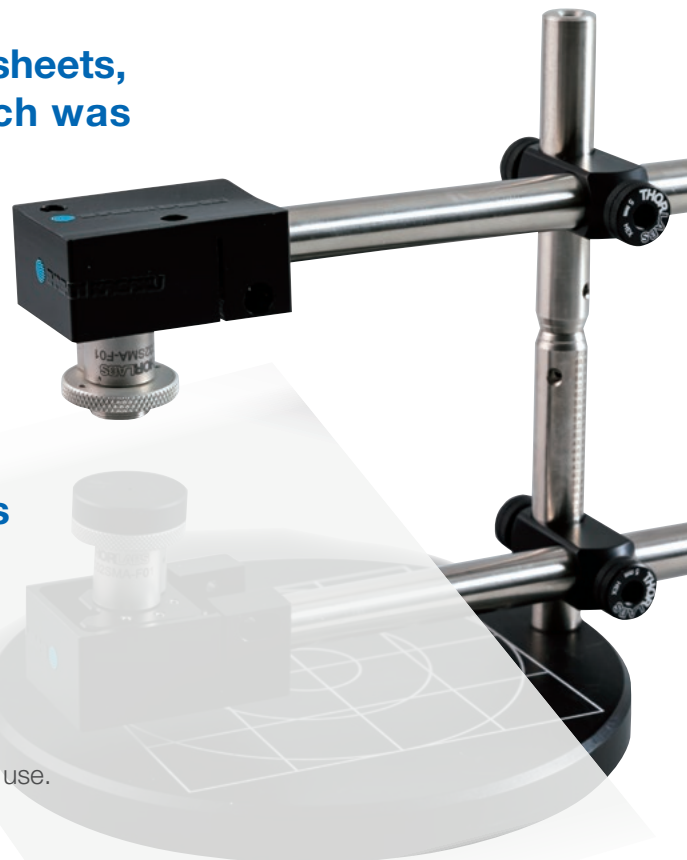
3 High speed measurement Simultaneous sampling of near-infrared wavelengths from 950 nm to 1600 nm at 100 points or more

It enables to make rapid sampling with min 1mm sec.
It enables to measure on production line at realtime basis.
It is superior for durability and consistency due to non impact filter use.

4 Thickness measurement reproducibility 0.1% or less (3 σ)^{*3}

5 Measurement algorithms

Algorithm	Calibration sample	Number of parameters
Lambert-Beer law	1	Thickness
Least squares regression method	2 or more	Multiple parameters (Thickness, Density, Composite ratio, etc)



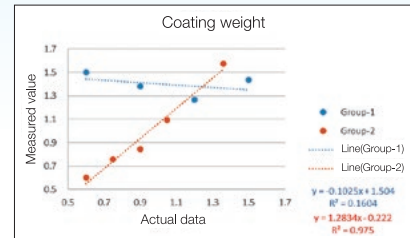
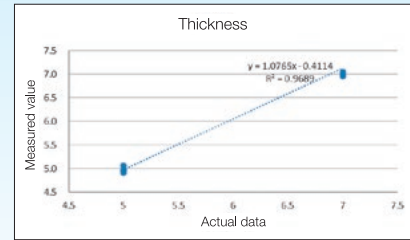
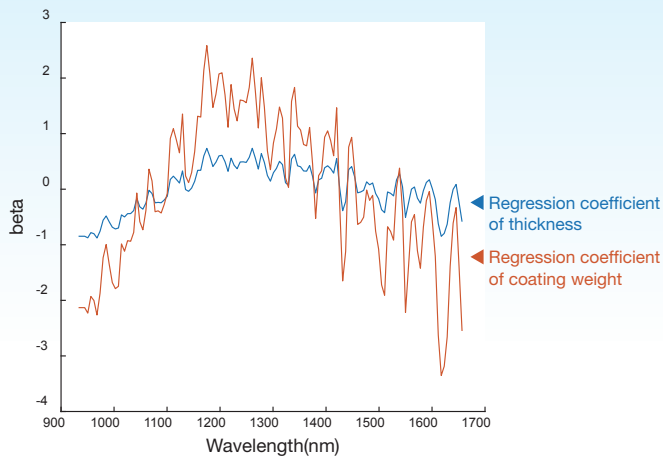
*1 It correspond to ceramic coating like inorganic material or plastic like organic material.

*2 We recommend to take 1mm to 80mm distance from probe to target sample. Measurement range is about 3mm ϕ .(It is possible to connect with 1mm ϕ probe optionally)
It is possible to take more than 100mm distance if changing probe kinds.

*3 Material shall be used under below condition.
Wavelength: 950-1600nm Transmittance: 5-95%

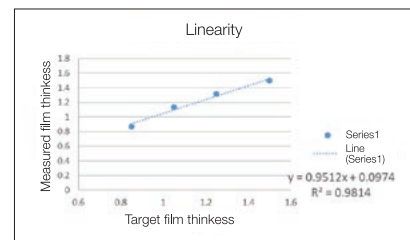
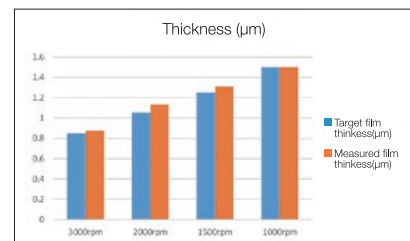
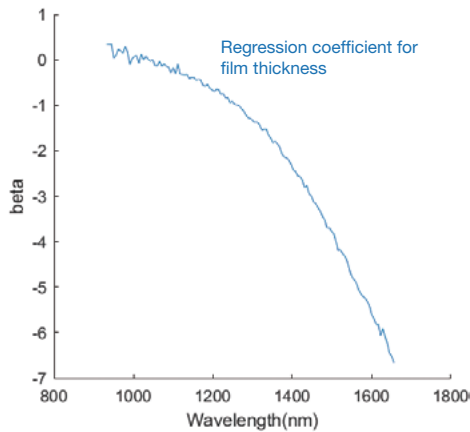
Measurement example 1(Lithium ion battery separator)

Simultaneous measurement of thickness and coating weight is possible

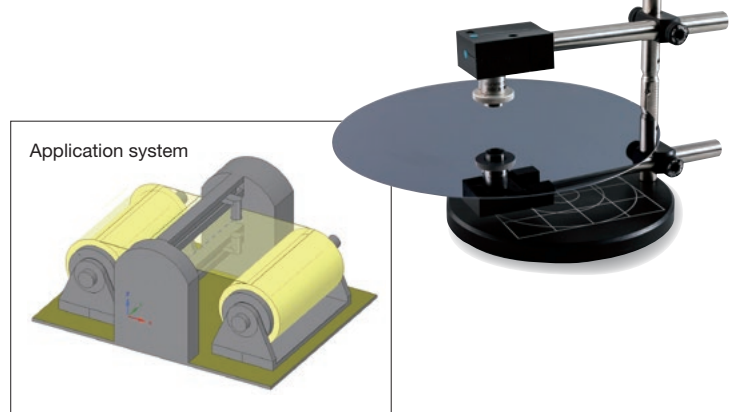
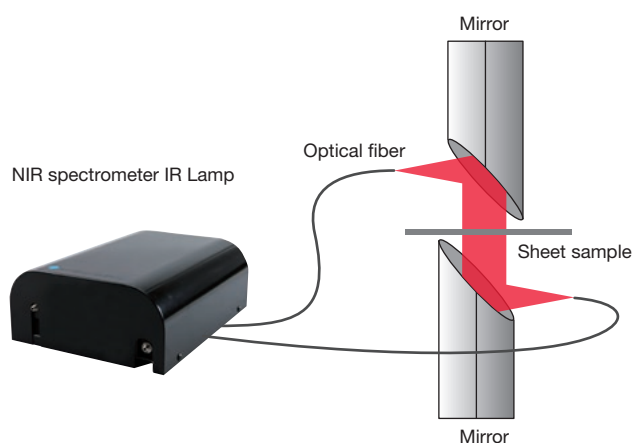


Measurement example 1 (Black resist film thickness)

Black resist film thickness measurement, which was difficult with reflection spectroscopy



Configuration



(Manufacturer)

Shashin Kagaku Co., Ltd.
Product Company



7-2-10, Nojihigashi, Kusatsu City, Shiga, 525-0058, Japan
TEL. +81-77-566-1208 FAX. +81-77-565-3506

Kindly browse to our website for the latest information,
inquiry and brochure about Film thickness monitor

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