

Polarized Reflection Measurement

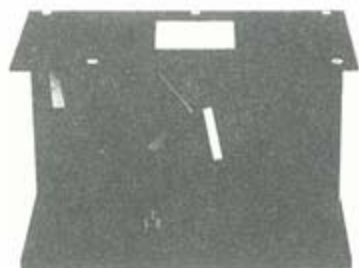
We would like to introduce the features and specs for our new polarized reflection measurement instruments RAS-300(built-in polarizing mirror model)/H and RAS-310/H(wire grid polarizer model). These instruments are intended for measuring general thin organic films on metal. We designed the RAS-300/H and RAS-310/H in an attempt to improve operability by fixing their incidence angle to 75 degree and allowing measurement simply by placing a sample horizontally on the instrument.

The RAS-300/H was designed with a polarizing mirror for the reflecting mirror which is part of the optical systems so that it can measure light parallel to the plane of incidence. With this model, you are not able to detach or rotate the polarizer. The wire grid polarizer model, the RAS-310H however, allows you to do both.

Figures 1 and 2 show examples of measurements made with the model with the built-in polarizing mirror. Figure 1 shows the measurement of an approximately 300Å layer of SiO₂ on a silicon substrate. Figure 2 shows the measurement of an approximately 30Å coating of fluoride resin lubricant on the surface of a hard disc. The hard disc can be measured simply by placing the entire 5-inch platter on this attachment.

Features

1. 75 degrees incidence angle (fixed)
2. Samples placed horizontally
3. Two types of sample masks (10 x 10 mm and 20 x 20 mm)
4. Two types depending on the type of polarize



RAS-300/H

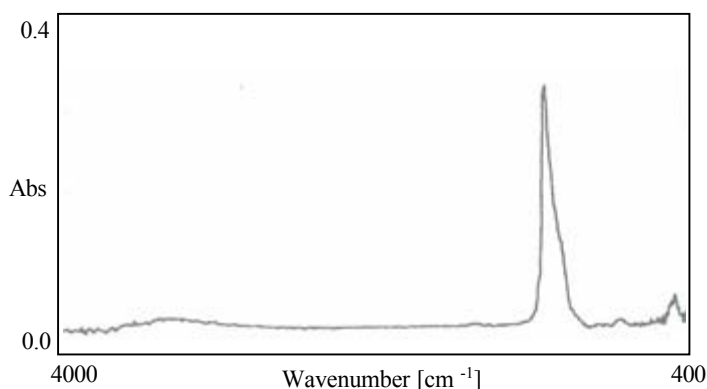


Fig.1 RAS-300/H Measuring SiO₂ (Approx. 300Å)

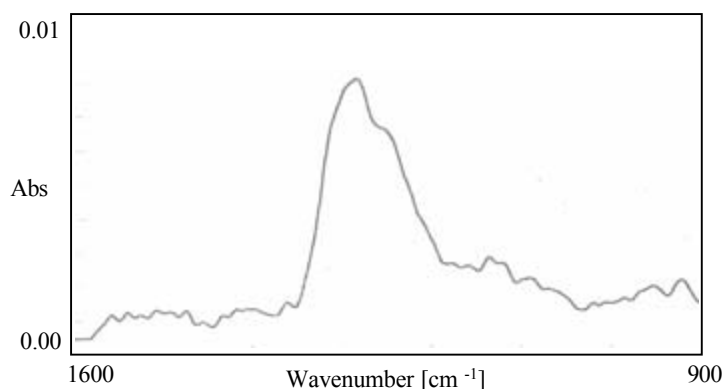


Fig.2 Measuring Lubricant on Hard Disk Surface