



ANNOUNCEMENT

Rudolph has recently introduced additional models of the AutoEL IV Ellipsometer. In addition to the standard wavelengths of 405nm, 546nm and 633nm, we have requests for AutoEL's with special wavelengths. This has prompted us to introduce additional models with other standard wavelengths. The model lineup is as follows:

<u>Model</u>	<u>Wavelengths</u>
AutoEL IV	405nm, 546nm and 633nm
AutoEL IV-Hg	365nm, 405nm and 546nm
AutoEL IV-NIR-1	633nm, 790nm and 830nm
AutoEL IV-NIR-2	790nm, 830nm and 850nm
AutoEL IV-NIR-3	405nm, 633nm and 830nm

The advantages of these AutoEL's are outlined below:

AutoEL IV - This model provides general purpose wavelengths where 633nm is for general purpose use. The 405nm wavelength is primarily used for S_iO_2 /Poly/ S_iO_2 where the upper S_iO_2 layer can be measured. The 546nm wavelength is normally used in conjunction with the 633nm wavelength for order resolution (absolute thickness).

AutoEL IV-Hg - This model with it's two short wavelengths of 365nm and 405nm uses a mercury light source in place of the tungsten source. It's specific application is to resolve the absolute thickness of the upper S_iO_2 layer of a S_iO_2 /Poly/ S_iO_2 structure. The 546nm wavelength is retained for general purpose use.

AutoEL IV-NIR-1; NIR-2; NIR-3 - These models of the AutoEL provide one or more longer wavelengths. These longer wavelengths are ideal for plasma deposited films so that they are rendered transparent, and transparent film calculation programs can be used. This also restores the usefulness of the absolute thickness order matching program. Conventional resists can also be rendered transparent for ease of measurement. Other applications are in the optical storage media field where film characteristics might be measured at the 790nm or the 830nm wavelength on a routine basis.