



Model CA Ellipsometer



FEATURES

Ease of Operation	Rapid Coating Measurement
Measures Each Side	Readout in gm/bb or mg/m ²
Measures Profiles	High Reliability
Rugged Construction	Solid State Circuitry

The Solid State Model CA Ellipsometer is a versatile, precision, instrument for rapid oil film measurement on tinsplate, chrome, and TFS (tin free steel). This equipment can also be used to measure chrome oxides when purchased with Option B1. It uses a highly accurate optical system to relate small changes in the ellipticity of light reflected from the sample before and after automatic degreasing to the film thickness. The coating weight is computed by solid state circuitry and displayed with an LED readout in English units (Metric units are optional).

This instrument has been carefully designed to minimize operating skill and maintenance requirements. To use, the operator places a sample in the sample chamber and depresses the start button. The instrument will automatically obtain and display the coating weight in approximately 40 seconds. This reading remains displayed until reset when another measurement cycle is initiated. There is only one operating adjustment. It is used only when radical differences in luster are encountered.

Solid state logic circuitry controls the various measurement cycles using solid state relays. The instrument can be set up by any competent laboratory technician. Two manuals containing installation, operating, and maintenance instructions are supplied with each instrument.

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SPECIFICATIONS

REPEATABILITY+/- 0.02 gm/bb (+/- .5 mg/m ²)
ANGULAR RANGE20 degrees
MEASUREMENT RANGEIn excess of 1.0 gm/bb (24.7 mg/m ²)
SAMPLE SIZE1" to 3" (2.5 to 8 cm) diameter
READOUTDirect in oil coating weight with LED numerals
MEASUREMENT TIMEApproximately 45 seconds
POWER REQUIREMENTS115 Volts, 60 Hz, 600 VA (220 Volt, 50 Hz options)
VENT SIZE2 1/2" diameter - Domestic 7.62 cm diameter - Export
CABINET SIZE24" x 26" x 50" (61 X 66 x 127 cm) 24" x 26" x 56" 220 Volt (61 x 66 x 142.24 cm) 220 Volt
APPROXIMATE WEIGHT300 lbs (136 kg)

Short Form Catalog

Solid State Model CA Ellipsometer with new automatic set-up feature and self-relieving pressure relief valve includes Solid State Indicating Temperature Control. The Ellipsometer comes complete with standard accessories, schematics, parts list, and two instruction manuals. The Ellipsometer can operate on 110 Volts, 60 Hz current or 110 or 220 Volts (not both), 50 Hz current.

Normal delivery is 5-6 months after receipt of order.

The following options are available:

Option B1 - TFS pin positioning sample holder bracket – Three pin positioning sample holder for TFS oxide determination. Requires a positioning notch in the sample. Sample holder permits removing a sample for exterior treatment and then replacing the sample back in the Ellipsometer to read the same spot. Typical applications are manual oil coatings and oxide measurements.

Option D - Immersion Heater Tank Thermometer – A useful maintenance device which provides maintenance personnel with the internal tank temperature in order to assure proper tank temperature setting and cleaning action. Accessibility from the rear of the instrument allows maintenance personnel to determine temperature at a glance.

Option F – Computer Controlled Windows Operating System. Operator entry of Mill Test information (ex: Coil No., Line, Test No., etc). This option allows auto measurement correction via correction constant. The operator is able to make small corrections in reported measurement for variance in surface condition and oil types. It allows testing of 6 or 10 coupon tests reporting data parameter top average, bottom average, and total average. It saves and files test data and allows Ethernet connection.