

EddyCus® lab 2020MT – Metal Layer Thickness Tester

P_2020MT_25



Highlights

- ▶ Contact-free and realtime
- ▶ Accurate single-point measurement
- ▶ Manual mapping guided by easy-to-handle software
- ▶ Measurement of encapsulated layers
- ▶ Characterization of multilayer materials upon request

Applications

- ▶ Semiconductor industry
- ▶ Electronic industry
- ▶ Metallization in photovoltaics
- ▶ Batteries, fuel cells, capacitors
- ▶ Boards and panels (PCB, WLP, PLP)
- ▶ Mirrors and lenses
- ▶ Barrier films
- ▶ EMC/EMI Shielding
- ▶ Heating and de-icing films
- ▶ Medical applications

Device Series

- ▶ Metal layer thickness (nm, μm)
- ▶ Sheet resistance (Ohm/sq)
- ▶ Emissivity
- ▶ Conductivity / resistivity (mOhm·cm)
- ▶ Electrical anisotropy (%)
- ▶ Weight (g/m^2) and drying status (%)
- ▶ Permeability (H/m) *Beta*

Materials

- ▶ Metal films
- ▶ Metal meshes
- ▶ Metal substrates
- ▶ Alloy films
- ▶ Alloy substrates

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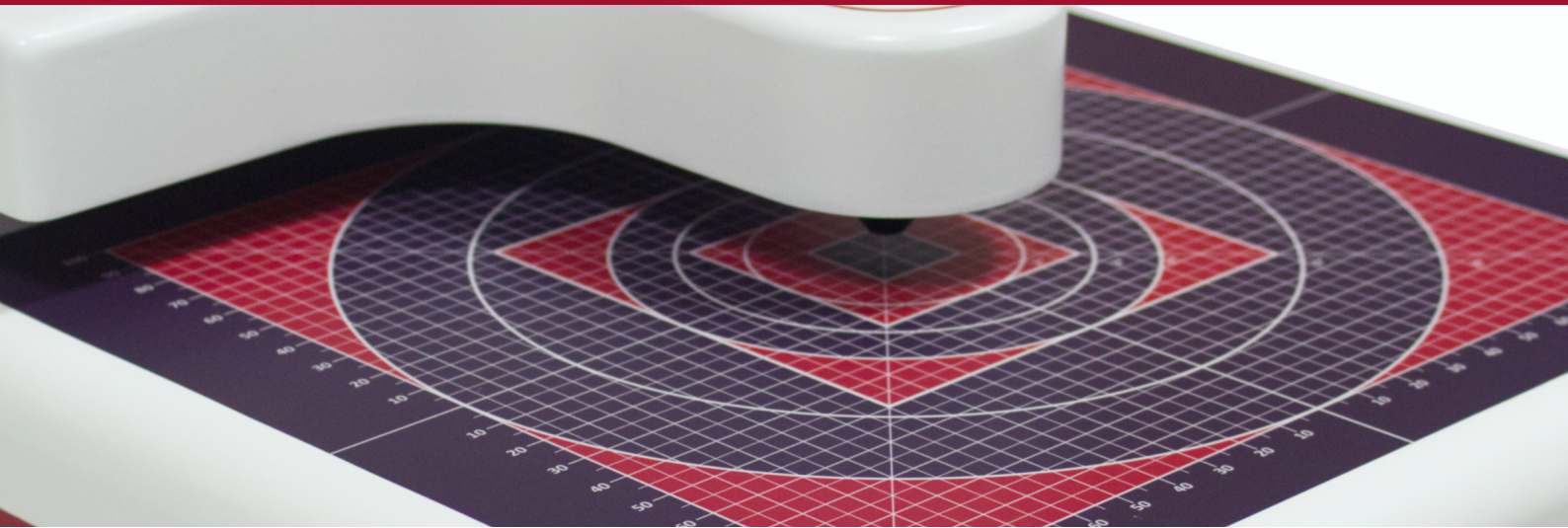
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Engineered and Made in Germany 





Measurement technology	Non-contact eddy current sensor
Substrates	Foil, glass, wafer, etc.
Substrate area	8 inch / 204 mm x 204 mm (open on three sides)
Max. sample thickness/ sensor gap	4 / 10 / 14 / 20 mm (defined by the thickest sample)
Metal thickness range	Low 1 – 10 nm; 2 – 5 % accuracy
Accuracies depend on the selected setup and the type / conductivity of the metal (e.g. copper, aluminum, silver)	Standard 10 – 1,000 nm; 1 – 3 % accuracy
	High 1 – 100 μm; 0.5 – 3 % accuracy
Metal thickness calibration	Direct thickness calibration / sheet resistance conversion
Device dimensions (w/h/d) / weight	11.4" x 5.5" x 17.5" / 290 mm x 140 mm x 445 mm / 10 kg
Further available features / other tool configurations	Sheet resistance measurement / conductivity / resistivity / electrical anisotropy / permeability (beta)

Device Control and Software

The software interface includes the following components:

- Top Bar:** File, Measurement, Info, Measuring, TempOk, CalOk, SURAGUS logo.
- Main Display:** Thickness 2.11 μm, Unit Standard checkbox.
- Mapping Window:** A 6x6 grid of measurement points. Values are displayed in scientific notation (e.g., 2.12e-6, 2.11e-6, 2.10e-6, 2.13e-6). A legend indicates: 'Left mouse click to move the selection, right mouse click to overwrite cell value without moving the selection'.
- Data Tracker:** A table listing measurement series with columns for Id, Time, and Coating.

Id	Time	Coating	Value	Unit
1	1:33:06			
2	1:33:10			
3	1:33:14			
4	1:33:18			
5	1:33:23			
6	1:33:27			
7	1:33:31			
8	1:33:35			
9	1:33:40			
10	1:33:44	Coating...	2.11e-06	m
11	1:33:48	Coating...	2.13e-06	m
12	1:33:52	Coating...	2.12e-06	m
13	1:33:57	Coating...	2.11e-06	m
14	1:34:01	Coating...	2.13e-06	m
15	1:34:05	Coating...	2.10e-06	m