

Eddy Current Thickness Tester DMC - 211



SPECIAL FEATURE

Almost coatings on metal (oxidizing coating on Al., Zn/Fe, Chrome plating etc.) or almost metal coatings on nonmetal; they can be measured by non-destructive method in a short time (Within 1 second), and available for 100% inspection.

By using PC, easy for operation of calibration and measurement. Each measurement mode can be selected, and more smooth to measure small parts: the top of screw, wire material, die-casting products.

On automatic taking value mode, measurement value can be taken automatically as only probe being placed and released against test sample.

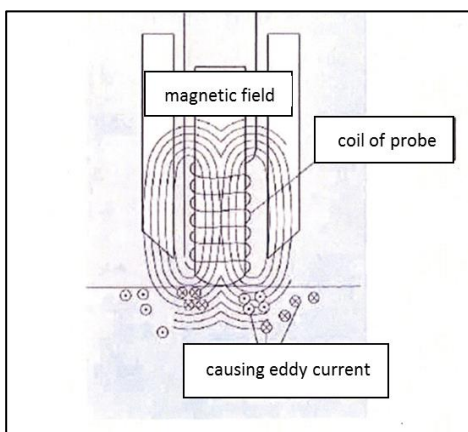
70 kinds of saved calibration curves as standard. When new calibration curve of special material needed, by using thickness standards, it can be set up.

Company's name, parts no., Lot no. can be saved by each channel.
Total channel q'ty: 40 Channels

Measurement data can be saved by each channels, afterward setting up statistics items against m'ment data, and statistics process can be done.

M'ment unit: mm, um, mil, MI, A; unit can be changed anytime, m'ment value is changed automatically.

MEASUREMENT PRINCIPLE



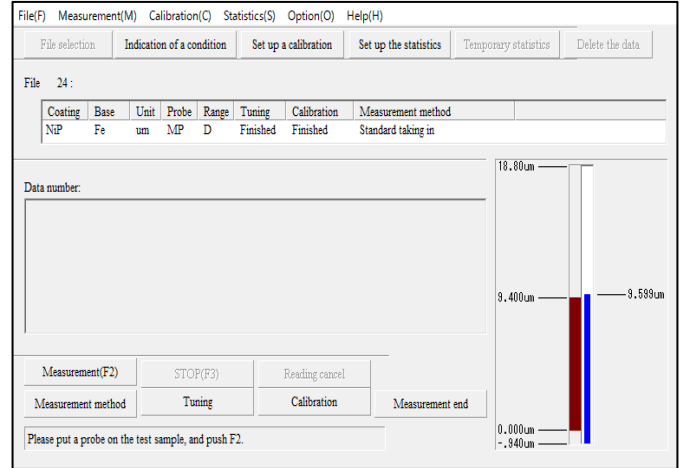
When probe (Coil of probe) with radiofrequency current being close to metal material, eddy current generates on the metal surface. Eddy current reflect on: strength of radiofrequency, metal conductance, thickness, form. Since eddy-current runs as long as it denies radiofrequency field of probe, its value is changed.

As value of changing radiofrequency resistance is generally not in proportion to thickness value, it is necessary to check it with calibration curve, and converting to thickness value, then this value is indicated on PC monitor.

STANDARD SPECIFICATION

Type (Main Unit): Dermess DMC-211
 Principle : Eddy-current method
 Measurement mode : 1) Thickness measurement
 2) Measurement for alloy material composition
 Quantity of channel: 40 channels
 Data volume : 100,000 data
 Indicating : By monitor of PC
 Statistics process: Maximum value, minimum value, average value, standard deviation, histogram, up-low limited value setting
 Power Supply : AC100-240±10%, 50/60HZ
 10VA (Main Unit)
 Weight : 3.0kgs (Main Unit)
 Dimension : 280 (W) × 230 (D) × 88 (H) (Main Unit)

Measurement screen



PROBE SPECIFICATION



Effective range : ϕ 5mm
 Using minute probe: ϕ 3mm
 Length of probe cord 900mm
 Available for curved surface sample due to probe guide type
 Probe type
 MP type : For flat, uneven curved surface (standard)
 SM type : Flat, uneven curved surface (minute)
 RP type : Concave curved surface, inside surface of pipe
 SR type : Inside surface of small diameter pipe
 *Four types of each probe type, due to thickness : A, B, C, D
 Probe Guide
 #180 : For flat surface measurement
 #120 : ϕ 25-60mm for convex curved surface
 #90 : Under ϕ 30mm for convex curved surface

Combination for plating and substrate

plating	Substrate	Range of Measurement (um)	Type of Probe
Non-metal Almite, paint etc	Non-magnetic metal (Al, Cu, etc)	1-100	D
		50-300	C
Cu or Ag	Fe	0.5-5.0	D
		3-10	C
		5-20	B
		10-160	A
	Non-metal (ABS, Epoxy etc)	0.5-5.0	D
		3-10	C
Zn	Fe	10-80	B
		50-160	A
		1-14	D
		8-30	C
Ni	Fe	15-50	B
		30-100	A
		1-12	C
	Non-metal	6-22	B
		18-80	A
		1-12	D
Metal deposition (Au, Cu, Al etc)	Non-metal	5-25	C
		50A-1um 1-5	D



SANKO

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