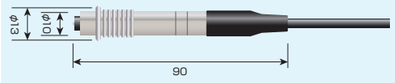
■ Specifications

Display resolution	0.1 µm (when less than 100 µm), 1µm (when 100 µm or more)
Display	Digital (backlit LCD)
Data memory	24,000 points
Number of application memories	50 (per probe)
External output	USB serial
Power supply	100 to 240 V AC or 1.5 V batteries (AA alkaline) × 8 (For main unit × 4, For printer × 4)
Power consumption	25 W
Battery life	70 hours (Printer power: OFF/Backlight: OFF)
Temperature/ humidity operating range	0 to 40° C, 85% RH or less (no condensation)
Additional functions	Substrate calibration, film calibration, application selection, upper and lower limit settings, unit switching, measurement mode switching, statistics calculation (block or group/number of measurements or average values, standard deviations, maximum values, minimum values), measurement data storage, auto power off, backlight, print density settings, date and time settings, display content switching and more
Conformity standards	JIS K5600-1-7, JIS H0401 (🔵), JIS H8401 (🔵), JIS H8501, JIS H8680-2 (🟠), ISO1460 (🔵), ISO2064, ISO2178 (🔵), ISO2360 (🟠), ISO2808, ISO19840, ASTM B499 (🔵), ASTM B244 (🟠), ASTM D7091, ASTM E376 (🔵 in parentheses: Correspondence is indicated only to electromagnetic type, 🟠 in parentheses: Correspondence is indicated only to eddy current type)
Dimensions and weight	126mm (W) × 256mm (D) × 93mm (H), 750g
Accessories	For iron substrate (for Fe probe EP-100), for aluminium substrate (for NFe probe HP-100), calibration foil × 6, 1.5 V battery (AA alkaline) × 8, AC adapter, power cable, probe adapter, strap, printer paper × 2, protective sheet × 3, calibration foil case, carrying case, Easy Guide for Calibration, Operating Manual
Options	Calibration foils (with thicknesses other than those supplied), LW-990 Coating Thickness Tester Measuring Stand, calibration (certificate of calibration, calibration records, calibration flow chart)

■ Probe specifications

Model	EP-100	HP-100
Measurement method	Electromagnetic type (Fe probe)	Eddy current type (NFe probe)
Application	Non-magnetic coating on magnetic metal	Insulation coating on non-magnetic metal
Measurement range	0-2,500 µm or 99.0 mils	0-1,200 µm or 47.0 mils
Measurement accuracy (according to our specified conditions)	±0.3 µm (when less than 15µm) ±2% (when 15 µm or more and less than 1,000 µm) ±3% (when 1,000 µm or more)	±1.0 µm (when less than 50 µm) ±2% (when 50 µm or more)
Dimensions		

Each probe is a required option.

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Management system enhancement department of the Japanese Standards Association (JSA) registers the Quality Management System of the above organization, which conforms to JIS Q 9001, ISO 9001.
The scope of the registration:
Design, development, production management, calibration and repair of moisture testers, NIR composition analyzers, grain inspectors and coating thickness testers.

Contact

2202-PD-0101-000

SCIENCE OF SENSING

Coating Thickness Tester

Coating Thickness Tester
L-500

Measure, display stats, print out on the spot.

KETT ELECTRIC LABORATORY Co. Ltd.

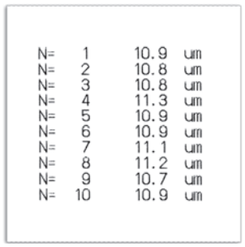
L-500 Coating Thickness Tester

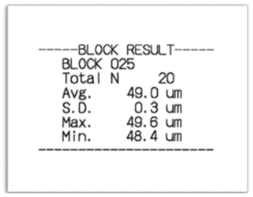
The L-500 Coating Thickness Tester is a coating thickness tester with an integrated printer.
Since measured data can be printed immediately and measurement results can be attached to measured objects or measured locations, coating thickness management can easily and accurately be performed. The new probe developed together with this instrument has superior measurement accuracy than the conventional models and the tip end also has improved wear resistance.
The shape of the main unit is designed to hold easily with one hand and the main unit is equipped with a large display with high visibility that enables easily checking statistical results without printing them out.
The L-500 Coating Thickness Tester can be used in many situations.

Printer integrated

Since results can be printed for each measurement, it is possible to manage them in combination with printed results on paper and measured objects.
Batch printout of stored results and printout of statistical results collected by each block or group are also available.
Printout can be turned off if unnecessary.

Printout example



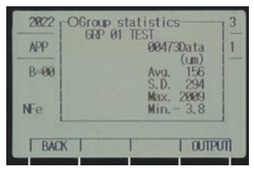


The icon ( ) will be displayed on the screen when the printer is off.

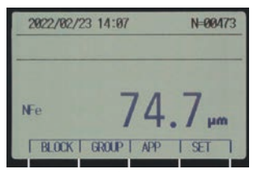
Large display

On the large display, the calibration procedure is displayed interactively and statistical results are displayed visibly and clearly.
High visibility is provided for dark places thanks to the built-in backlight.

Film calibration and substrate calibration procedures are displayed interactively.



Statistical calculation results can be checked on the same screen.

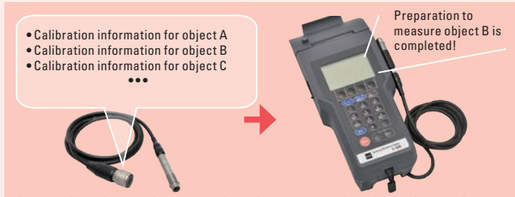


Switching between the normal display (left) and the simple display (right) is available.

Probe (required option)

The probe can store applications

Different from conventional products, applications (calibration curves) are stored in the probe instead of the main unit.
Up to 50 application information items (calibration results, substrate calibration results, application name and upper and lower limit settings) per probe can be stored.
Since the stored information is kept even when the power is turned off, the second and subsequent measurements with the same application can be performed without calibrating.



Immediately ready to use just by connecting it to the main unit and calling the information from the probe!

Two types of probes corresponding to an object to be measured

Available probes vary depending on the coating or substrate.
The selected probe is packaged with the main unit.
The following is a correspondence table of coating/substrate types and probes.

Electromagnetic type probe EP-100

- For magnetic metal substrate
- Black cable

Eddy current type probe HP-100

- For non-magnetic metal substrate
- Gray cable

Substrate type \ Coating type	Aluminium	Lead	Chrome	Anodic oxide coating/ Phosphoric acid	Enamel/Rubber paint/Plastic	Gold	Cadmium	Copper	Solder	Brass	Electrolytic nickel (magnetic)	Electroless nickel (non-magnetic)	Palladium	PVC/CVD Coating	Rhodium	Silver	Zinc	Tin
Iron/steel	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■
Kovar	■	■	■		■		■	■	■	■			■	■	■	■	■	■
Stainless steel (non-magnetic)					■ *													
Aluminium/Aluminium alloy/Copper/Brass/ Gunmetal				■	■													
Silver/Titanium/ Titanium alloy/Zinc/ Zinc alloy					■													

* Stainless steel bases may not be able to be measured depending on the conditions. Please contact us before purchasing.

Multiple measurement postures are supported

The shape of the main unit is designed to easily hold with one hand based on usability research at sites. In addition, using the strap provided as an accessory can free both hands. The display plane of the main unit is inclined to make the screen easy to see when using at a desk in an inspection room or elsewhere.

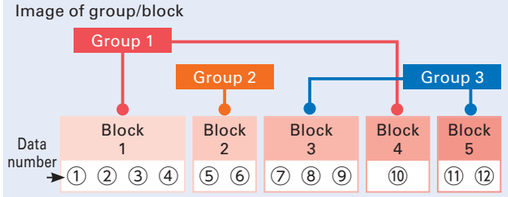
Probe holder

Since the probe can be put into the holder on the side of the main unit by one touch, it is easy to shift to another work during a measurement when it is needed. In addition, objects to be measured and the probe can be prevented from being damaged by fixing the probe.

Group/Block function

When performing coating thickness management, it is possible to obtain statistical results with further integrated data by sorting measurement data according to the measurement sites, objects to be measured and manufacture lots.
On this product, the block and group functions are featured to classify data into two stages.
It is possible to immediately obtain a required value with data statistics, which is a method to specify data to be statistically calculated after measurement, and by block or group statistics, which are both methods to specify a classification (block or group).

Image of group/block



Data numbers will be given in sequential order each time measurements are performed.
A desired series of data numbers can be collected as a block and desired blocks can be collected as a group.
A group can be named with up to 12 alphanumeric characters.

Other useful functions

Many useful functions for efficient management of coating thickness are featured such as data external output, measurement unit switching, automatic power off, backlight settings, upper and lower limit settings and print density settings.