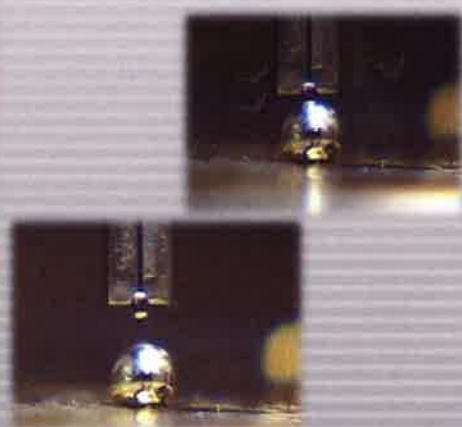


# SWB-2

## DIP WETTING TESTER

The entire procedure, from Flux application (with Flux Temperature Control Function) to Measurement End is automated.

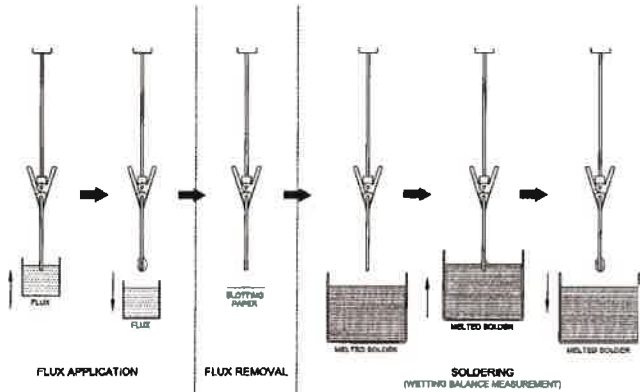


- Reducing unstable measurement results, and user error with Automatic measurement in compliance with JIS Z3195.
- Wetting Balance Method is available (option), making it possible to measure micro parts such as 0402 size & etc.
- Easily change Solder and Flux when necessary.

## SPECIAL FEATURES

- Reducing unstable measurement results, and user error.
- Micro Wetting Balance method enables for the evaluation of micro parts, such as 0402, 0603 size & etc. We offer Chip Placement System to install micro chip components on a jig. (option)
- Complies with the Wetting test method according to JIS Z3198 (Lead Free Solder Test Method) and Several International standards.
- The exclusive PC software efficiently analyze data, display the wave form & data on one screen together, save data & etc.
- An optional cover allows for wetting evaluation in a N<sub>2</sub> environment.

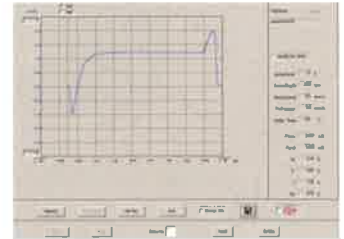
## MEASUREMENT PROCEDURE



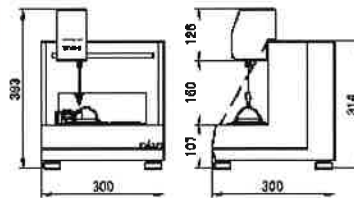
## DISPLAY PANEL



## SWB-2S Software (option)



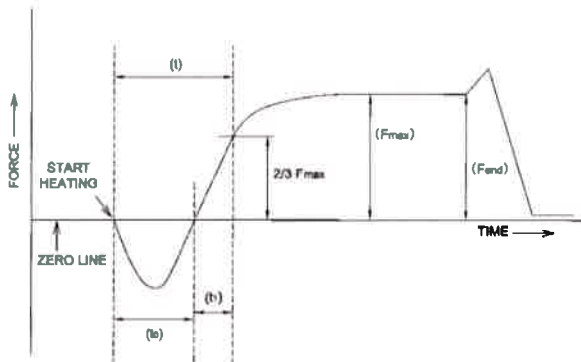
## OUTER DIMENSIONS



## CHIP PLACEMENT SYSTEM (option)



## WAVE FORM ANALYSIS



- Fmax: Maximum wetting force.
- Fend: Wetting force at the end of wetting measurement.
- t0: The time at which wetting starts. The time from the start of measurement (when the test piece contacts the solder), changing negative wetting force into positive.
- t1: Wetting force. The time from the zero point to 2/3 of the max wetting force.
- t: The wetting time. The time from the start of measurement (when the test piece contacts the solder) to 2/3 of the max wetting force.
- Sb: Wetting stability. The ratio of the last wetting force and the max. wetting force.  $F_{end} / F_{max} \times 100 (\%)$

## STANDARD

JAPANESE STANDARD	Automatic Measurement (Flux Application, Removal and Measurement) JIS Z3198-4, C60068-2-54 & C6008-2-69 JEITA ET7411
INTERNATIONAL STANDARD	ISO 9455-16 IEC 60068-2-54, 60068-2-69 ANSI J-STD-003, MIL-STD-883 (METHOD 2022.2) & IPC-TM-650 (2.4.14.2)

## SPECIFICATIONS

Load Sensor	Principle	Electro-Balance Sensor (EBS)	Solder Temp. Setting	Room Temp. ~400°C (Room Temp. ~320°C for Micro Wetting Balance Method)
	Measuring Range	30mN ~ -30mN	N. Measurement (option)	O <sub>2</sub> concentration: 500ppm max.
	Accuracy	±0.05mN	Power Supply	AC100, 115, 200, 220 & 240V 50/60Hz
	Resolution	0.01mN	Outer Dimension	330mm (D) x 300mm (W) x 370mm (H)
Temp. Sensor	Measuring Range	Room Temp. ~450°C	Weight	Approx. 16kg
	Accuracy	±3°C	Applicable OS	Windows 7 (32 & 64bit) / VISTA / XP (32bit)
Insertion Time, Depth, Speed		1 ~ 200s, 0.01 ~ 20.00mm 0.01mm step, 0.1 ~ 30mm/s	Operating Environment	The above OS operates

\* The above specifications are subject to change without notice.

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LED Manufacturing Devices  
Bio-Technology Products

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