

# JST ELECTRONICS

"Your Smart Solution Partner"



# **Auto LCR Technique**

## First Article Inspection Machine

Welcome to the advanced world of automation first article inspection machine named Auto LCR Technique, a state-of-the-art tool designed for efficient and accurate fault detection in electronic components on FAI (first article inspection).



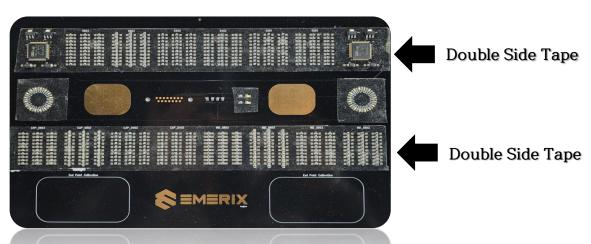
#### ◆ Auto LCR Technique

Auto LCR Technique is suitable for test on double sided tape is applied on the PCB to check the L,C,R value and exact location of the device.

It is possible to prevent errors or human errors and to retain accurate measurement result values due to automatic inspection rather than conventional manual inspection.

Accident prevention and quality stabilization in case of material mixing or reel replacement.

Approval for mass production after checking the capacity value and location



<<Bare PCB with double side tape with mounted components>>



### Auto LCR Technique Convenience

#### ◆ (1) Convenience for the Operator

All inspections are performed automatically through two probes, and it is a device that can inspect devices with a minimum size of 0201 inch / 0603 mm quickly and accurately without difficulty. In addition, if necessary, measu rement and data are saved in real time through the LCR inspection instrument mounted on the equipment, which he enables direct measurement by the user, and the convenience of manual inspection is also added to inspect the efirst article (double-sided tape board, dummy board, etc.) is possible



#### ❖ 0201 inch / 0603 mm Accuracy



\*Due to captured image it may not clear with pictures.



#### ◆ (2) Convenience for the Operator

That's correct. In cases where manual inspection is necessary, you can directly switch from the real-time equipment without the need to move to a separate station. The LCR measurement instrument's setting parameters such as measurement frequency, measurement voltage, and measurement range are automatically adjusted, allowing for swift inspection and data storage. This seamless transition between automated and manual inspection ensures efficient and accurate results without any unnecessary delays or additional setup.



#### Perfection of Measurement and Convince

When manual measurement is needed, the rail is moved forward to enable realtime manual measurement, adding convenience to the user. During m anual measurement, the position of the device requiring measurement and the measurement value are updated in real time in the equipment. \*Additional instruments are optional

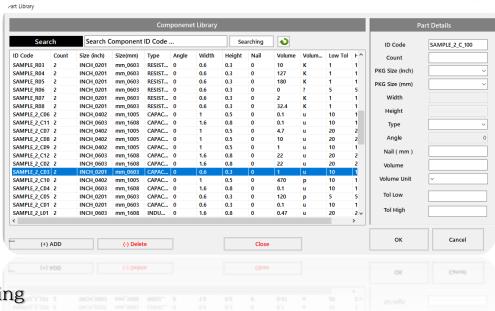


\* Patent Design



#### Use of Library

It provides a library for each LCR part and learns the measured value, making it easy to create quick test programming and manage errors.



#### ◆ Easy Programming

- It is possible to create a program within 5 minutes when writing a light program, that
   can skip image creation, and detailed writing can be done immediately after completing the program within 20 minut
   es, including images.
  - \* Program writing time may vary depending on sample level or worker skill



#### ◆ Smart Self Probing Point

• If a defect occurs due to position error, the probing position is automatically corrected and moved to secure the measured value.



#### Auto Alignment

 It is possible to align the exact sample by automatically proceeding the alignment, and continuously accurate inspection is possible for the once applied model

#### ◆ Optimized Route

• Through the Optimized Route, the equipment automatically identifies the shortest path and performs efficient and fast inspection.



#### ◆ Data with CSV and MES

 After the test is completed, the result report can be output as a CSV file, and process registration through MES linkage is possible.

#### Retry Test

For failed or inaccurate measuring elements, it is equipped with an automatic re-test or retry function.
Up to 5 Retry Tests are possible. (adjustable number of retry times)

#### ◆ Probe long life cycle

We use long life cycle of Probe for Auto LCR Technique (+/- 1 Million Hits)

#### Probing Speed Control

5 different speed of probing control is available with world fastest FAI Tester!



#### ◆ No Fixture Required

No Fixtures required for the testing. It would save some space and cost

#### ◆ Fail Visualizer Statistical information

 After the finished test, all faulty component will show with image map and statistical information also share with the test report





- ◆ Plug and play on the power core. All Motor! No Air Compressor Required.
  - Auto LCR Technique is build with all motor type to just plug and play on the power core. No Air Compressor Required for usage.

#### ◆ Made In Korea

Made in Korea equipment that Guaranteed Quality

#### Users Operations

Easy usage of S/W to take about 2 days to master on operations.



## Auto LCR Technique Specification

#### ◆ <u>Specification</u>

■ Input Voltage Range 200~240 V

Input Frequency Range
50~60Hz

Equipment Size 1200mm \* 1200mm \* 1750mm

Industrial PC
Included

Monitor27 inch

Operating System Window10 / 64bit

Emerix Function Controller Included

#### ◆ Application

Maximum Board Size 360mm x 240mm

Maximum Thickness 8T

#### ◆ System Specification

Probe Head2 (Dual)

■ Min Contact Pad +/- 100 microns (0.1mm)

■ Min Contact Pitch +/- 200 microns (0.2mm)

Alignment
Auto Alignment

#### ◆ <u>Utilities</u>

■ Power 200 - 240 V / 10Ka

#### ◆ <u>Measurement Specification</u>

Test Frequencies

20Hz ~ 300kHz [Optional for up to 2Mhz]

Measurement Arrange

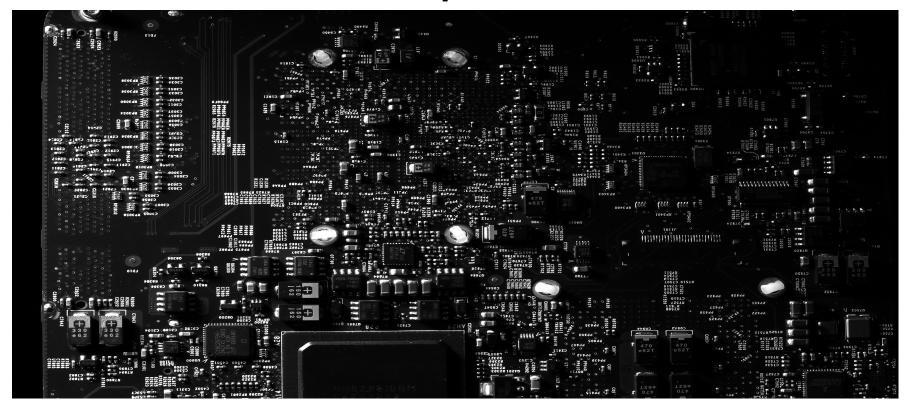
R:  $0.1\Omega \sim 100M\Omega$  L:  $100nH \sim 5H$  C:  $1pF \sim 10m0F$ 

• Measurement Diode is also available (Optional)



Auto LCR Technique Equipment Image

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