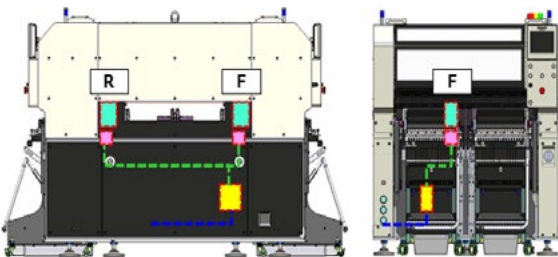









## Ensure Passive Component Integrity

### MACHINE SETUP

LCR meter shared by front and rear sides.

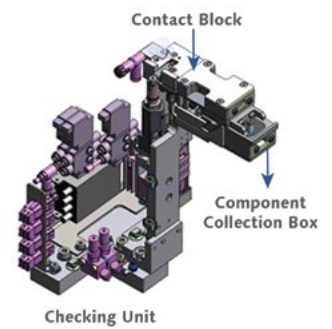


#### Front/Rear Option Selected

-  Check Unit x 2 Units
-  LCR Head x 2 Units
-  LCR Meter x 1 Unit [shared]
-  LAN Cable
-  Camera Link Cable

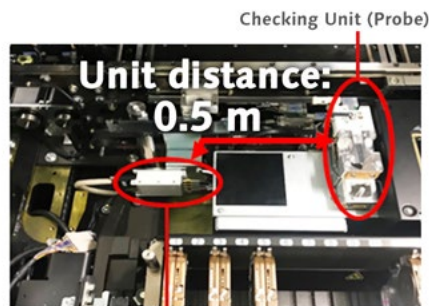
### Component Check Events

1. After production starts (including changeovers)\*  
*\*During changeovers, common setup components already checked won't be checked again*
2. After splicing is detected
3. After feeder reinsertion is detected
4. After restarting from component run-out
5. Upon selecting manual test



### Test Component Management

Components selected for verification are automatically placed in the LCR checking unit (probe.)



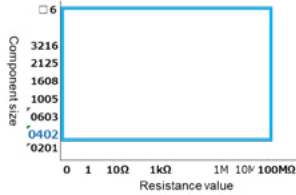
LCR Head Positioning Arrangement



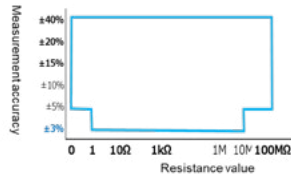
## RANGE

Size(mm): 0402 ~ 6 x 6 x 5 Time: ≤ 5 sec

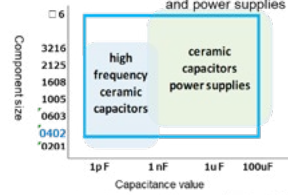
**Resistors** ♦ **Appl. size** Support low size -0402  
♦ **Resistors** Supports low resistance



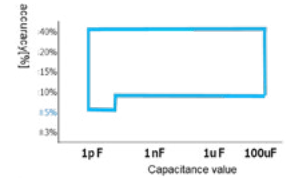
♦ **Accuracy** Up until 1 ~ 10MΩ with ± 3 %



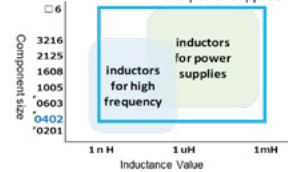
**Capacitor** ♦ **appl. size** Supp. as small as 0402  
♦ **capacity** Tests both high freq. and power supplies



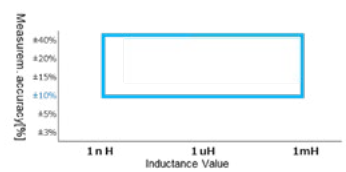
♦ **accuracy** Capacitance Range: Panasonic = ASM



**Inductor** ♦ **appl. size** Supp small size 0402  
♦ **inductance** Tests both high freq. and power supplies



♦ **accuracy** High accuracy at wide range



## BENEFITS OF BUILT-IN LCR CHECKER

<b>Labor savings</b>	<5s test time (vs 30s by hand)
<b>Cost Containment</b>	Test prior to placement from new reels to guard against barcode label & human errors
<b>Product Integrity</b>	Guard against counterfeit components
<b>Faster NPI</b>	Accelerate NPI by not having to wait until ICT has completed test of first board (typ. 45 min)
<b>Ergonomics</b>	Able to test microchips (≥ 0402mm)
<b>Test</b>	Test components that ICT and Flying Probe cannot due to high density PCB designs
<b>New Products</b>	5G, IoT, ADAS demand for low impedance devices
<b>Traceability</b>	High value products demand tracing validation of correct components loaded & placed
<b>Digitalization</b>	Electronic vs paper logging of tests
<b>Factory of the Future</b>	Leveraging most advanced technology to win new business & lower costs

### Models Supported:

New machine purchase models supported: NPM-D3A, W2, TT2 + X-series  
Field retrofit models supported: NPM-W, D-series, and TT can be upgraded  
Heads Supported: beams with 16, 12 and 8 NH mounted

[na.panasonic.com/FactoryAutomation](http://na.panasonic.com/FactoryAutomation)

