



C02 Laser Drilling Machine

# LC-2N252E

High-Speed, High-Precision C02 Laser Drilling Machine  
for HDI/BGA Package PCBs

The global standard laser drilling machine –  
realizing stable processing quality



Via Mechanics, Ltd.

# LC-2N252E

High-Speed, High-Precision CO2 Laser Drilling Machine for HDI/BGA Package PCBs

## Stable, mass-production processing brought to you in high quality by the world's leading advanced technology

### □ The best solution for smaller via hole drilling and higher-precision hole positioning

Flexible handling of a variety of PWB processing through unique laser pulse control, with improvements achieved in all categories with respect to reduction of hole diameter and higher-precision hole positioning. Stable productivity and high quality are provided, even with rapid increases in hole count. In the future we will continue to expand the applicable scope for CO2 laser processing, including copper-foil direct, resin and through-hole processing.

### □ High-level improvements in processing speed and productivity

Equipped with Via Mechanics's new high-speed galvano scanner and high-power laser unit, a dramatic improvement in drilling speed has been achieved (120% compared to the previous model) with a new CNC system developed in-house. Productivity has also been increased through synchronized control of the XY table and galvano.

### □ Reduced running costs

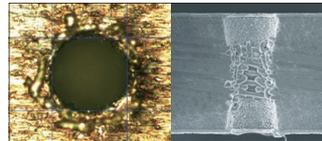
The LC-2N252E has achieved a longer operating life through the development of a new CO2 laser unit. With the inclusion of the automatic gas exchange system, replacement of the gas tank is now unnecessary for 10 years, while ease-of-maintenance has also seen an improvement. Total running costs have been reduced with a wealth of applications supporting trial processing and maintenance work included as standard.

### □ Industry leader in energy savings

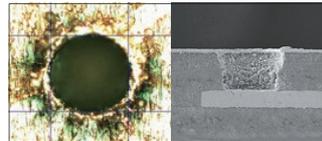
High-quality core machine parts and high-precision control technology have substantially improved production efficiency. 29KVA power consumption and 1150L/min air consumption makes this machine the industry leader in energy savings.

### Unprocessed Cu direct processing

Through hole (diameter 70 $\mu$ m)

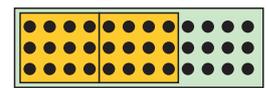


Blind hole (diameter 65 $\mu$ m)

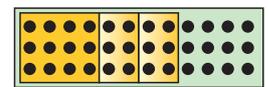


### GT (Galvano & Table) synchronized control

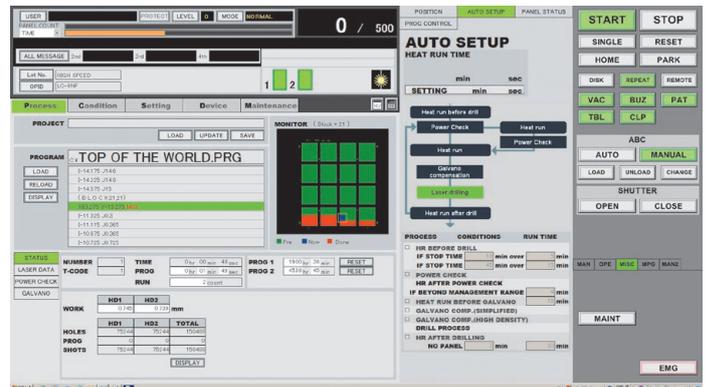
Previous processing  
Processing → Table moving → Processing



GT synchronized Processing  
Processing synchronized with table moving

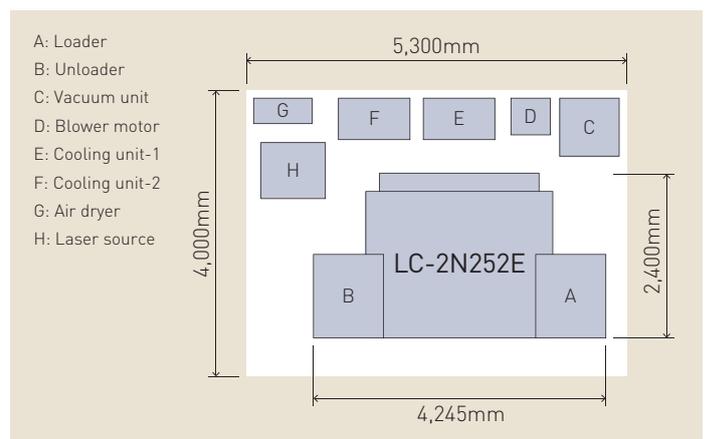


### New CNC MARK-55L



Optimizing CNC screen to 21.5" Wide offers easy access to required information and operation buttons.

### Floor Plan



### LC-2N252E/Primary specification

Max. Drilling area	635 x 813mm 2Panels
XY Positioning speed	50m/min
Number of beam	2
Laser output	500W
Galvano Scan area	□65mm (OP : □30mm, □50mm)
Drilling accuracy	±0.010mm
CNC	MARK-55L



## Via Mechanics, Ltd.

Headquarters: 2100, Kami-Imaizumi, Ebina City, Kanagawa Prefecture, 243-0488 Japan  
Tel. +81-46-231-7111 Fax. +81-46-235-9356  
<http://www.viamechanics.com>

