# DI INLINE ROTARY LASER DEPANELLER 

## TOTAL SOLUTION FOR ROUTER BUSINESS

As a world leader in PCB Depaneling systems, GETECH presents IRLD. An inline machine designed for high-speed laser depaneling and high volume production of rigid and semi-flexible PCB panels size up to $300 \mathrm{~mm} \times 300 \mathrm{~mm}$.

## FEATURES

## DUAL-STATIONS ROTARY TURNTABLE

$30 W$ GREEN LASER OR 100 W USP LASER
PARALLEL PROCESSING (DEPANELING AND HANDLING)
UP TO 4 VACUUM SUCTION PICK-AND-PLACE TIPS
VERSATILE VISUAL PROGRAMMING SYSTEM (MOVE, TEACH, CUT)
HIGH-RESOLUTION VISION CAMERA
IN-LINE AUTOMATION READY
PROGRAMMABLE Z-HEIGHT
SMEMA CONNECTIVITY


ISO 9001: 2015 Cert. No.: 622220

## IR L D Inline Rotary Laser Depaneller



IRLD is an inline laser depaneling machine specifically designed to depanel and/or singulate rigid and semi-flexible PCBs with high precision and repeatability. It is suitable for handling densely populated printed circuit board assemblies (PCBA) in automatic production assembly lines.

The system consists of up to 4 high-speed vacuum suction nozzle tips for very low dwell time pick-and-place operations to boost productivity. The machine also supports barcodes and/or 2D codes verification of incoming boards before depaneling and sorting of outgoing boards before releasing to down-stream processes or straight to tape-and-reel packaging.

The IRLD comes with either a short-pulsed green laser for highquality cuts with almost no carbonization or an ultra-short-pulsed picosecond laser which produces virtually char-free cut edges.

## SPECIFICATIONS

| Manipulator | Configuration <br> Manipulator Motors <br> Manipulator Repeatability <br> Resolution | : 4 axes <br> : AC brushless servo motors <br> $: \pm 0.02 \mathrm{~mm}$ <br> $: \pm 0.01 \mathrm{~mm}$ |
| :---: | :---: | :---: |
| Workstation | Design <br> Panel Positioning <br> Panel Size <br> Panel Thickness <br> Component Height | : Dual workstation with dedicated fixtures on a rotary turntable <br> : Locating pins with top clamp <br> $: 300 \mathrm{~mm} \times 300 \mathrm{~mm}$ <br> $: 0.6 \mathrm{~mm}-1.0 \mathrm{~mm}$ <br> : Top max. 5mm, Bottom max. 5mm |
| Laser System | Type Cooling FOV | 30W green laser or 100W USP laser <br> Closed-loop water chiller <br> $50 \mathrm{~mm} \times 50 \mathrm{~mm}$ to $300 \mathrm{~mm} \times 300 \mathrm{~mm}$ |
| Vision System | Video Camera | : High-resolution CCD vision camera |
| Programming | System Platform Product Setup <br> Variable Functions | : Windows ${ }^{\circledR}$ based Industrial PC <br> : Vision assisted point-to-point manual teaching and editing function, test run mode <br> : Barcodes scanning (1D and 2D), auto-loading of last product, etc. |
| Conveyor System | Incoming Conveyor Conveyor Width Adjustment Conveyor Direction Outgoing Communication | : Belt type edge conveyor with lifter <br> : Manual <br> : Left to right <br> : Options available <br> : SMEMA |
| Safety Features | E-stops, Mechanical Laser Shutter, Laser-safe Enclosure, Servo Overload Detection, Hepa Filter With Activated Carbon, In-machine Webcam |  |
| Dimensions \& Utilities | Machine Size ( $\mathrm{W} \times \mathrm{D} \times \mathrm{H}$ ) <br> Power Supply <br> Air Supply | $\begin{aligned} & : 1,200 \mathrm{~mm} \times 1,350 \mathrm{~mm} \times 1,850 \mathrm{~mm} \\ & : 208^{\sim} 240 \mathrm{~V} \\ & : 6 \text { bar } \end{aligned}$ |

