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TECHWIN's GREEN LASER FOR PCB MARKING

- TECHWIN'S ZK-G-300 IS WITH A HIGHER "532NM WAVELENGTH" WHICH GIVES YOU A FINER & SMALLER PRINTING CAPABILITY ON THE SUBSTRATE
- GREEN LASER IS A COLD LASER & PRODUCES NO HEAT/SMOKE
- THE PRINTING IS BASICALLY A CHEMICAL REACTION WITH THE COATING ON THE PCB & NOT BURNING OF ANY SURFACE, SO IT IS THE SAFEST & BEST FOR PRINTING ON PCB SURFACE WITH ALMOST NO FEAR OF DAMAGE TO THE PCB TRACKS ETC
- THE PRINTING QUALITY OF THE GREEN LASER IS THE BEST (READABILITY) EVEN AFTER CONFORMAL QUOTING. THE INTENSITY OF PRINT CAN BE ADJUSTED AS PER REQUIREMENT.
- THE LIFE OF THE LASER IS ABOUT 25,000HOURS
- REPLACEMENT COST OF LASER = USD 7,000/- ONLY
- CAMERA RESOLUTION : 2MP
- THE LASER SOURCE : INNGU-CHINA
- THE LASER CONTROLLER : TECHWIN-CHINA
- CAMERA : DAHENG-CHINA
- MOTOR'S & SERVO'S : PANASONIC-JAPAN

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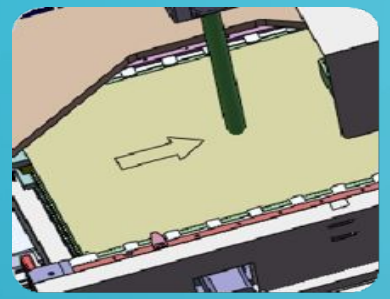
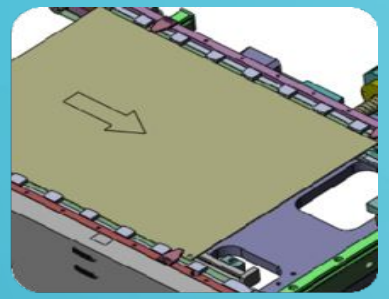
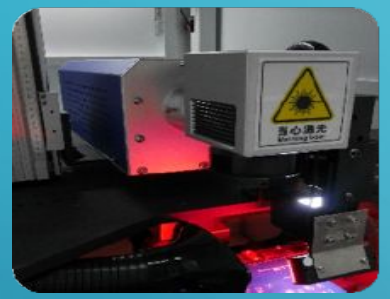
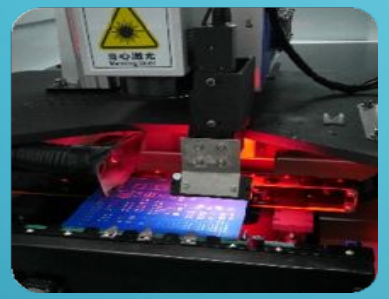

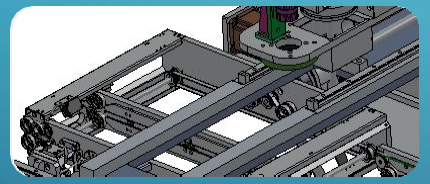

PCB MARKING MACHINE MAINLY FOR FPC OR PCB GREEN OIL AFTER THE CHARACTER AFTER MARKING BAR CODE, TWO-DIMENSIONAL CODE AND CHARACTERS, GRAPHICS AND OTHER INFORMATION, OFFLINE PRODUCTION, AUTOMATIC LOADING AND UNLOADING.

THE MACHINE CAN BE EQUIPPED WITH A FLIP PLATE MECHANISM TO ACHIEVE DOUBLE-SIDED CODING. IT INTEGRATES HIGH-PERFORMANCE UV/GREEN/FIBER/CO2 LIGHT SOURCE, HIGH-PIXEL IMPORTED CCD CAMERA AND HIGH-PRECISION XYZ MOBILE MODULE TO REALIZE AUTOMATIC POSITIONING BEFORE AND AUTOMATIC READING AFTER CODE PRINTING.

THE MARKING INFORMATION CAN BE GENERATED AUTOMATICALLY BY THE SOFTWARE SYSTEM OR RECEIVED OVER THE NETWORK. IT CAN CONNECT ME,S, ERP AND OTHER DATA SYSTEMS.

AUTOMATIC PCB LASER MARKING MACHINE IS A SPECIAL MACHINE FOR MARKING BAR CODE, TWO-DIMENSIONAL CODE, CHARACTERS, GRAPHICS AND OTHER INFORMATION ON THE PRINTING BOARD.

THIS EQUIPMENT CAN BE DIRECTLY CONNECTED TO SMT ASSEMBLY LINE FOR FULL AUTOMATIC PRODUCTION WITHOUT MANUAL OPERATION IN THE PRODUCTION PROCESS. IT CAN ALSO BE COMBINED WITH AUTOMATIC UPPER AND LOWER BOARD MACHINE TO FORM AN OFFLINE WORKSTATION. ONE DEVICE CAN CORRESPOND TO MULTIPLE ASSEMBLY LINES.

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TECHWIN's GREEN LASER FOR PCB MARKING

SERVO XY MOTION PLATFORM, INDUSTRIAL PC CONTROL, MODULAR FLEXIBLE PROGRAMMING DESIGN.

WITH GREEN LASER THE MINIMUM 2D CODE OF 32-BIT CHARACTERS OF 1MM*1MM CAN BE CARVED.

THREE-COLOR LIGHT SOURCE ILLUMINATION: THE COLOR CAN BE SWITCHED BETWEEN THREE COLORS, SO IT IS CONVENIENT TO READ THE ENGRAVING MARKS OF DIFFERENT COLOR BOARDS.

THE CONVEYOR BELT IS 900 +30 MM FROM THE GROUND, WHICH CAN DIRECTLY BUTT SMT. IT CAN SELECT THE DIRECTION OF MOVEMENT OF FEED AND DISCHARGE.

STANDARD SMEMA INTERFACE AND NETWORK COMMUNICATION FUNCTION CAN COMMUNICATE WITH UPSTREAM AND DOWNSTREAM DEVICES AND SERVERS.

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TECHWIN's GREEN LASER FOR PCB MARKING

Laser parameters	Laser source	Green
Processability	Laser wavelength	532nm
	Circuit Board Size	Maximum 280mm*300mm (customizable)
	Circuit Board Thickness	0.6-6mm (customizable)
	Repeated positioning accuracy	<0.005mm
	Minimum line width	±0.02mm
	Supporting Bar Code Types	Code128, Code39, EAN-8, UPC-A, BarCode, DataMatrix, QR and other two-dimensional codes 2DCode
	Way of entering plate	Left in right out/right in left out/ left in left out
Main configuration	Electric Working Platform	X-y Linear Module
	Positioning System	Side-axis CCD camera
	External Auxiliary Device	Negative Pressure Adsorption Dust Extraction System
	Power supply protection(optional)	USP, power failure can last 10 minutes
Use of environmental conditions	Power supply specification	220V/50Hz/2KW
	Gas supply specification	0.6Mpa
	Environmental requirements	Temperature 5-25 C, humidity <50%
	Whole machine size	1050mm*1150mm*1700mm

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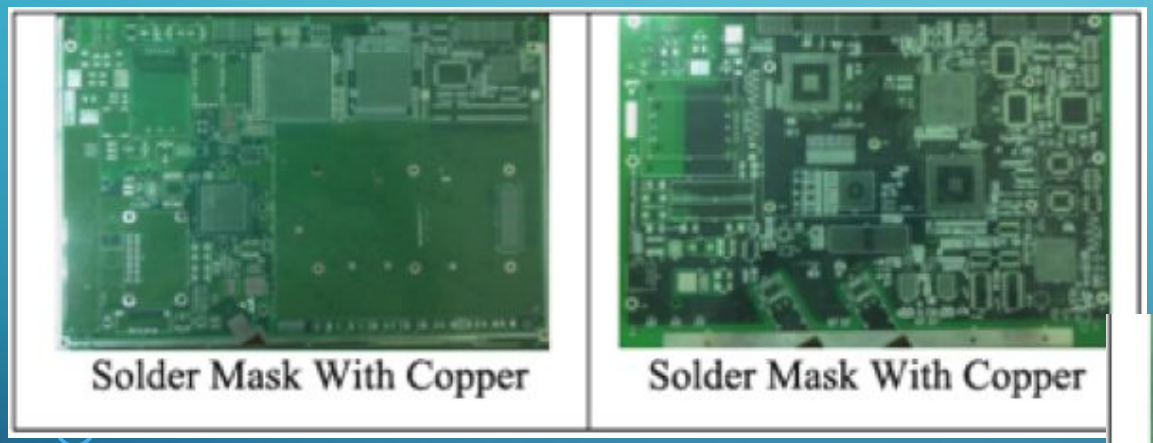
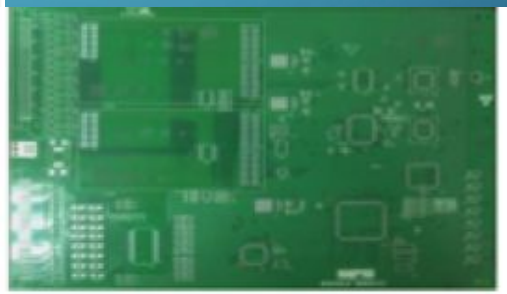
TECHWIN's GREEN LASER FOR PCB MARKING

TYPE OF LASER:

INDUSTRIAL LASER HAVING 3 DIFFERENT TYPES： FIBER OPTIC LASER, SEMI-CONDUCTOR LASER（GREEN、UV）, CO2 LASER
DIFFERENT TYPES OF LASERS PRODUCE DIFFERENT LABELING EFFECTS ON THE SURFACE OF THE PRODUCT DUE TO DIFFERENCES IN LIGHT WAVELENGTHS。


Solder Mask With Copper

Solder Mask With Copper


Solder Mask With No Copper


Solder Mask With No Copper

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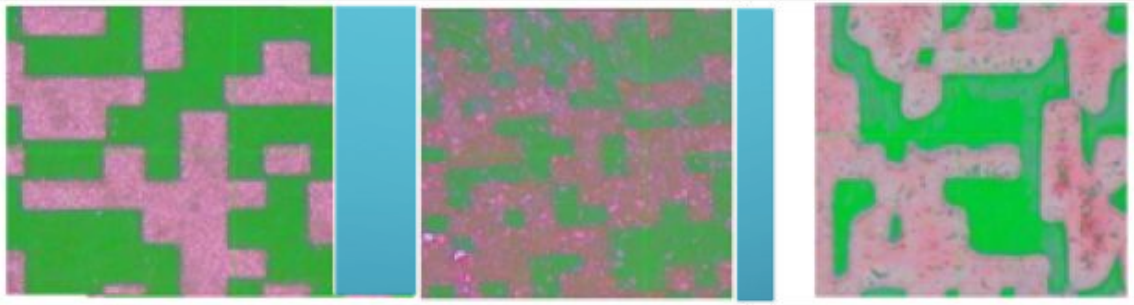
TECHWIN's GREEN LASER FOR PCB MARKING

Green Laser	IR Laser	CO2 Laser
		

Performance Comparison:

1) CO2 laser having thick lines, yellow or black phenomenon

2) Fiber Optic laser may have rough and unevenness interior texture

3) Green laser having better and clearly visible lines

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TECHWIN's GREEN LASER FOR PCB MARKING

BELOW IS A SHORT LIST OF TECHWIN'S GREEN LASER FOR PCB MARKING. THEIR CUSTOMER LIST IS QUITE LONG FOR ALL KINDS OF LASER. THE BELOW ARE THE BIGGER COMPANIES USING THEIR GREEN LASER FOR PCB MARKING…. DIRECTLY PURCHASED / EMS OF THESE COMPANIES PURCHASED

- CHANGHONG
- HAIER
- PHILIPS
- SUMSUNG
- TP-LINK
- DEFOND GROUP
- DELI
- BYD
- LITEON CHINA
- CHEROKEE INTERNATIONAL CHINA FACTORY , WHICH UNDER GE USA, (GENERAL ELECTRIC COMPANY)
- DJ-INNOVATIONS (UAV PRODUCT)

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TECHWIN's GREEN LASER FOR PCB MARKING

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GREEN LASER VS CO2 PCB MARKING

CO2 & GREEN LASER COMPARISON		
Model	ZK-CO2-10	ZK-G-300
Working principle type	GAS LASER	SOLID LASER
operating wavelength	10.6um	532nm
Working mode	In-line	In-line
Laser speed	0--2000mm/S	0--2000mm/S
Power	5W	10W
Product usage	PCB	PCB
Shortage description	1) Lack of refinement of the radium carving pattern 2) Burn risk if careless touch the Source at work 3) Smoke and dust is occur's when marking 4) Radium carving burn the PCB. 5) Laser life is short	1) Color of the radium carving pattern is gray 2) Higher Power Rating
Advantage description	1)Price bit lower than Green light	1)Many types of adaptation board; 2)No burn on PCB, no risk of burn on human body 3)Radium carving precision more than CO2 one 4) Can Mark a perfect 1.5mm*1.5mm code size 4)Speed of radium carving is faster than CO2 5)Code identification higher than CO2; best in class for readability after Conformal Coating 6)Laser performance is more stable than CO2 7)Less and dust than CO2 in production 8) Life of 25,000 Hours