

GODZILA PTE LTD/ Singapore

X系列在线激光雕刻机产品介绍

X series On-line Laser Marking Machine Product Presentation

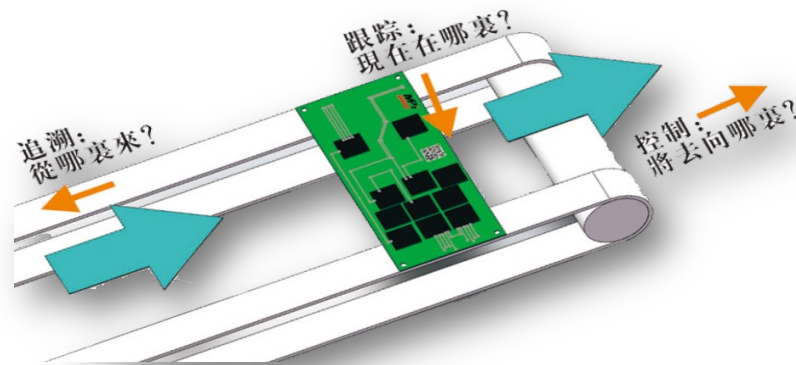


Prepared by Ken Peh
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在线激光雕刻机简述 On-line laser marking machine

激光雕刻设备实现**数据传输、刻印、读取**于一体的自动化刻印设备。适合电子行业刻印快速追溯自动化生产解决方案。

Laser marking system to realize data collection, marking, read and control integrated equipment. Suitable for industry marking celerity trace automation solutions.



二氧化碳激光器CO2 laser

满足不同产品需求

Meet the needs of different products

有机材料
Organic materials

塑料与薄膜
Plastic and film

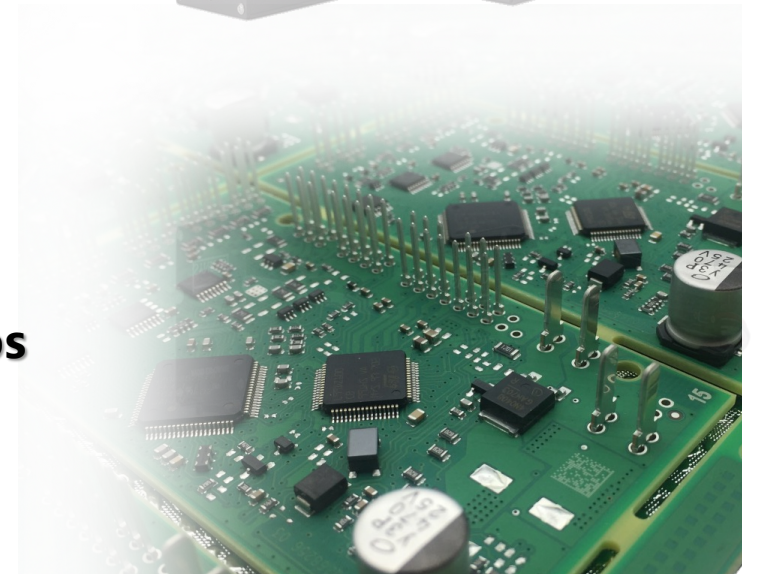
薄金属和锡箔
Thin metal and tin foil

其它
Others

多种功率，可适应不同场景下应用

A variety of power, suitable for different scenarios

风冷Air cooling: 5W、10W



激光器性能 Laser performance

用于低功率工业级CO2激光器的行业标杆。用于标记和编码应用的完美解决方案，适合最终用户需要较小机器以实现紧凑工厂设置的场所。

Industry benchmark for low power industrial grade CO2 lasers. The perfect solution for tagging and coding applications, suitable for places where end users need smaller machines to achieve compact factory settings.

- RF集成

RF integration

- 低功耗

Low power consumption

- 提供最小密封金属管CO2激光器

- Provide a minimum sealed metal tube CO2 laser

产品特性 Product Feature

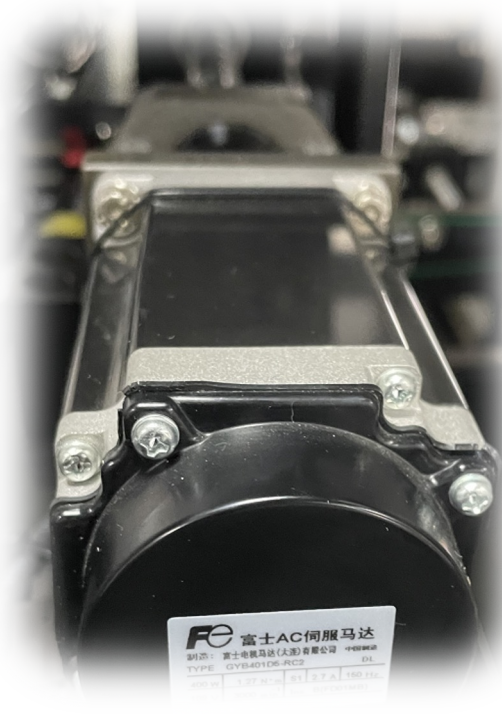
智能相机实现自动补正刻印，视觉影像处理系统能准确进行Fiduciai Mark和Bad Mark识别，翻板系统可实现双面二维码同打同读。

The intelligent camera realizes automatic correction and engraving, the visual image processing system can accurately recognize Fiduciai Mark and Bad Mark, and the Flap system can realize the double-sided two-dimensional code to type and read simultaneously.

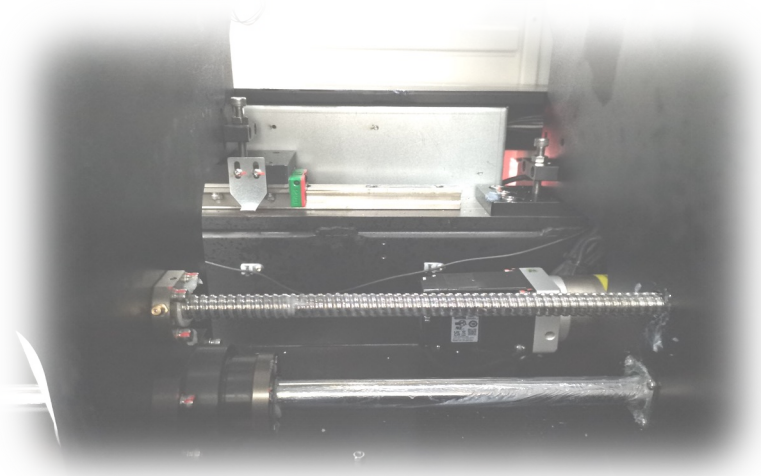
产品特性 Product Feature

日本伺服电机让设备性能更稳定，更可靠，可连续24小时作业。

Japan Servo motor : Make the equipment more stable, more reliable, continuous operation for 24 hours.

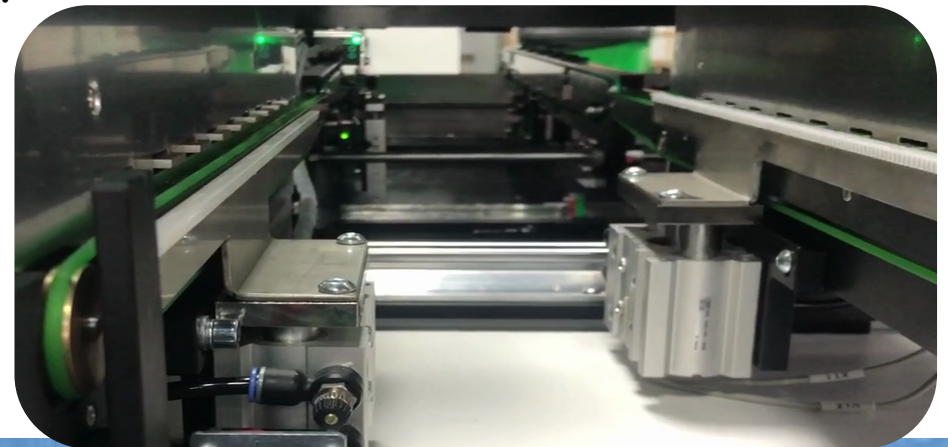
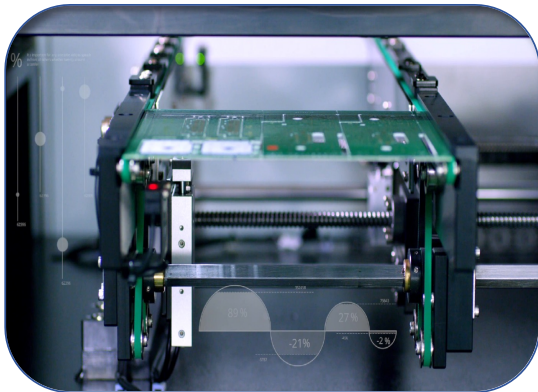


产品特性 Product Feature



XY驱动单元， 高标准的铸钢本体的XY丝杆， 为激光头的高速移动与精确打标提供强有力的保障。

XY drive unit: The XY screw rod of high standard cast steel body provides strong guarantee for the high-speed movement and accurate marking of the laser head.



产品特性 Product Feature

净化系统，设备自带烟雾净化系统，外置激烟净。减少粉尘对激光器的损害，有效保证生产无异味。

Purification system, the equipment has its own smoke purification system, external smoke clean. Reduce the dust damage to the laser, effectively ensure that the production of odor-free.



产品特性 Product Feature

系统兼容，生产管理系统与雕刻机系统可兼容对接追溯系统，设备可直接接收MES指令工单生产作业。亦可按指定编码规则自行生成二维码，刻印后同步上传。

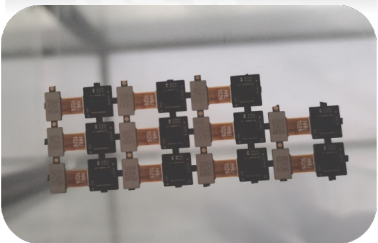
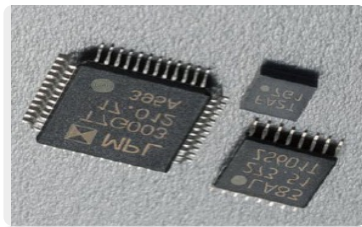
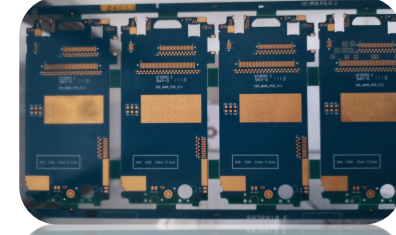
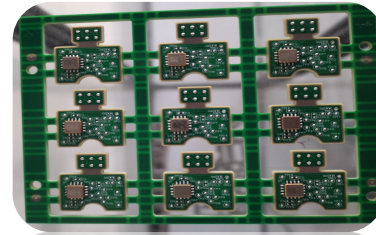
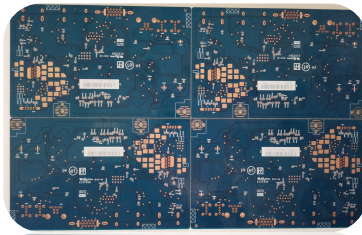
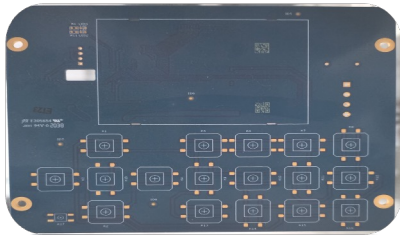
The production management system and the engraving machine system can be compatible with the docking traceability system, and the equipment can directly receive MES instruction ticket production operations. You can also generate your own QR code according to the specified rules, and upload it synchronously after engraving.



工艺对比 Process comparison

类别 Category	激光雕刻机 Laser marking machine	贴标 Label	喷码 Spurt code
追溯可靠性 Traceability reliability	高 (永久标记) High (permanent mark)	低 (易去除、更换) Low (easy to remove, replace)	低 (易去除、更换) Low (easy to remove, replace)
耗材 Supplies	无 None	高温标签、打印油墨 (费用较高) High Temperature label, printing ink (higher cost)	喷码油墨、喷头清洗剂 Inkjet ink, nozzle cleaning agent
环保能力 Environmental capacity	无污染 No pollution	标签耗费、化学油墨污染 Label consumption, chemical ink pollution	化学油墨污染 Chemical ink pollution
标记效果 Mark effect	精细 (最小码0.8mm) Fine (minimum size 0.8 mm)	粗糙 Rough	粗糙 Rough
标记位置要求 Mark location requirements	无需预留、根据要求寻找空位 No need to reserve, according to the request to find space	需要预留较大空间 Need to reserve a large space	需要特定附着面 (白油), 预留较大空间 Need specific adhesion surface (white oil), reserve a large space
适用范围 Scope of application	PCB、PCBA、金属、非金属等 PCB, PCBA, metal, non-metal, etc.	仅可对应 PCB PCB only	仅可对应特定要求的表面 The surface of a particular requirement only
标刻原理 Principle of marking	不接触雕刻表面 Do not touch the carved surface	接触表面有压力效果 The contact surface has a pressure effect	油墨喷射接触表面 Ink jet contact surface
人工效率 Artificial efficiency	Efficient production (0.2 seconds per unit)	人工贴标效率极低 Extremely inefficient	效率低于镭雕 Less efficient than radium carving

应用案例Case



GODZILA Pte. Ltd.
40 Lloyd Road, #04-44, Lloyd court, Singapore 239107

Tel:+65-6468 3991, Fax: +65-6482 3262
Email: tts_sing@singnet.com.sg

部分生产案例 Product Feature



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X系列产品-U技术参数 Specification

设备名称 Product Name	CO2激光雕刻机 CO2 laser marking machine	CO2激光雕刻机 CO2 laser marking machine	CO2激光雕刻机 CO2 laser marking machine	CO2激光雕刻机 CO2 laser marking machine	CO2激光雕刻机 CO2 laser marking machine	CO2激光翻板机 CO2 Flap laser marking machine	CO2激光翻板机 CO2 Flap laser marking machine	CO2激光翻板机 CO2 Flap laser marking machine
设备型号 Modeled NO	X1	X4	X4-P	X5	X5-P	X4-T	X4-PT	X5-KT
线路板刻印方式 PCB Marking mode	单面刻印 single-sided Marking					双面刻印 Double-sided Marking		
线路板尺寸 PCB size	50*50-450*400mm	50*50-450*400mm	50*50-450*400mm	50*50-510*460mm	50*50-510*460mm	50*50-450*400mm	50*50-450*400mm	50*50-530*510mm
激光类型 Laser type	CO2	CO2	CO2	CO2	CO2	CO2	CO2	CO2
激光波长 Laser wavelength	10.6um							
激光点径 Laser electricity	0.15mm	0.11mm	0.11mm	0.11mm	0.11mm	0.11mm	0.11mm	0.08mm
激光功率 Laser power	10W	10W	5W	10W	5W	10W	5W	30W
冷却方式 Cooling way	空气冷却/Air cooling							
工作方式 Way to work	XY轴移动/XY axis move							
支持刻印类型 Support Marking Type	一维码, 二维码, 文字图形/1D ,2D Bar Code,Text graphics							
循环时间 Cycle Time	移动 < 1S, 刻印时间 < 0.3S/transfer < 1 seconds,Marking Time < 0.3seconds							
传送方向 Transport Direction	左→右或右→左/L→R or R→L							
轨道高度 Conveyor Height	900±20mm							
通讯方式 Communication methods	TCP、FTP、webservice及用户指定协议 TPC、FTP, webservice and User specified protocol							
输入电压 Input voltage	AC 200-230V 10A 50/60HZ							
气压 Air pressure	0.5MPa							
外形尺寸 Overall dimensions	900*1450*1650mm	900*1450*1650mm	900*1450*1650mm	1100*1570*1650mm	1100*1570*1650mm	1000*1550*1750mm	1000*1550*1750mm	200*1750*1800mm
设备重量 Equipment weight	650KG	650KG	650KG	750KG	750KG	750KG	750KG	850KG

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