

DEDICATED TO
PRECISION

让精密制造改变世界





东莞园区
Dongguan Garden

Shenzhen Tensun Precision Equipment Co., LTD. (hereinafter referred to as "Tensun Precision") was established in July 2006. Tensun Precision integrates R&D, design, production, sales and service of precision equipment, and is a state-level high-tech enterprise and a key state-level specialized and special new little giant enterprise.

Tensun Precision is headquartered in Shenzhen, with two production bases in Longhua District, Shenzhen and Xiegang Town, Dongguan, an application testing laboratory in Suzhou, and agents or offices in Chengdu, Taiwan, South Korea, Singapore, Malaysia and Thailand. Leading the development of the industry with world quality, is the partner of more than 50 domestic and foreign leading enterprises.

Tensun Precision continues to focus on the technology research and development and innovation of precision equipment, currently has the core module design of precision equipment, precision operation control platform development, machine development and automation system integration capabilities, products include precision dispensing equipment, precision cutting (slicing) equipment, precision bending body equipment and 3C automation custom equipment, etc. It has been widely used in 3C consumer electronics, display/screen and semiconductor packaging.

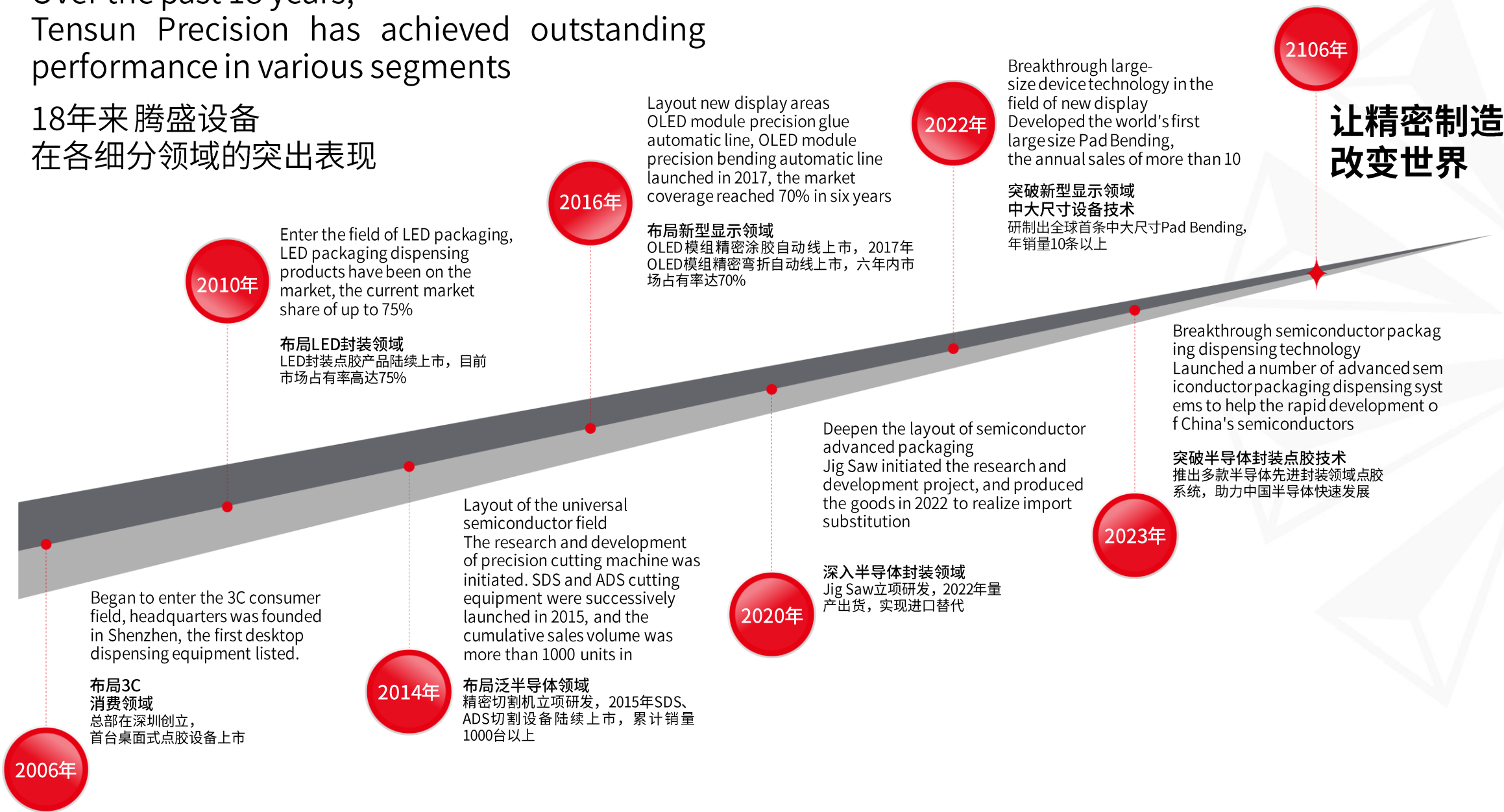
深圳市腾盛精密装备股份有限公司（以下简称“腾盛精密”）成立于2006年7月。腾盛精密集精密装备的研发、设计、生产、销售和服务为一体，是国家级高新技术企业、重点国家级专精特新小巨人企业。

腾盛精密总部位于深圳，在深圳龙华区和东莞谢岗镇建设有两个生产基地，在苏州设有应用测试实验室，以及在成都、台湾地区、韩国、新加坡、马来西亚、泰国设有代理商或办事处。以世界品质引领行业发展，是50多家国内外头部企业的合作伙伴。

腾盛精密持续专注于精密设备的技术研发与创新，产品包括精密点胶设备、精密切割（划片）设备、精密弯折线体设备以及3C自动化客制设备等，已被广泛应用于3C消费电子、显示/屏幕及半导体封装等领域。

Over the past 18 years,
Tensun Precision has achieved outstanding
performance in various segments

18年来 腾盛设备
在各细分领域的突出表现



Continue to invest money and manpower in R&D and innovation of key technologies

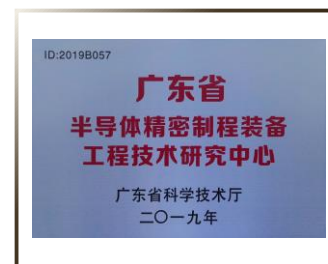
持续在研发上投入资金与人力
以保持核心技术的领先

Employees
As of 2023.12
500+

R&D
staffs
240+

R&D
investment
>10%

Patents
-
222+



Deep cultivation of the three major industries has a wealth of process solutions

深耕三大产业 拥有丰富的制程工艺解决方案

Semiconductor Packaging

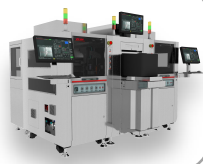
半导体封装

Jig Saw



Wafer level packaging dispensing

晶圆级封装点胶



Substrate level packaging dispensing

基板级封装点胶



SIP package spray tin

SIP封装喷锡



Tape Saw



3C Assembly

3C组装

Universal dispensing

通用型点胶



Precision component/Module dispensing

精密部件/模组点胶



Surface five-axis linkage dispensing

异形五轴联动点胶



New Display

新型显示

Mini LED dispensing

Mini LED点胶



OLED BPL gluing

OLED BPL涂胶

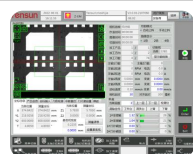


OLED Pad Bending

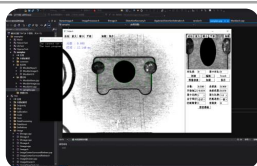
OLED Pad Bending弯折



Basic platform core technology
基础平台核心技术



Operation control software platform
运控软件平台



Vision software platform
视觉软件平台



Precision motion platform
精密运动平台



Precision valve body
精密阀体



Linear motor module
直线电机模组

Semiconductor packaging process cutting and sorting automation process solution -FDS3200

半导体封装制程切割分选自动化工艺解决方案-FDS3200

Master **JIG SAW** core technology

掌握 **JIG SAW** 核心技术

3×3mm Cutting Engine & Special motor /UPH > 20.6K/ Minimum machining size 3×3mm

切割引擎&专用电机/UPH>20.6K/最小加工尺寸3×3mm



Suitable for QFN/BGA/LGA/DFN and other mainstream products
适用于QFN/BGA/LGA/DFN等主流产品



Precision Cutting process solution for semiconductor packaging Process -ADS2100

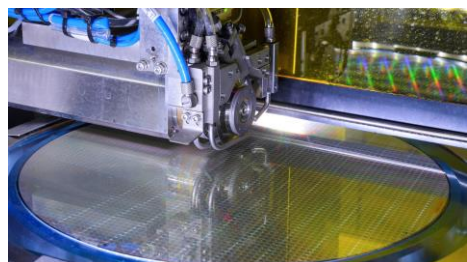
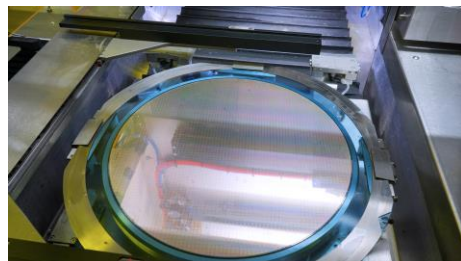
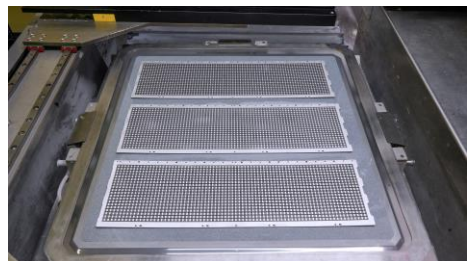
半导体封装制程精密切割工艺解决方案-ADS2100

8~12 inch Large size **TAPE SAW**

8~12吋大尺寸**TAPE SAW**

sales 1000+ / Maximum processing size 300×300mm

销量1000+ / 最大加工尺寸300×300mm



Applicable to Wafer/QFN/BGA/LED chip /LED package /SIP, etc
适用于Wafer/QFN/BGA/LGA/LED封装/SIP等



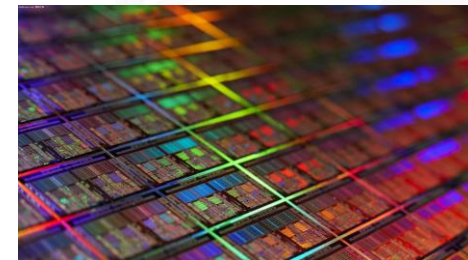
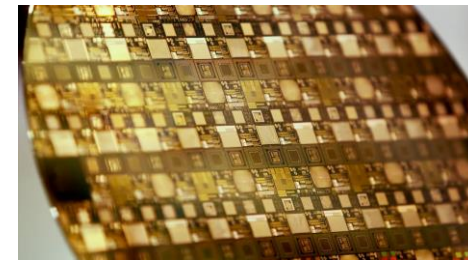
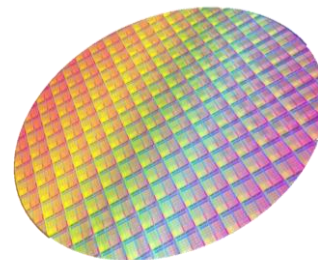
Wafer-level dispensing process solution for semiconductor packaging -WDS2500

半导体封装制程晶圆级点胶工艺解决方案-WDS2500



Wafer level packaging dispensing 超精密晶圆级封装点胶

Compatible with 8~12 "Wafer/repeated positioning accuracy $\pm 3\mu\text{m}$
兼容8~12吋Wafer /重复定位精度 $\pm 3\mu\text{m}$



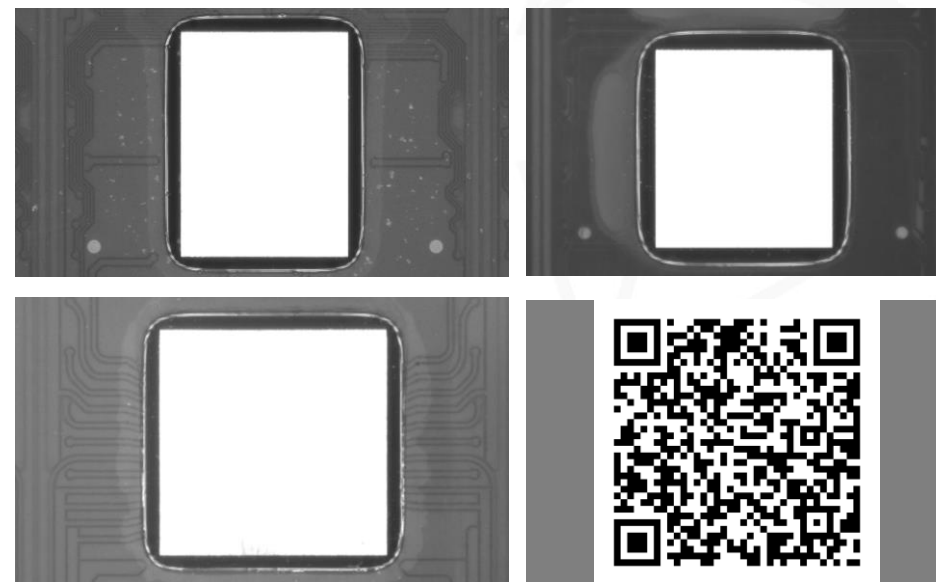
Suitable for wafer-level Underfill and Coating processes
适用于晶圆级Underfill、Coating工艺

Substrate level dispensing process solution for semiconductor packaging process -Sherpa900

半导体封装制程基板级点胶工艺解决方案-Sherpa900

Designed for **underfilling** process 专为**底部填充**工艺研制

Support tilt spray /KOZ narrowest 200 μ m
选配倾斜喷胶系统/KOZ最窄200 μ m



Suitable for FCBGA/FCCSP/SIP packaging industry
适用于FCBGA/FCCSP/SIP封装行业

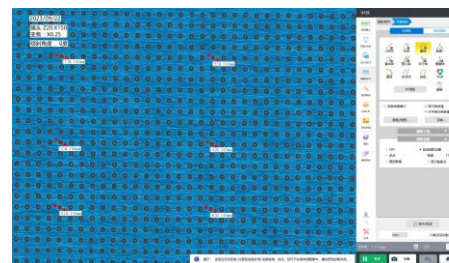
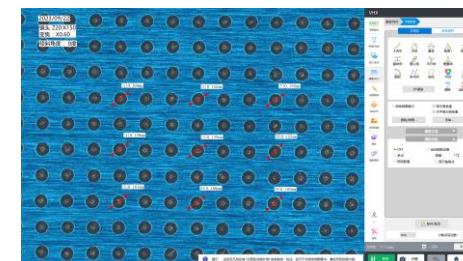
Semiconductor Packaging Process SIP High Speed tinspray process solution -Sherpa700

半导体封装制程SIP高速喷锡工艺解决方案-Sherpa700



Industry-leading **tin spray** technology 行业领先的**喷锡技术**

Minimum point diameter 150 μ m/ Frequency 150Hz/ acceleration 3G
最小点径150 μ m/频率150Hz/加速度3G



Suitable for high speed Solder/Sliver Dispensing process
适用于高速Solder/Sliver Dispensing工艺

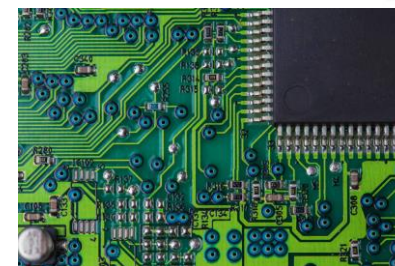
3C assembly process general dispensing process solution -Sherpa65

3C组装制程通用点胶工艺解决方案-Sherpa65



Universal dispensing machine 通用型点胶机

Integrated casting frame/linear motor drive
一体式铸件机架/直线电机驱动



Suitable for PCB, FPC and other board level Underfill/
component encapsulation/bonding sealing/coating, etc
适用PCB、FPC等板级Underfill/元件包封/粘接密封/涂覆等

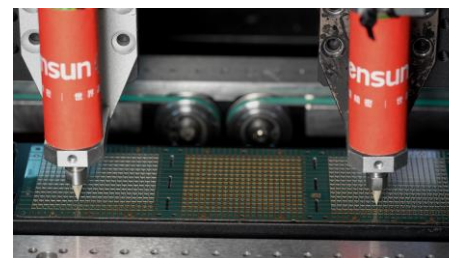
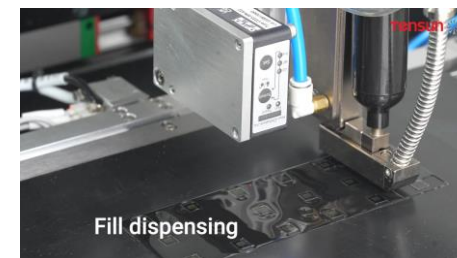
3C assembly process precision module dispensing process solution -Sherpa83

3C组装制程精密模组点胶工艺解决方案-Sherpa83



Double-head double-station module dispensing 双头双工位模组点胶

Dual valve asynchronous/simultaneous processing of
two processes/efficiency increase by more than 80%
双阀异步/同时处理两种工艺/效率提升80%以上



Suitable for Dam&Fill/MEMS dispensing process
适用于Dam&Fill/MEMS点胶工艺

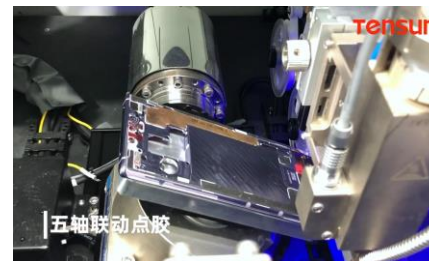
3C Assembly process profiled/curved dispensing process solution-FD300

3C组装制程异形/曲面点胶工艺解决方案-FD300



Surface five-axis linkage dispensing 异形五轴联动点胶

Repeated positioning accuracy $\pm 5\mu\text{m}$ / two-station five-axis platform
重复定位精度 $\pm 5\mu\text{m}$ /双工位五轴平台



Suitable for VR/ mobile phone frame/mobile phone screen
and irregular complex curved surface
适用于VR/手机中框/手机屏幕及异形复杂曲面

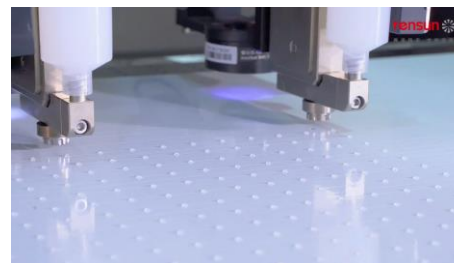
Mini LED precision dispensing process solution-Sherpa63

Mini LED制程精密点胶工艺解决方案-Sherpa63

Focus on **Mini LED** three major processes

聚焦**Mini LED**三大工艺

Dam/Lens/Fill/ Accuracy $\pm 5\mu\text{m}$ / Efficiency increased by 20%
Dam/Lens/Fill/精度 $\pm 5\mu\text{m}$ /效率提升20%



Suitable for glass substrate, PCB substrate precision dispensing process
适用于玻璃基板、PCB基板的精密点胶制程

OLED Process BPL coating process Solution-TS BPL

OLED制程BPL涂胶工艺解决方案-TS BPL

Make the **BPL** apply more evenly 让**BPL**涂胶更均匀

TT \leq 4.5s/coating thickness accuracy $80\pm 15\mu\text{m}$ / yield $\geq 99.9\%$ / Utilization $\geq 98\%$
TT \leq 4.5秒/涂布厚度精度 $80\pm 15\mu\text{m}$ /良率 $\geq 99.9\%$ /稼动率 $\geq 98\%$

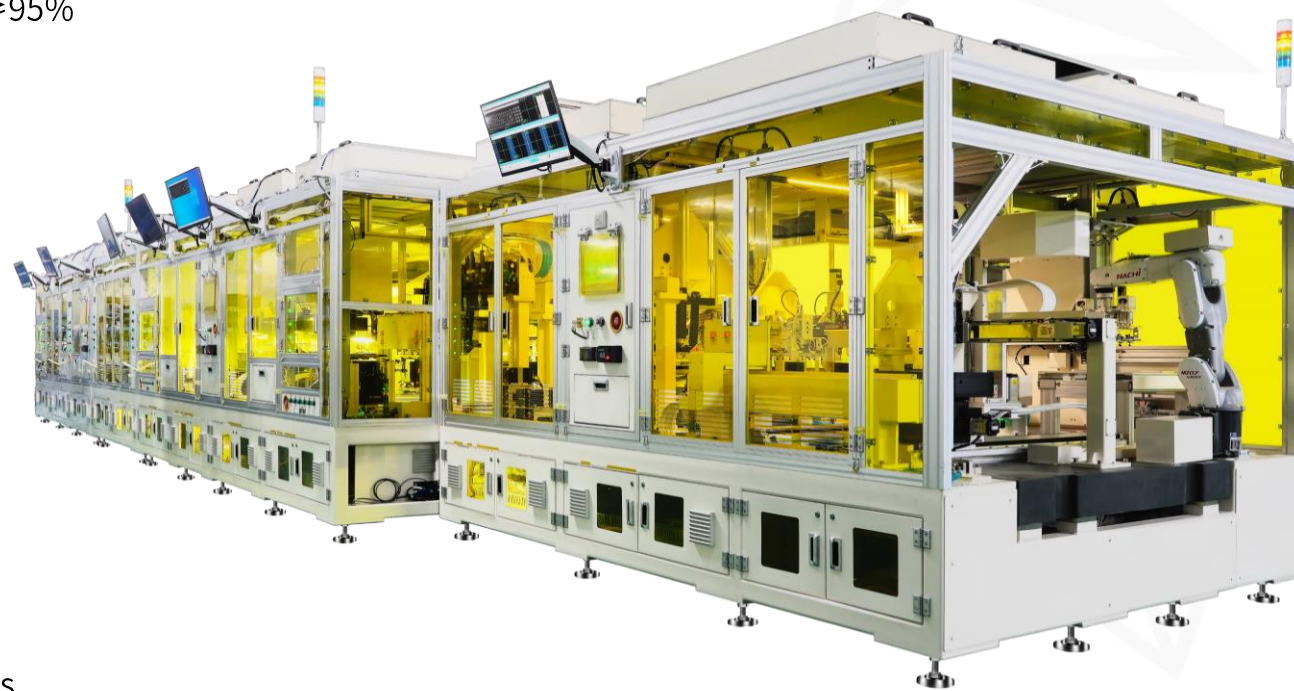


Suitable for automotive, 3C consumer electronics and other fields
适用于汽车、3C消费电子等领域

OLED Bending process solution -TS Pad Bending
OLED制程弯折工艺解决方案-TS Pad Bending

The first Pad Bending in China 国内首条Pad Bending

TT ≤ 4.5s/bending accuracy ±50um/yield ≥99.9%/ Utilization ≥95%
TT ≤ 4.5秒/弯折精度 ±50um /良率 ≥99.9%/稼动率 ≥95%



Suitable for automotive, 3C consumer electronics and other fields
适用于汽车、3C消费电子等领域

Precision dispensing valve performance reached the international advanced level

精密点胶阀性能达到业界领先水平



New generation of piezo injection valve JVS200
新一代压电喷射阀JVS200



Two-component auger dispensing valve DSP900
双组份螺杆式点胶阀DSP900



Solder paste injection valve JVS100
锡膏喷射阀JVS100



Piezo injection valve JVS96
压电喷射阀JVS96



Auger dispensing valve SVS81
螺杆式点胶阀SVS81



Volumetric dispensing valve SPP-H9
容积计量式点胶阀SPP-H9

Performance

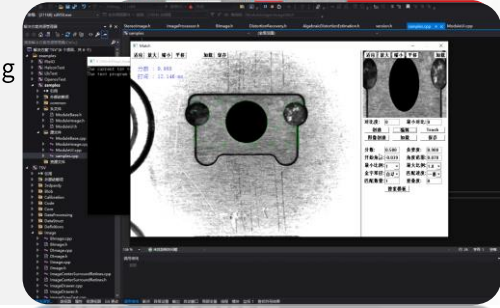
- Meet Underfill, UV, Solder Paste, Silver Glue and other process dispensing
- Piezo injection valve, ultra-micro peristaltic tin point valve, auger valve, volumetric dispensing valve, etc
- The minimum glue point diameter is 100 μ m, and the minimum glue dispensing quantity is 0.5nl
- Glue output accuracy 1mg \pm 5%@CPK 1.33

性能

- 满足Underfill、UV、Solder Paste、Silver Glue等制程点胶
- 压电喷射阀、超微量蠕动式点锡阀、螺杆阀、容积计量式点胶阀等
- 最小胶点直径100 μ m，最小点胶量0.5nl
- 出胶量精度1mg \pm 5%@CPK 1.33

With core module design, precision operation control platform development, machine development and automation system integration capabilities

具备核心模块设计、精密运控平台开发、整机研制及自动化系统集成能力

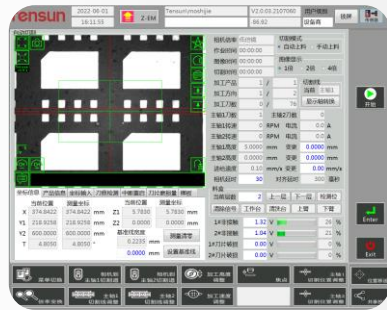


Vision software platform

Independently developed TSV vision system, using standardized, modular, intelligent development ideas, fully cater to the industry 4.0 intelligent manufacturing era.

视觉软件平台

自主开发TSV视觉系统，采用标准化、模块化、智能化的开发思路，全面迎合工业4.0智能制造时代。

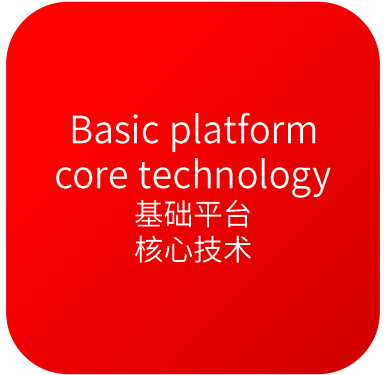


Operation control software platform

Independently developed RUZ motion control system, supports up to five axis linkage interpolation control, suitable for various models of motion control.

运控软件平台

自主开发RUZ运动控制系统，支持最多五轴的联动插补控制，适应各种机型的运动控制。



Linear motor module

Independently developed linear motor, flexible adaptation according to application scenarios.

直线电机模组

自主研制直线电机，根据应用场景灵活适配。



Precision motion platform

Independently developed precision motion platform, whether it is standard equipment or customized equipment, can ensure that the equipment structure is more reasonable and the function is more comprehensive.

精密运动平台

自主研制精密运动平台，无论是标准设备还是定制设备，都能保证设备结构更合理，功能更全面。

Precision valve body

Independently developed a variety of precision valve bodies, fully meet the three industries of precision dispensing needs. Independently developed a variety of precision valve bodies, fully meet the three industries of precision dispensing needs.

精密阀体

自主研制各种精密阀体，全面满足三大行业的精密点胶需求。



Establish good cooperative relations with 50+ industry leading enterprises
与50+行业头部企业建立良好合作关系



Never forget original intention
Keep the mission firmly in mind
不忘初心 牢记使命

Mission Precision manufacturing changes the world

Vision Become a world-class equipment enterprise

Value Achieve customers, achieve strivers, fight entropy increase

使命 让精密制造改变世界

愿景 成为世界级精密装备企业

价值观 成就客户、成就奋斗者、对抗熵增



腾盛精密 世界品质

THANK YOU !



深圳市腾盛精密装备股份有限公司
Shenzhen Tensun Precision Equipment Co., Ltd.
网址: www.tensun.cn 服务热线: 400-885-0766

Authorized Business Partner In Malaysia

Fanco Precision (M) Sdn Bhd

Address : No. 30 & 32, Persiaran Perindustrian Pengkalan 8, Kawasan Perindustrian Pengkalan, 31500 Ipoh, Perak, Malaysia.
Email : ymfan@fanco-precision.com, sales@fanco-precision.com Contact : +605-3212108
Webpage : <https://www.fanco-precision.com/>

