



PCBA TEST & INSPECTION SOLUTIONS

SMT / PCBA EQUIPMENT SOLUTIONS

SMT SPARES & CLEANING SYSTEMS

PCBA TOOLS & OTHER PERIPHERALS



Koritsu

www.kyoritsuelectric.com

MUMBAI | NEW DELHI | PUNE | BANGALORE | CHENNAI

Kyoritsu Electric India was established in India since 2008 as a 100% Subsidiary of Kyoritsu Electric Corporation & Kyoritsu Test System-JAPAN, for marketing, sales & after sales global support of their state-of-the-art PCBA In-Circuit Testers & Function testers manufactured in Shizuoka, Japan.

With a strong presence in the Asian market since the year 1994, Kyoritsu Electric India has supplied over 100 ICT machines of TESCON, Japan (brand model -Point 70MB).

Later, with our strategic merger with TESCON in 2001, Kyoritsu Electric India trail-blazed the New Generation ICTs (Focus 2000, ALMAX) in the Indian market, catering to many EMS & OEMS with more than 500 of these Next-Gen, Hi-Tech ICTs.

Scaling-up on the portfolio of products & services offerings, Kyoritsu Electric India now also offers SMT turnkey solutions, an extensive range of SMT peripherals & accessories and SMT industry consumables which are essential for mass production. Kyoritsu also provides factory automation to major automotive giants across the globe & India.

Our customer-centric support team is well spread-out across the country including strategic presence in the metropolitan cities of New Delhi, Mumbai, Pune, Bangalore, Chennai, Ahmedabad & Hyderabad.

Kyoritsu Electric India team proudly associates itself with the Make-in-India initiative by working as a consultant training partner for the ESSCI SKILL DEVELOPMENT PROGRAM & assisting them to set-up skill development centers with live SMT lines, across India.

Kyoritsu Electric India is also one of the prominent manufacturers & suppliers of ICT Test Jigs & Function Test Jigs with highly sophisticated & modernized infrastructure for in-house jig manufacturing. We have highly sophisticated & modernized infrastructure for in-house manufacturing of test jigs. Not only do we offer ICT Test jigs for Kyoritsu brand machines, but also for other brands like Agilent, Teradyne, Spea, TRI, OKANO, etc.

Kyoritsu Electric India has a world-class team of highly qualified and experienced engineers, especially in the field of PCBA testing, who are well equipped with the knowledge of ICT + FCT machines application, technical & service support, pin fixture development, fabrication & debugging.

**YOUR TRUSTED PARTNER IN CUTTING EDGE TECHNOLOGY FOR COST OPTIMISED
PCBA AND SMT TEST & COMPLETE TURNKEY SOLUTIONS**

Vision

To design, develop customized futuristic PCBA test systems & test fixtures as well as offer Industry 4.0 enabled smart SMT Line manufacturing system & integrated factory automation solutions, which empowers diverse electronic sectors across geographies to craft world-class products with efficacy.

Mission

To understand the stated & unstated needs of customers by practicing a customer-centric approach with focus on innovation and continuous improvement of critical-to-quality deliverables with on-time service support, no matter how simple or complex.

PCB TEST & INSPECTION SOLUTIONS

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FOCUS-2000 (ICT+MDA)
IN-CIRCUIT TESTER

Features:

- ✓ Fastest ICT + MDA in the Market
- ✓ Patented Ultra Advanced Solid State Switching Technology
- ✓ Comprehensive Test Coverage
- ✓ Easy Maintenance

Available options:

- ★ Barcode reader
- ★ HP Test Jet
- ★ Kelvin Measurement
- ★ JTAG Test
- ★ Data base server
- ★ HV function
- ★ CE marking

Test Specification:

- Test points
- 256 pins (Standard) ~ 2,048 pins (MAX)
- Expandable by 128 pins switching card, upto 16,000 pins configuration (As an option)

Test coverage:

- Short / Open Optimum detection on all pin
- Resistor, Capacitor, Indicator, Diode, Transistor,
- Digital Transistor, Photo coupler, Jumper,
- IC Pin floating test, IC programming and J-TAG Test

Test Step:

Unlimited (The number of test step is limited by recorder)

FX SERIES MODULES
EXCLUSIVE FEATURES:
AVAILABLE MODULES:


- ✓ High Speed Test
- ✓ Each and every pin test
- ✓ Operation
- ✓ Super compact size
- ✓ Use semiconductor Photo MOS relay
- ✓ USB 2.0 Controlled for FX-Modules
- ✓ OS Windows 10
- ✓ Function software FX-Builder

- ★ Fx-210 Short Open Tester
- ★ Fx-600 Relay Unit
- ★ Fx-510 Isolated Digital I/O
- ★ Fx-300 Digital Multi-meter
- ★ Fx-610 32 x 4 Multiplier Unit
- ★ Fx-950 LED Analyser
- ★ Fx-320 Digital Oscilloscope
- ★ Fx-700 Multi Function
- ★ Fx-500 128 CH Digital I/O

FOCUS 4000 (ICT + MDA+ FCT)
COMBINATION TESTER


Focus 4000 consists of integrated combination tester for carrying out In-circuit as well as function testing for the PCBA under one Tester. Focus 4000 is combination of powerful ICT Focus 2000 & Focus - FX modules.

Key Features:

- ✓ Low cost, compact and modular structure
- ✓ FX modules can also operate as an independent measurement unit via a personal computer
- ✓ Connects via the USB 2.0 bus and capable of achieving measurement
- ✓ Standardization of functional test program utilizing the program generator
- ✓ Function testing module: Open/short test, digital I/O, digital multi-meter, Relay Unit, Digital oscilloscope, multifunction
- ✓ Built in self diagnostics board to check on the conditions of measurement board
- ✓ In addition to above listed function tester features all the features of Focus 2000

ALMAX - 2000
IN-LINE ICT

Features:

- ✓ Almax ICT is fully automated In-line In-Circuit test system for high volume production
- ✓ Built on industry's leading MDA + ICT (Focus 2000)
- ✓ Easy maintenance and fixture change.
- ✓ Short Wire Fixture
- ✓ Small footprint, better mobility
- ✓ Fastest throughput
- ✓ Delivers the fastest ramp up of test coverage among all similar-category testers
- ✓ SMEMA Support
- ✓ Full automation capabilities reduce labor costs
- ✓ Reduced human contact to minimize contamination and ESD damages to the assemblies
- ✓ Easy Software for programming & debugging

ATE/EOL TEST EQUIPMENT


We provide compact ATE's platform along with fixturing solution for Bench-top as well as stand-alone testing. The test procedures can be customized and automated to meet the customer requirements with test steps & go/no-go limits program in the software window.

- ✓ Faster test throughput with improved test consistency
- ✓ Automated flash programming, test measurement logging, functional test, vision test, boundary scan etc.
- ✓ The simplified MMI which is developed by our team on different software platform such as lab view, visual basic, python, Fx builder etc. assist the operator with ease of programming and identification of test results without any advance training
- ✓ Our systems provide easy implementation of control applications, communication protocols, traceability for device under testing (DUT)
- ✓ Kyoritsu make ATE/EOL test equipment is ideal to support high volume & high mix products and increases the production rate through concurrency in manufacturing and reducing the operating cost by automated test solutions

ICT AND FCT TEST PINS & PROBES
TEST PINS & TEST PROBES


Kyoritsu Electric has been long associated with QA for distribution & use of their Test Pins & Probes in India. 90% of Test Jigs developed by us are fitted with these Test Pins & Probes. Their Quality with cost advantage is unmatched. These Test pins/ probes are meticulously quality control checked using leading-edge measuring equipment as well as the extensive production capacities allows for multi-item low volume production and enables us to produce optimal products with excellent response time to a rapidly changing market environment, worldwide, while meeting a wide variety of customer needs.

These Test Pins & Probes have long lasting life with excellent quality & are economical with ex-stock availability with Kyoritsu Electric India Pvt. Ltd.

ICT FIXTURE & FUNCTIONAL TEST JIGS

MADE IN INDIA-TEST FIXTURES & JIGS

Kyoritsu Electric India Pvt. Ltd. is engaged in manufacturing and supplying ICT Fixtures & Function Test Jigs. We have highly sophisticated & modernized infrastructure for in-house manufacturing of Test-Jigs, with a capacity to develop 70-80 Jigs per month.

The Kyoritsu Advantage:

- ✓ Dedicated team of experienced engineers for ICT & FCT Test Jigs development & technical support including pin fixture development, fabrication & debugging
 - ✓ Fixtures are developed by us using 80 % imported & branded materials like Pogo pins, Anti-static plates, etc.
 - ✓ Shortest lead time for fixture development guaranteed
 - ✓ A dedicated project management process ensures continual communication with you through the design, build, verification, acceptance and lifecycle management stages
 - ✓ Localized team & resident engineers in major metropolitan cities – Mumbai, New Delhi, Pune, Bangalore, Chennai provides prompt service support for on-site fixture installation to customers
 - ✓ Our facility has a capacity to manufacture 70-80 Jigs per Month
- With over 3000+ ICT Test Jigs & 600+ FCT Test Jigs supplied to various customers across India, our company has vast experience in this field

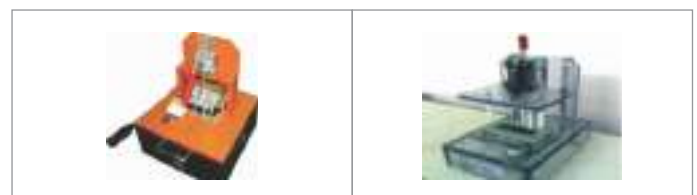
Pneumatic Test Fixture for ICTs (Tescon/Kyoritsu, Okano, TRI, Agilent, Teradyne, Checksum, Spea, etc.)



Vacuum Test Fixture for ICTs (Agilent Technologies, Teradyne, Genrad, SPEA, etc.)



Manual Test Jigs and Fixtures for Functional Testing



KM Series Test Jigs



RE-FURBISHED ICT MACHINES SALES / RENTAL

We offer Refurbished ICT Machines for brands like Agilent, Teradyne, Genrad, etc and also essential spare parts for the same.

Agilent i3070 Series2/3/5 ICT Tester:

ASRU C Card, ASRU N Card, Control XTP Card, PC Controller with Unix, Agilent 3070 Vacuum Valves, etc.

Teradyne TS ICT:

ICA Board, REF PID, Ultra II 124 Pin Card, AFTM Card, PCI GPIB Card, etc.

Genrad ICT:

MTG Board, HSC Board, Combo II Pin Card, DSM Card 8M, PCI Control Rocket Card, etc.

Agilent i1000 ICT:

Control Card, Measuring Card, AR Analog Pin Card, DR Hybrid Card, etc.



Agilent i3070 Series2/3/5 ICT Tester



Genrad ICT

- Buying & Selling
- On-Site Setup and Diagnosis
- Hardware and Software Training
- Service Support Contract
- Reconditioning & Refurbishment
- Maintenance and Repair
- Upgradation
- Rental



Teradyne TS ICT



Agilent i1000 ICT

LED TEST SOLUTIONS & LED ANALYZER

The Feasa Analyzer is an innovative solution for testing multiple LEDs simultaneously for Color and Brightness. There are two Models, Feasa-I (ICT) and Feasa-F (Functional). These can be ordered in 3, 5, 10 and 20 Channel configurations.

Automotive: Interior & Exterior lighting, Brake lights, Headlights & mood lighting, LED Backlit switches & panels.

Aerospace: Instrument displays & Cockpit controls

Telecoms: Servers, Routers & Network equipment

Consumer Electronics: Mobile devices, Notebooks & Smartphones



FEASA LED SPECTROMETER

The New Feasa LED Spectrometer has been designed specifically to allow testing of LEDs on populated PCBs where access is limited. The Feasa LED Spectrometer includes customized on-board firmware for automatic color calculation in multiple color spaces. It uses a similar set of commands as the Feasa LED Analyzer. When your quality demands Traceable Measurements the Feasa LED Spectrometer provide an ideal solution. Traceable Measurements can be obtained for Luminous Flux (Lumens) and Wavelength. The Spectrometer can work with all Feasa LED Analyzers to ensure production setup meets customer requirements.

LED SPECTROMETER



LED SPECTROMETER

INTELLIGENT SPECTROMETER FOR LED MEASUREMENT

- ◆ LUMINOUS FLUX
- ◆ LUMINOUS INTENSITY
- ◆ CHROMATICITY
- ◆ WAVELENGTH
- ◆ LUMINANCE

FLYING PROBE ICT TESTER FA 1240

FLYING PROBE TESTER



Features:

- ✓ Quickly complete programs that take into account component height
- ✓ Automatic calculation of arm interference (when used with the UA1780)
- ✓ The FA1240-60 series is designed to improve probe replaceability, dramatically reducing system downtime caused by probe replacement
- ✓ Fine pitch inspection: Accurately and consistently test down to a lead pitch of 0.2 mm
- ✓ Available with Automatic De-bugging function (ATG)
- ✓ Ultra-Highspeed testing at up to 0.025 sec./step (FA1240-61, FA1240-63)
- ✓ Measuring rate up to 40 steps per second helps reduce tact times and can actually be used in fully automated production lines averting a bottleneck. This is indeed a unique strength of Hioki's flying probe testers
- ✓ Detection of IC lead float and pseudo-contact states
- ✓ Support for active testing (optional feature)
- ✓ High-precision probing, Probing accuracy of $\pm 100 \mu\text{m}$ and movement repeatability accuracy of $\pm 50 \mu\text{m}$
- ✓ Large testing area of $510 \times 460 \text{ mm}$ (FA1240-61, FA1240-63)
- ✓ Standard transport capability
- ✓ Supplement overall vision inspection strategy with Hioki's standard vision function allowing for component presence/absence check, as well as polarity and displacement confirmation
- ✓ Automatic alignment function and simple visual test function
- ✓ **Bad mark detection:** Equipped CCD camera can be used for detection of inspection marks used for multiple-sample boards as well as inspection only involving the step of image detection of marks
- ✓ **User-friendly interface:** A completely revamped Windows based user interface makes use of graphics-rich environment making productivity very intuitive and efficient. Competent and reliable testing achieved regardless of operator

ADVANCED 3D X-RAY INSPECTION SYSTEM (V810i S2 SERIES)

3D AXI



Advanced 3D X-Ray Inspection (AXI) is specially designed for different sizes of PCB assembly to be examined at micron level with maximum throughput.

Features:

- A complete solution for large form factor board
- Rapid programming to support low mix high volume and high mix low volume inspections
- Advanced defect verification offers quality inspection result
- Smart Factory M2M communication through V-ONE
- Expanded global sales and support coverage
- Recommended by renowned Tier 1 CM and OEM

Models available (depending on PCB Size): XXL, EX and XLT.

ADVANCED 3D OPTICAL INSPECTION SYSTEM (V510i OPTIMUS 3D)

3D AOI



V510i Optimus 3D AOI's system uses 2D + 3D Inspection concurrently to achieve high productivity and high detectability. It has capabilities that are unmatched by other existing solutions in the market. The system is able to detect various types of challenging defects, such as:

- Lifted Lead
- Coplanarity
- Black color PCB / Multicolor PCB
- Presence / Absence
- Small components like 01005/ 0201 and many others

V510i Optimus 3D AOI is coupled with structured lighting for 2D illumination with multiple color LEDs. The revolutionary multi-angle multi-color illumination capability allows multiple images to be acquired for each view.

Camera Options Available : 4 MP, 12 MP CoaXpress Camera.

Multiple models available as per PCB size like XXL, Dual Lane and Flexible Dual Lane.

ADVANCED 3D SOLDER PASTE INSPECTION SYSTEM (V510i Optimus API)

3D API



Advanced 3D API uses 2D + 3D Inspection Concept to achieve high productivity.

Features:

- Vitrox's API is equipped with ultra fastest Gerber switching software. It is easy to use and convenient for editing
- D-Lighting Technology is a special technology
- CCD Camera 12MP will capture images from different RGB light sources from various angles
- RGB TUNE helps to filter solder paste, scaling powder and other impurities

X-SPECTION 6000

X-RAY INSPECTION SYSTEMS



The X-SPECTION 6000 X-Ray Inspection System is the most Technologically Advanced X-Ray Inspection System. As with all X-SCOPE platforms, it includes every advanced s/w tool required for a wide variety of applications. With more tilt and a rotating work table, the X-SCOPE 6000 is the ultimate in flexibility.

Standard features of the X-SPECTION 6000:

- ✓ High Power 130kV micro-focus X-Ray tube
- ✓ 5"x5" or 4"x3" high resolution CMOS digital flat panel image detector
- ✓ 22"x18" Inspection Stage with 350° Rotation
- ✓ 60° Camera tilt for oblique angle inspection
- ✓ Color mapping camera with zoom window – easy location and identification of faults
- ✓ Computer controlled kV and mA settings
- ✓ Programmable computer controlled – variable speed X-Y stage
- ✓ Simple point and click inspection routines
- ✓ BGA Void detection and automatic calculations
- ✓ Easy macro recording for intuitive step and repeat programming
- ✓ Various measuring tools for radius, area, perimeter, etc.
- ✓ Industrial PC with Windows 10 PRO

X-SCOPE 3000

X-RAY INSPECTION SYSTEMS



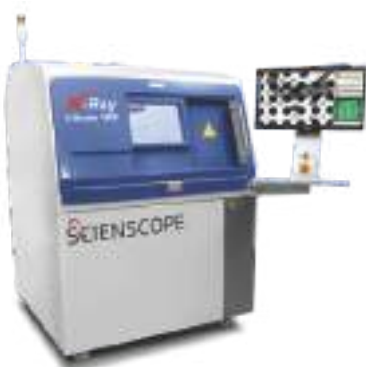
The X-SCOPE 3000 X-Ray Inspection System is the latest addition to the X-Scope platform. Based on the very popular X-SCOPE 2000, it adds a larger working area and more power and can use the same 130kV X-Ray source found in our flagship model, X-SPECTION 6000.

Standard features of the X-SCOPE 3000:

- ✓ High Power micro-focus X-Ray tube up to 130kV
- ✓ 4" x 3" high resolution CMOS digital flat panel image detector
- ✓ 25.4" x 19.5" Inspection area
- ✓ 60° Camera tilt for oblique angle inspection
- ✓ Color mapping camera with zoom window – easy location and identification of faults
- ✓ Computer controlled kV and mA settings
- ✓ Programmable computer controlled – variable speed X-Y stage
- ✓ Simple point and click inspection routines
- ✓ BGA Void detection and automatic calculations
- ✓ Easy macro recording for intuitive step and repeat programming
- ✓ Various measuring tools for radius, area, perimeter, etc.
- ✓ Industrial PC with Windows 10 PRO

X-SCOPE 1800

X-RAY INSPECTION SYSTEMS



The X-SCOPE 1800 X-Ray Inspection System is an entry level machine with high level features. A micro-focus X-Ray source and CMOS digital flat panel image detector with tilting for oblique angle views are standard, all at an affordable cost.

Standard features of the X-SCOPE 1800:

- ✓ 80kV or 90kV High Power micro-focus X-Ray tube
- ✓ 4" x 3" high resolution CMOS digital flat panel image detector
- ✓ 19.6" x 14.75" Inspection area
- ✓ 50° Camera tilt for oblique angle inspection
- ✓ Color mapping camera with zoom window – easy location and identification of faults
- ✓ Computer controlled kV and mA settings
- ✓ Programmable computer controlled – variable speed X-Y stage
- ✓ Simple point and click inspection routines
- ✓ BGA Void detection and automatic calculations
- ✓ Easy macro recording for intuitive step and repeat programming
- ✓ Various measuring tools for radius, area, perimeter, etc.
- ✓ Industrial PC with Windows 10 PRO

AXC-800 SERIES

X-RAY COMPONENT COUNTER



Scienscope AXC-800 Series makes inventory management and component counting even more fast, accurate and easy. This system features an internal barcode scanner.

Features:

- Fast, Intuitive, user friendly software interface with 99.9% accuracy
- Scanning of 13" or 15" reels
- Scanning of JEDEC trays and counting of BGA balls
- Scanning of loose wound components or tightly wound components
- Built in library & Internal Barcode Scanner

AXI-5100c SERIES

X-RAY COMPONENT COUNTER



Scienscope AXI-5100c Series is the most advanced, automated component counting system. This automated system communicates with data management providing complete inventory control and by using an inline integrated conveyor system.

Features:

- Fast, Intuitive, user friendly software interface with 99.9% accuracy
- Scanning of 7"-15" reels
- Built in library with automatic storage
- Automatic continuous feeding and positioning
- Smart Reader that automatically acquires one dimensional or two-dimensional code and material height, size, type and other information

BINOCULAR MICROSCOPES & TRINOCULAR MICROSCOPES

DIGITAL INSPECTION SYSTEM



Binocular Stereo Zoom Microscope Series: ELZ, SSZ-II, NZ, E, Vizor Series.

Trinocular Stereo Zoom Microscope Series: SSZ-II, NZ, E Series.

Features:

- High quality Optics
- Ergonomic tilting and rotating head
- Proven Body Design
- Maintenance Free

The Binocular & Trinocular Microscope Systems by Scienscope International are some of the best in the industry with Stereo Zoom. They come in five and three different series respectively, with packages available for all level of users as per their needs.

Scienscope also provide high-end digital microscopes with in-built measurement softwares.

Vizor Visual Inspection Systems

Vizor Series Inspection Systems include 4x, 6x and 8x lenses with a choice of a bench stand, bench stand with a focusing stage or an articulating arm stand with a c-clamp.

Features:

- Stereo Optics
- Integrated LED Lighting
- No Eyepieces
- Up to 7.5" of Working Distance

ELITE PCB SEPARATOR MACHINE
PCBA ROUTING MACHINE
The Ultimate Solution for PCBA De-paneling:

Avoid bending stress, tin break & component damage by manual PCB bending. Suitable for Circle, Arc and Line Cutting.

Features:

- ✓ High Speed and Accuracy
- ✓ User Friendly Software Interface
- ✓ High Suction Force and Low Noise, keep the Working Table Clean
- ✓ Each Table complete with a Universal Jig for PCB positioning
- ✓ Dedicated Jigs available upon request to speed up the operation
- ✓ Full-color and high resolution CCD camera assisted teaching
- ✓ Extended router bit's life by multistage auto compensation of Z height to reduce cost

EM-5700N OPTIONS

ER-6000AT OPTIONS

EM-5700N

ER-6000 AT

SPECIFICATION

MODEL	EM-5700N	ER-6000 AT
PCB size (mm)	(DS) 285x340mm;	(SW) 330x420;
	(DL) 285x450mm;	(DW) 400x420;
	(DW) 350x450mm;	(DX) 500x500
	(DX) 500x450mm;	
X,Y Cutting Speed	1~100mm/s	
XY Repeatability	± 0.02mm	
X,Y,Z Controller	Industrial IPC & PC	
X,Y,Z Driving Method	AC Servo Motor	
Operating System	Windows 10	
Cutting Accuracy	±0.1mm	
Spindle Rotation	Max.60,000RPM	
Power Supply	1 φ ,AC 220V 50/60Hz	
Air Supply	4~6 kg/cm ² , flow:2500 L/hr	
Power Consumption	3KVA	
Dust Collector	3HP Bottom suction	
Power Supply of Dust Collector	415V3 φ	
Machine Dimension	(DS) 1470*1150*1450	(SW) 1812*1510*1732
	(DL) 1470*1150*1450	(DW) 2052*1560*1733
	(DW) 1470*1300*1450	(DX) 2450*1720*1710
	(DX) 1470*1300*1450	
Machine Weight	(DS) 800 KG	(SW) 780 KG
	(DL) 800 KG	(DW) 880 KG
	(DW) 840 KG	(DX) 1150 KG
	(DX) 880 KG	

SMARTTrack
SMD STORAGE TOWER

Features:

- SMARTTrack identifies part size and type automatically and accurately, which is helpful to avoid any wrong manual selection and loading by human errors
- It has in-built barcode reader
- Detection of temperature and humidity can be done
- MES and ERP integration support
- Availability of Touch screen software
- Sensitive SMD storage and management
- Can integrate with Mobile Robot
- Automatically Judge the reel size & the varieties available
- Area of 1.3m² for upto 548 (minimum) reel storage available
- Storage time <12 sec./reel
- Storage capacity customization available

Specifications:

- Standard Capacity: 728 Reels
- Reel Size : 4", 7", 13"
- Reel Thickness, mm : 8/12/16/24/32/44/56
- Loading Time: 12.0 s
- Unloading Time: 12.0 s
- Dimension, mm: 1160*1260*2650

SMART STORAGE SYSTEM WITH IGV
SMD STORAGE SYSTEM


Robo-Technik is a specialized provider of industry-specific automation solutions. They focus on developing, designing and manufacturing highly accurate, high-speed automated solutions to meet each customer's specific requirements.

Features:

- Complete Solution i.e. Smart Storage, AGV & MES
- Modular Design and can be extended in any direction
- Having capacity from 1400 – 190400 reels
- Helps to eliminate poor arrangement and mix-ups of stored parts
- Fast and accurate storage / retrieval of the components
- Temperature and humidity detection
- Greater Space saving concept, Fastest Robot and Lowest Cycle time for Operation
- Support for integration of MES and SAP/ERP
- Real time data collection and analysis for SMT Lines
- MES has high performance traceability and Quality Control
- User friendly and easily upgradable APIs

FULLY AUTOMATED HIGH SPEED PRINTER
PCB SCREEN PRINTER


- Motorized 3 Stage Conveyor systems ensures reduction in the waiting time for PCB transfer
- Multi-Point PCB clamping block which provides edge clamping control for board holding in order to obtain best printing quality
- RPSS control which displays & controls real time pressure for squeegees
- Rigid construction of the machine & for the frame construction
- PCB push down unit used for big size PCB to prevent warpage
- Special Edge Clamping Control for Board Holding Critical Part to Obtain Best Printing Quality
- Built in Cp, Cpk generator
- Built in MES & Barcode Port
- Suitable Design for BTB Layout
- Models: X3, X3A, X5L, X6L, X8L

DESKTOP 4-AXIS SOLDERING ROBOT
AUTOMATIC SOLDERING ROBOT

Features:

- Robust construction to withstand maximum speed
- Possible to select High Frequency Temperature Control Unit
- V-Cut system is applied to lead feeder for prevention of flux-shatter
- Soldering Iron can be adjusted in various directions to prevent PCB damage
- Easy programming and easy to learn with portable LCD teaching pendant
- LAN and USB memory port is included so that it can control several robots by PC and for data backup respectively

TURNKEY SMT LINE
NEW

We offer Total SMT Turnkey Solution with new as well as refurbished machines (of latest vintage) for 3C Intelligent Plants through our sourcing partner. **Brand new SMT lines with machines from leading brands like Kulicke & Soffa, INOTIS, VITROX, EXE, KAIT, DENSEN etc. are supplied & set up by us, followed by strong post-installation support.**



Loader	Laser Marking	PCB Cleaner	Screen Printer	3D SPI	Chip & Flexible Mounter	N2-Reflow	3D AOI	Unloader
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SMT MOUNTER

Features:

- High speed and high stability
- Ultra high accuracy with process control
- Modular design with less maintenance time
- Industry 4.0 ready

RE-FURBISHED

We supply refurbished machines for various brands like Panasonic, Fuji, ASM, DEK, MPM, Heller, Vitronics, etc. Under re-furbished, we not only sell complete refurbished machines but also provide support with required spares, consumables and full Annual Maintenance Contract.

Features:

- Latest vintage machines
- High performance
- Quick availability of spare parts & consumables
- Low cost ownership
- Easy maintenance



LEAD FREE REFLOW OVEN:
REFLOW OVEN


- Heating system with separate heating unit easy-in/easy-out
- Independently controlled multi-zone Preheaters with Easy maintenance
- Uniform heat balance without any heat interference with a controllable baffle
- Actual Temperature Monitoring Function & indications
- Flux Management System - New flux collecting system creates highly efficient flux recovery system and reduces pollutants
- High-quality, lead-free performance is available in all ovens, Air or N2



- Real time adjust type heating program allows minimum of power consumption
- Multi-cooling system (Air/Water synchronous cooling)
- Temperature profile memory for each product. Hence no time is lost when changing products
- Reflow information saved in real time - default setting is one minute interval
- Dual Conveyor Option

LEAD FREE WAVE SOLDERING MACHINE
WAVE SOLDERING


- Unique and patented Heating Panel
- It meets higher preheating temperature and capacity required in lead free soldering
- Direct drive Flow Motor for optimal wave
- Suitable for soldering multi PCBs mixed high density SMD
- Auto tension device



- Foaming Nozzle, designed in special structure for smooth flow of flux
- Optimal Design for easy maintenance
- Maximized Cooling Efficiency with Top & Bottom Cooling
- The best soldering quality under lead free environment
- The central integrated operation program on touch panel
- Cleaning tool kit

**ADVANCE DISPENSING/SPRAYING
TABLE-TOP ROBOT**
DISPENSING MACHINE


The 3000 Series is a multifunction robot designed with both cell production sites and automated inline installation in mind. The Ethernet (LAN) is included as standard equipment and the faster speed up to 900mm/sec ensures greater output on production lines.

Features

- Increased structural rigidity
- Faster speed and well enhanced communication capability
- Ready for manufacturing processes aimed at IOT
- Smooth movement attained with the micro-step control system
- Increased communication capability
- Easy camera system installation

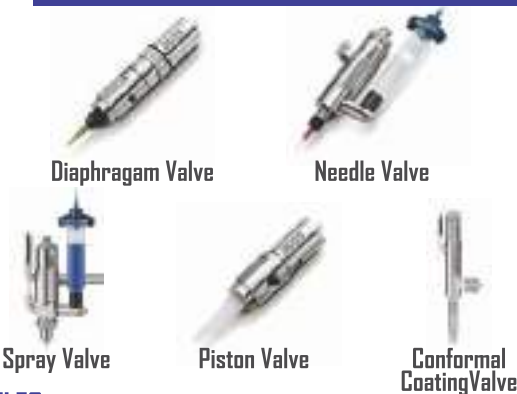
AUTOTUBE SYSTEM


Autotube system allows user to directly dispense a tube or cartridge type material like a silicon adhesive using a special container with air pressure instead of refilling it to other containers.

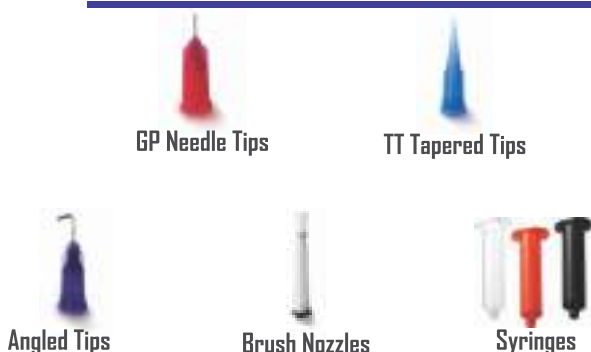
- No refilling, no contamination or bubbles
- Air pressured mechanism greatly reduces operator workload
- Can be combined with dispensing valves (ATD300CV-S AUTOTUBE set with dispensing valve)
- Enhances accuracy and consistency

NOZZLES, VALVES & CONTROLLERS
SDP SERIES DISPENSERS


- SDP/SVC Series Dispensers are designed to optimize the dispensing of adhesives, lubricants and other assembly fluids by increasing throughput, improving yields and reducing production cost.
- Ultra-lightweight and easy-to use design
- Stabilized by internal air pressure reservoir
- Most versatile, all-digital display for optimal process control

VALVES


- Compact diaphragm valve especially for resist materials
- Precision compact diaphragm for accurate flow control
- Mini diaphragm valve for controlled consistent coating where space is limited
- Fast and accurate filling process for low to high viscosity fluids
- Precision needle valve ideal for consistent microdot application
- Smooth inner surface of the nozzle prevents clogging and ensures consistent fluid flow

NOZZLES


- Precise, consistent dispensing is determined by the type of dispense tip selected
- Polished burr-free tips ensure accuracy
- Angled shaft allows for reaching under or inside work
- Syringes ensures consistent fluid deposits with little wasted residue

ROTARY TUBING DISPENSER



The rotary tubing dispenser is a high-end tubing type dispenser that combines its own rotor mechanism and vacuum mechanism. Suppress generation of air bubbles in the liquid feed tube, and smooth flow of liquid medicine.

- Reduce stress on the tube and extend the life of the tube
- Low noise and vibration isolation
- Reduction of heat transfer to rotor part
- Equipped with digital timer as standard
- Light weight and space saving

HYPERDOT



Hyperdot provides non-contact, high-speed jetting at a rate up to 300 drops/second and exceptional volumetric control for a variety of fluid viscosities ranging from middle to high viscosity.

- Ultra high speed
- Consistent micro-dispensing increases yields and production efficiency

NOVADOT



Novadot is a unique electromagnetic non-contact dispenser providing high-speed delivery and exceptional volumetric control for various low to medium viscosity fluids. Combining the controller programming with a temperature-controlled rigid dispensing head makes this system ideal for robotic applications.

- Consistent micro-dispensing provides high speed delivery

BGA REWORK STATIONS



BGA rework stations are widely used in many repair fields, such as computer, laptop, game player, communication equipment, mobile phone, etc.

- Air, IR & Direct Heating are Possible
- Flat Package & Chip Components are Possible
- All-Reworking Processes is Possible
- Auto-Thermal Profile System (ITTS)
- Digital Image Matching System (Auto-Positioning)
- Auto-Solder Cleaning (Double Cyclone Suction System)
- Load Free Mount System

OIM - 2S
ODD FORM INSERTER MACHINE

Features:

- ✓ Precise function nozzle. We design nozzles and clips to fit different odd components to ensure that suitable for various usage.
- ✓ Variety of Feeders to chose from to suit the feeding requirement like vertical tape feeder, horizontal tape feeder, roll feeder, tube feeder, tray, bowl feeder
- ✓ High Speed Auto Insertion of Odd Form Components easily possible
- ✓ It is adaptable to different components such as Connector, switch, socket transformer coils, ports, capacitors etc.
- ✓ Accurate insertion to ensure quality
- ✓ Modular design, for easy switching over of lines
- ✓ 4 high-precision plug-in device configuration
- ✓ With 2 CCD cameras, one for monitoring PCB board Mark points, another for monitoring device foot positioning
- ✓ Machine Industry 4.0 ready

Advantages of automatic inserter over manual plug-in

- ✓ Saves labor
- ✓ Reduction in Operating & Training Cost
- ✓ 24*7 Work operations
- ✓ One machine can replace atleast 3 workers
- ✓ Improve the product quality with high efficiency production
- ✓ Data management, remote monitoring possible
- ✓ Suitable for a variety of components and also machine is a stable fixed asset for owner

PCBA DESKTOP ROUTER HEDA 801F
AUTOMATIC DESKTOP PCBA DE-PANELING ROBOT


Heda's PCBA routers are ideal for depanelizing or separating PCBA from panel. They can cut round PCBs or any other curve/ odd shape. It is widely used in Electronics industry across segments like automotive, LED, Consumer, Defence & aerospace, Medical, etc.

Features:

- ✓ High speed cutting accuracy
- ✓ Highly reliable and low maintenance
- ✓ High power suction with low noise level
- ✓ Small foot print and compact

V-CUT PCBA SEPARATOR HEDA 801A (MOVING BLADE TYPE)
V- CUT PCBA SEPARATOR


With moving blade Heda - 801A is used where high cutting accuracy is required with minimal human movement of the PCBA.

It separates the PCBA by using V-cut method.

Features:

- ✓ Prevents stress on the PCB components
- ✓ Prevents cracks in soldering
- ✓ Blade angle adjustment provided to meet appropriate V-cut depth
- ✓ Customization can be done as per client specific for component height of maximum 70 mm


AUTOMATIC LEAD CUTTER FOR LOOSE COMPONENTS HEDA-804A
COMPONENTS PRE-FORMING & LEAD CUTTING MACHINES


HEDA cutting & forming machines are built with superior quality & are used for high precision lead cutting and forming process.

Features:

- ✓ This machine is used exclusively for cutting loose single-side resistor, capacitor, crystal & electronic components, or components in strip form, with customization in the machine
- ✓ The machine is composed of programming control execution electric drive. With a high precision mechanical movement and pneumatic action, it completes the electronic shaping and molding process
- ✓ Noiseless & high performance
- ✓ Steel used is Japanese imported steel which ensures high durability & long service.
- ✓ Easy to adjust, Easy to operate, Easy to Maintain
- ✓ Small foot print.
- ✓ Accurate cutting & molding
- ✓ Customization provided as per customer's requirement.
- ✓ Vibration disc feeding can be added to realize automatic forming

AUTOMATIC RADIAL LEAD CUTTER & FORMER FOR TAPED & WHEEL COMPONENTS HEDA-805C
COMPONENTS PRE-FORMING & LEAD CUTTING MACHINES

Features:

- ✓ Equipped with a standard mould die set forming & cutting as per client's requirement
- ✓ Applicable to all kinds of taped radial components
- ✓ Forming cutting completed at the same time
- ✓ Customers can request molding die set & can easily replace the old die set at their end
- ✓ Adjustable speed
- ✓ Throughput of 7200 pcs/h
- ✓ Automatic feeding
- ✓ Easy to adjust, Easy to operate, Easy to Maintain
- ✓ Precise accuracy
- ✓ Steel used is Japanese imported steel which ensures high durability & long service

LOOSE/ TUBE TRANSISTOR FORMER HEDA-803B
COMPONENTS PRE-FORMING & LEAD CUTTING MACHINES

Features:

- ✓ Suitable for stick packed power transistor, customization can be done for loose components
- ✓ Easily changeable forming tool
- ✓ Increased efficiency
- ✓ Adjustable forming speed
- ✓ Super fast forming speed (max-90 pcs/min)
- ✓ Noiseless & high performance
- ✓ Easy to adjust, Easy to operate, Easy to Maintain
- ✓ Precise accuracy

AXIAL LEAD FORMER HEDA-807A
COMPONENTS PRE-FORMING & LEAD CUTTING MACHINES

Features:

- ✓ Suitable for bulk / taped resistance or diode crystal parts forming
- ✓ Suitable for mass volume production with speed of 6000 pcs/h
- ✓ Easy to Adjust, Easy to Operate, Easy to Maintain
- ✓ Precise accuracy
- ✓ Steel used is Japanese imported steel which ensures high durability & long service
- ✓ Stepless adjustment of speed to follow the status of parts

FIBER/METAL MARKING
LASER MARKING MACHINE

Inline laser marking machine

- Delicate marking with superior laser beam
- High Electro-optic conversion rate
- Fast marking speed and high efficiency
- Integrated structure
- Advanced marking software

Application:

- Can mark on metals such as stainless steel, aluminum, gold, silver, titanium, bronze, platinum, copper and much more


Offline laser marking machine

- Can mark letters, numbers, characters, icons, symbols, one-dimensional bar codes, two-dimensional bar codes, date & time, serial numbers, random numbers and other texts
- Can make dot matrix or scribbling laser encoding with high quality on fast moving products and meet the demands of all kinds of production lines
- Also other Laser marking machines available such as CO2 Laser marking, 3D Laser making, UV Laser marking etc.

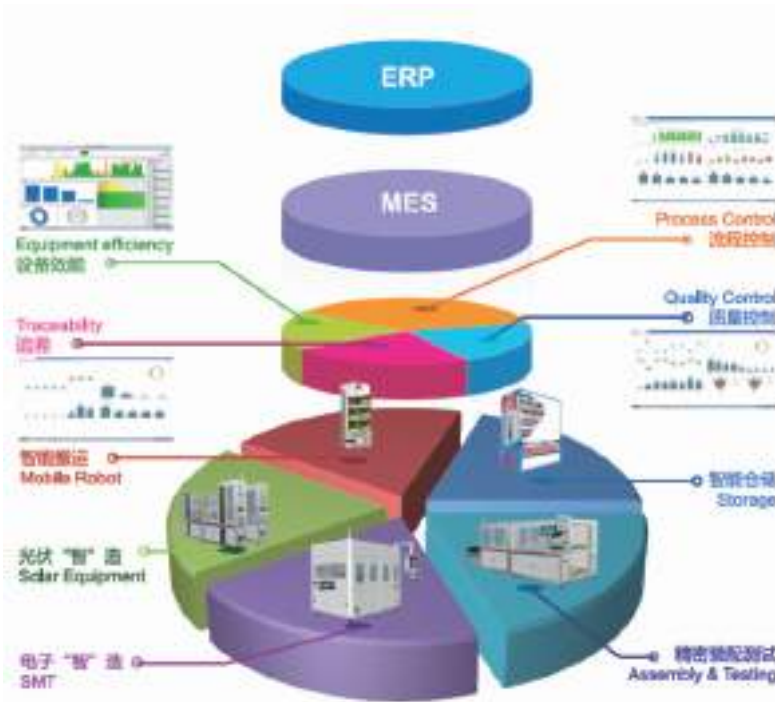
- We can also engrave on Plastics like ABS, polycarbonate, polyamide, PMMA and many other plastics
- Also on other materials like glass, ceramics, wood, cardboard

PCB MARKING

Features:

- High-performance CO2 / Fiber laser has high-quality laser beam, small focusing spots and well-distributed power
- The high-pixel CCD camera makes automatic positioning, identification and feedback reporting come true
- Gantry structure and synchronous transmission guide ways ensure the stable and precision performance
- The function of automatic focusing and track width adjusting are designed to match up different production line

MES AND TRACEABILITY SOLUTIONS



Manufacturing execution systems (MES) are computerized systems used in manufacturing, to track and document the transformation of raw materials to finished goods. MES provides information that helps manufacturing decision makers understand how current conditions on the plant floor can be optimized to improve production output. MES works in real time to enable the control of multiple elements of the production process.

- Improve producing efficiency
- Reduce pickup error, Save material cost
- Component level traceability
- Reliable quality management
- Advice reasonable resource assignment

vayo [VAYO (SHANGHAI) TECHNOLOGY CO., LTD.: CHINA]

TOTAL NPI SOLUTIONS

NPI SOFTWARES

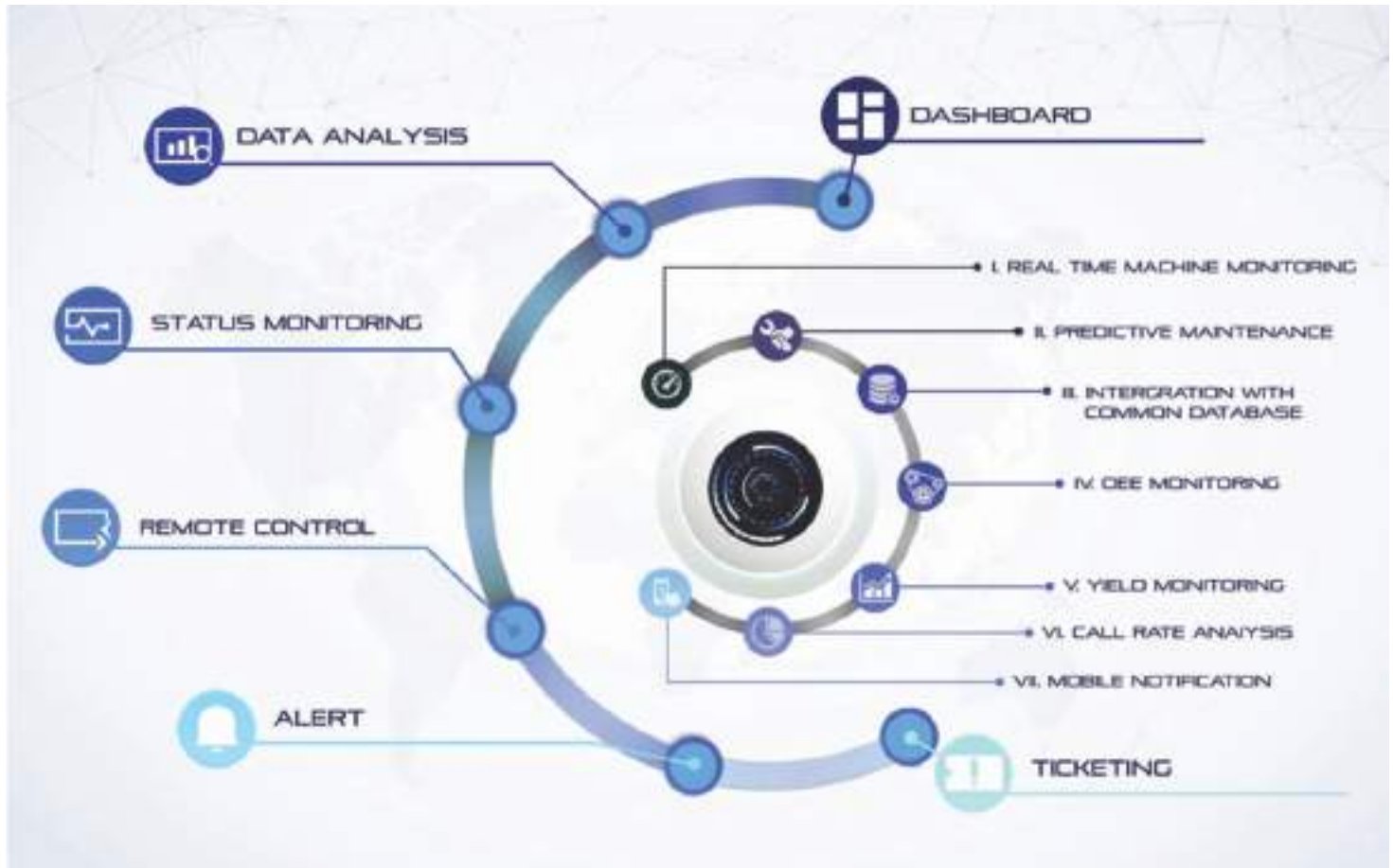


- **DFM Expert**: Design for manufacturing analysis which can be used to leverage PCB design with manufacturing for NPI projects
- **Document Expert**: Intelligent work instruction and process document generation for all PCBA process stations, visible document with automatic highlight parts
- **SMT Expert/Accelerator**: Save 80% offline programming cycle and 50% inline debug cycle for pick & place machine such as Fuji, Panasonic, ASM...etc.
- **Test Expert**: Design for Test ability analysis (DFT), faster program generation for ICT/FP/AOI/X-Ray tester
- **View Expert**: PCBA board viewer and fast query tools for all manufacturing departments (SMT/TE/PE/IE/QA/SQA/...)

V-ONE

M2M / SMART TRACEABILITY

Drives toward a highly customizable one-stop platform which offers data-driven decisions in manufacturing process by allowing stakeholders to remote, visualize, monitor, control and implement condition-based alerts with the ticketing feature to reduce downtime and increase throughput.



- Features:**
- Real Time Machine Monitoring
 - Predictive Maintenance
 - Integration with common database
 - DEE Monitoring
 - Yield monitoring
 - Call rate analysis
 - Mobile notification

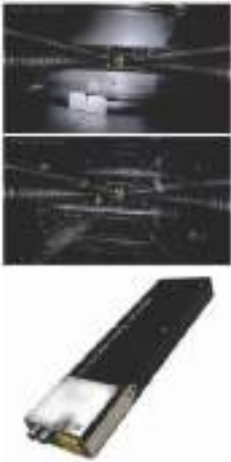
RTTPS

REAL TIME TEMPERATURE PROFILE SYSTEM



- RTTPS enables automatic profile by monitoring real-time temperature changes within the preheaters and solder pot/coolers, by fixing temperature sensors inside the wave machines
- Proximity and impeller sensors enable changes in conveyor and motor speed along with dip time, to improve productivity and preventing mass defects
- Also prevents fire by fire detection sensors, and can be monitored real-time from remote location via network

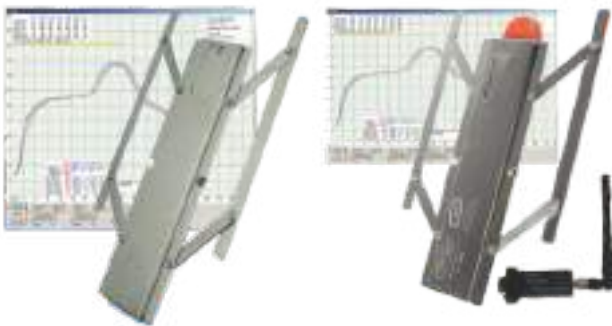
UI-HICAM



- UI-HICAM has 3 channel temperature measurement function and vibration measurement function
- In addition, camera functions can be added to observe the inside view of the reflow
- UI-HICAM can be used to see the PCB production process inside the reflow and identify the defect phenomenon
- Camera has two types of module: Wide-angle lens(to shoot the whole environment of oven) & Close angle (to view shooting diffusion & soldering property)
- UI-HICAM removes the noise that can be generated in wireless transmission and reception by using a storage method of making use of a detachable memory card

REFLOW PROFILER

REFLOW PROFILER



- Capable of measuring maximum of 16 channels
- Simulation Possible
- Measurement analysis
- Data Comparison
- Easy conversion of data to Excel files
- 2 data storage facility
- Adjustable sampling speed & low-power
- Data Filtering
- Monitoring for low battery
- Protection of internal circuits
- Display of real time measurement
- Wireless Model available
- Vibration sensor

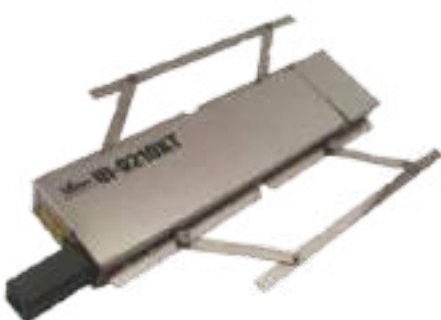
WAVE CHECKER

WAVE CHECKER



- Available in different channel models
- Different Dip-time by Depth
- PC based profile
- Balanced sides
- Easy data conversion to excel file
- 5 data storage facility
- Measurement analysis
- Soldering / Pre-heating Temperature
- Data Filtering
- C/V Speed
- Vibration sensor

O2 ANALYZER UI-O210KT



- In-Line O2 measurement
- Result storage up to 2 times
- Analysis & Comparison of measurement
- PC-based O2 Temp Profile
- Precision measurement : 0ppm~1,000ppm
- Wide range measurement : 0ppm~250,000ppm
- Data converted Measurement of max 3 Channel

SPIRAL VISCOMETER


- Dual cylinders rotate coaxially
- The spiral pump sensor maintains a constant flow, allowing a steady measurement to be obtained
- The viscosity of a liquid that changes viscosity during mixing can be continuously measured
- Fixed shear rate and shear time for high repeatability and accuracy
- Interchangeable rotors (Type A, B, C) allow this single unit to measure a wide range of viscosities

OTHER MODELS:

PM-2A

PCU-02V

PCU-200 SERIES
SOLDER PASTE SOFTENER SPS-2000
PASTE MIXERS


- High speed revolution, approx.1000rpm, allows for mixing in short time
- Temperature monitoring function makes solder paste the best condition
- Built-in auto-balancer function for adjusting the balance, depending on weight automatically
- Makes the appropriate rotation profile freely by PC

DS-10 DIP TESTER


- The self-contained DS-10 rides along the conveyor like a PCB
- Transfer data to a PC by USB, creating temperature profile
- Equipped with a New Dip Time Sensor, providing a more accurate measurement
- Measures and records the maximum temperature and dwell times of both solder waves
- The heat-resistant cover for high heat load such as Nitrogen oven etc. is available as an option

AUTO DRY CABINETS


X-Treme Series Auto Dry Cabinets provide the perfect environment to store your products after they are removed from moisture barrier bags. It saves time and money by eliminating the need to put the products back in the bags.

Features:

- 1% Rh Humidity attainable in 7 minutes
- Heating options for 45°C, 60°C and up to 100°C
- Homogenous humidity throughout the Cabinet
- Real time monitoring system
- Adjust all settings within seconds
- Customizable Modern & Ergonomic design
- Cooling options down to 15°C
- Automatic door locks with Silent Operation
- Datalogger for in depth analysis

 **(NTC - KOREA)**
SCIENTIFIC PCB MAGAZINE RACKS
PCB MAGAZINE RACKS


- Fast and simple gear adjusting card guide to maintain parallelism and ensure accurate setup
- Aluminum top and bottom
- Zero flexing of card guides with steel reinforcing supports and molded ribs
- Standard ABS model (N) tolerates 60°C, plus optional models to 120°C (M) and 200°C (H)
- Easy board insertion with offset ribs
- Reversible models, NTC-092B, for top and bottom side assembly
- Surface resistivity of 10^4 to 10^6 ohm/cm
- Compatible with many assembly lines
- Load from either side with removable end stop
- Cut-out carrying handles in top panel; stackable

PCB HANDLING EQUIPMENT
PCB HANDLING SYSTEM

The PCB handling product lines incorporate modular stand-alone units that are truly independent from other modules in the system.

Buffer Stations

- Buffering according to FIFO-method
- Buffering according to LIFO-method
- Manual magazine change with 1 magazine
- Automatic change with several magazines
- Process buffers

Handling Systems

- Turn units
- Flip units
- Lift units
- Traverser
- Gate stations

Loader and Unloader

- Magazine loader
- Magazine unloader
- Bare board stacker
- Bare board destacker
- Combined Loader/Unloader

Conveyors

- Standard length 400mm to 2.400mm
- Any quantity of segments
- Toothed belts, flat belts, pin chain, roller chain
- Design also as dual lane
- 1, 2 or 3 transport layer possible


Automatic Loader/Unloader

Linking/Inspection Conveyor

Buffer

PCB Inverter

INJET 388 CRD
PCBA/STENCIL/SQUEEGEE CLEANING


- INJET cleaning machines are using high pressure spray-in-air technology for cleaning and rinsing process
- They are built as one or multi chamber devices, due to requested application and needed cleaning capacity
- Available as a vertical or horizontal spraying device, with large portfolio of options which can be added due to customer request, needed capacity or level of final cleanness
- This technology is very effective for wide range of parts to clean stencils, squeegees, misprinted PCBs, assembled PCBs, pumprint, soldered PCBs and also maintenance parts cleaning applications

AIRJET 4127 CRD
REFLOW & SOLDERING PARTS CLEANING


- AIRJET cleaning machines are used for cleaning and rinsing process technology of air-bubbles in cleaning bath
- Offering high capacity and big process chamber sizes, mostly built as a multi-chamber solutions
- Also available special one-chamber full automatic model Airjet 943 CRD designed for use with flammable solvents developed for removing of some special cured coating materials
- These devices are designed for applications of maintenance cleaning, especially soldering frames, pallets, masks, reflow oven filters and wave soldering machine parts

SONIX 943 CRD
GLUE & CONFORMAL COATING CLEANING


- SONIX cleaning machines are using ultrasonic technology for cleaning process, rinsing process is provided by air -bubbles
- Due to high efficiency of ultrasonic cleaning these devices designed mainly for removing of cured varnishes or special degreasing applications
- Ultrasonic technology can be used also for PCB flux cleaning, if all components and materials used on PCB are compatible with ultrasonic energy
- This technology is very effective for removal of conformal coating

SMT NOZZLE CLEANER
NOZZLE CLEANER


Bosung, Korea has introduced the innovative solution to reduce the recurring costs incurred on SMT pick and place nozzles by the electronics manufacturing companies. With the use of Eco friendly SMT nozzle cleaner, the customer can now clean their blocked nozzles and re-use them to maximum life span. This machine in combination with Inspection microscope proves to be ideal solution for nozzle cleaning.

Features:

- ✓ Cleans 12 Nozzles at a time (Optional - 24, 38, 60 Nozzles)
- ✓ Reduction of Carbon-Effect by use of distilled water
- ✓ Easy Operation with touch panel
- ✓ Use Of Nozzle Holder Reduces nozzle Changing time
- ✓ Simple and eco-friendly method of cleaning nozzles without use of any chemicals
- ✓ Programmable human friendly machine interface

SMT WIPER PAPER ROLLER CLEANER
WIPER ROLL CLEANER


Environmental management
Reducing expense
Recycling cleaning paper of screen printer through cleaning, which has been discarded

Features:

- ✓ Easy paper setting
- ✓ Re-usable wiper rolls for printing machine
- ✓ Cleans upto 18m roll in 25-30 minutes
- ✓ Cleans for width of 410-250 mm with $\Phi 38$ mm inner diameter
- ✓ Environmental advantage - reduces CO₂ upto 83%
- ✓ Cost reduction

SMT NOZZLES & SMT SPARE PARTS
SMT SPARES


Bosung Eng. Co. Ltd, with their expertise & experience in SMT field of more than decade, have developed high quality ceramic SMT nozzles for pick & place machines of SMD components. Other than specialized nozzles, Bosung Eng is also engaged in supply of SMT mounter parts, SMT feeder parts, SMT feeders, Feeder calibration instruments, etc.

Features:

- ✓ Nozzles are made from superior quality material, which ensures minimum wear & tear during the life cycle of the nozzles
- ✓ Diamond coating is done on these nozzles to improvise nozzle operation & performance
- ✓ Excellent quality of SMT spare parts which are QC

ELECTRIC SCREWDRIVER


Vessel screwdrivers are light weight, have an excellent built quality, easy to use and has long life.

- Ease of operation
- Ergonomically designed Elastomer grip
- Wide output torque range
- Slotless Brushless motor
- Anti-fatigue Gel Pad
- Forward/Reverse switch is magnetic and long life

SCREW FEEDER


- It corresponds to various screws from M1 to M5.
- Lightweight and compact
- Corresponds to countersunk screws, head screws, truss screws, washers and so on

TORQUE METER


- Accurate torque measurement is possible within $\pm 0.5\%$ torque accuracy
- Light weight and compact design, about 1 kg body. It is rechargeable and convenient to carry
- Measurement in both directions of tightening and loosening is possible
- Torque range 0.01 ~ 1.0 N.m

VESSEL SCREW COUNTER


- To prevent human errors during screw tightening work
- Compact and lightweight, can be mounted anywhere
- Convenient slow start function and final tightening function available
- To notify tightening completion, insufficient tightening and wrong screws by alarm sound and light

ESD MATERIAL

ESD TABLES

CONDUCTIVE TABLE MATS

ESD COAT

ESD SLIPPERS

ESD-FRIENDLY RE-USABLE STICKY MAT

NAKALIMA (JAPAN)

KOTELYZER 90 AUTO II (SELF IGNITION)



- Cordless Soldering Iron
- It can be used as a soldering iron or as a hot air device
- Maximum soldering iron temperature is 500°C
- Hot blow temperature is approx. 650°C
- Gas container capacity 28ml
- Approx 120 minutes operation time in one gas filling

KOTELYZER GT-02



- Self ignition
- Works in 30 seconds
- 2 in 1: Soldering iron function and hot blower function
- Comes with soldering tip, hot blow tip and protective cap

BONKOTE
[BONKOTE: JAPAN]

KBC Co. Ltd.
[KBC CO. LTD.: KOREA]

In association with Bonkote & KBC we supply below PCBA tools & peripherals to the Industry. These are high performance and efficient products, yet at economical cost.



LA Type Soldering Station



Automatic Tape Dispenser



Automatic Label Dispenser



Automatic Solder wire V-cut Machine



Non-Electric PCBA V-Cut Separator

Exso
[EXSO CORP. LTD.: KOREA]

M.O.A. CO. LTD.
[M.O.A.: KOREA]

SPlicing TOOLS & SPlicing SOLUTIONS



Temperature Controlled Soldering Station



Rework Station



Swing Splice Device



Splice Clip-Frame Type



Splice Tool-Stapler Type

HAND CUTTING TOOLS & PLIERS

Italian Make high quality hand cutting tools & pliers, which are very handy and are in for every day needs of SMT industry. Precision and light configuration with steady capability and resistant abrasion are prominent features of these tools supplied by us.



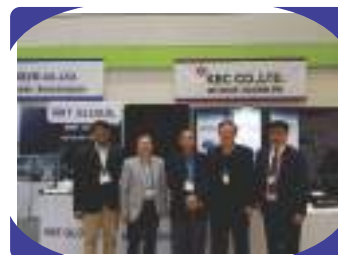
ROUTER BITS

We also supply high quality router bits for PCB de-panelling machines. These have long life, superior built quality and ensures efficient and accurate cutting. Router bits are available in various ranges starting from 0.4 to 3.175 mm.



OUR PRINCIPALS

OUR PRINCIPALS



OUR CLIENTS

OUR CLIENTS

JAPAN: <u>HEAD QUARTERS</u>	MUMBAI: <u>HEAD OFFICE</u>	MUMBAI: <u>CORPORATE OFFICE</u>
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Tel: +81 054 2888888	Mob: +91 95525 97464 / +91 78880 95810 e-mail: sales@kyoritsulectric.com	Mob: +91 98202 60518 e-mail: prashant@kyoritsulectric.com

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