

AN ISO 9001:2015 CERTIFIED COMPANY



partnership forever



Product Overview



Mectronics - Partnership Forever

ABOUT US

Founded in 1994, Mectronics aimed to bring premium quality products from top international brands to India and that's exactly what it has done these two and half decades. Today, Mectronics Marketing Services is a leading distributor for PCB assembly floor consumables and support equipment in India.

Rising to boast a pan-India presence - headquarters in New Delhi, but offices in Bangalore, Chennai, Pune, Hyderabad and NOIDA. Top class products, process support, ex-stock deliveries and competitive pricing turned Mectronics into one of the top distributors in India

Fast adapting products and service to changing customer requirements kept the customers happy and intact. Our optimum product pricing suits suppliers and ensures best value to customers. Both SEZ as well as domestic customers benefit with Mectronics. Our SEZ unit gets customers ex-stock material in India at best international prices.

For 25 years now we have been supplying the Indian electronics industry. All our growth is built upon the trust placed in us by our suppliers and customers.

OUR STRENGTHS

- Extensive stock to ensure immediate deliveries of our products. About 2000 SKUs ensure one shop solution to our customers.
- Pan-India presence with 6 offices, staffed with well experienced, qualified and trained team of engineers, providing best after-sales support to our customers.
- Optimised product pricing. Our initiatives with SEZ trading unit results in unique cost advantages to our SEZ, EOU customers.
- Supportive partners and loyal customers help us to give our best



- Delhi
- Ahmedabad
- Bengaluru
- Noida
- Chennai
- Pune
- Hyderabad
- Mumbai

Mectronics Team



Heraeus

Heraeus has stood out for over 155 years as globally recognized precious metals and materials specialist with revenue exceeding Euro 12 billion and more than 11000 employees in more than 100 countries.

Products we offer

- No-Clean Solder Paste
- Lead Free Solder Paste
- SMT Adhesive - Dispensing / Printing
- Rework Flux
- Flux Pens



Solder Paste

Heraeus offers a full line of no clean, solvent clean and water soluble pastes. These lead free pastes provide industry leading wetting and outstanding void performance on a variety of component terminations and surfaces. The products feature wide process windows which reduces processing costs significantly, makes set-up easy and saves time.

Lead free Solder Paste Series F 640

Code	Alloy	Melting Point	Particle size
F640-SA30C5-89M30	Sn96.5/Ag3/Cu0.5	217°C	25-45µm (Type 3)
F640-SA30C5-89M40	Sn96.5/Ag3/Cu0.5	217°C	20-38µm (Type 4)
F640-SA3C7-89M30	Sn99/Ag0.3/Cu0.7	217°C -229°C	25-45µm (Type 3)
F640-SA3C7-89M40	Sn99/Ag0.3/Cu0.7	217°C -229°C	20-38µm (Type 4)



Solder Paste Printing

No-Clean Solder Pastes Series F 381 / F 352 / F 381AT

Code	Alloy	Melting Point	Particle size
F381-SN62-90.5M30	Sn 62 / Pb 36 / Ag 2	179°C	25-75µm (Type 3)
F352-SN62-90.5M30	Sn 62 / Pb 36 / Ag 2	179°C	25-75µm (Type 3)
F381- AT - 90.25M30	Sn 63 / Pb 37	183°C	25-45µm (Type 3)
F381-SN63-90.5M40	Sn 63 / Pb 37	183°C	20-38µm (Type 4)
F381- AT - 90.25M40	Sn 63 / Pb 37	183°C	20-38µm (Type 4)



SMT Adhesive Printing

SMT Adhesive



Ideal, high dot form and excellent consistency of the glue dots. Specially developed for printing with thick stencils. Very high green strength prevents component movement during placement form stable glue dots.

Excellent adhesion with standard and also with difficult to-glue components. Very low humidity absorption, steep temperature increase and very short curing times are possible without danger of formation of air bubbles or worse adhesion.

Key Benefits:

- Ideal, high dot form and excellent consistency of the glue dots
- Very high green strength
- Excellent adhesion with standard and also with difficult-to-glue components
- Very low humidity absorption.
- Steep temperature increases and very short curing times are possible
- Without danger of formation of air bubbles or worse adhesion.
- High surface insulation resistance (SIR)

Code	Color	Density	Curing	Strength
PD 955 PY	Yellow	1.2 g/cc	150°C/1.5m	≥25 N/mm ²
PD 955 M	Red	1.2 g/cc	150°C/1.5m	≥25 N/mm ²

Rework / Tacky Fluxes

From wave soldering and rework to BGA/CSP ball attach and flip-chip attach, Heraeus offers special liquid and paste or gel fluxes for different application techniques: spraying, foaming, dipping, pin transfer, dispensing etc.

These fluxes leave minimal, non tacky flux residues. In wave soldering, this allows for the lowest level of false rejects during pin testing. Residues of fluxes for flip-chip attach have outstanding compatibility with underfill materials.



Microbond Flux 5070

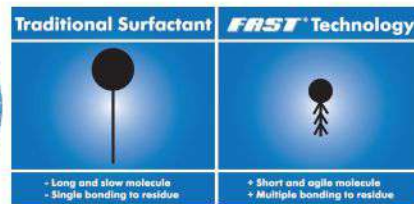
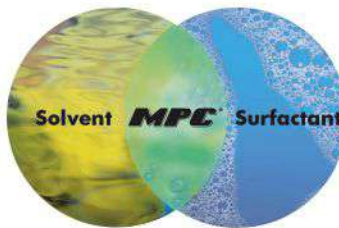


Zestron is the global market and technology leader for cleaning products and services for high precision cleaning applications. You can test all Zestron products free of charge at their five technical centers in Europe, America or Asia. The Technical Centers with more than 35 cleaning machines from leading system manufacturers, offer you the opportunity to carry out free trials in all types of systems. Zestron helps you to develop cleaning process for you.

Three main cleaning product group currently available are :



Product Group	Characteristics	Cleaning Technology
VIGON	Water based, surfactant-free	MPC Technology
ZESTRON	Water free, Solvent Based	Modified Alcohols
ATRON	Surfactant Based	FAST® Technology
HYDRON	Single Phase Water-based	HYDRON Technology



Rework Flux Cleaner



Pressure Sprayer



Baked Flux Cleaner

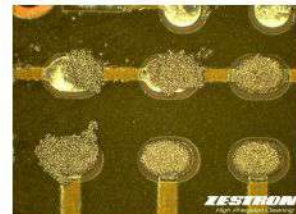
	Substrates	Contamination	Cleaning media		
			Solvent-based	Water-based MPC®	Aqueous alkaline-based
1	Electronic assemblies	Flux Residues	ZESTRON® FA + VIGON® EFM	VIGON® A 200 VIGON® A 201 VIGON® US VIGON® N 600 HYDRON® SE 230A	ATRON® AC205 ATRON® AC207
2	Stencils, Screens	Solder Pastes, SMT Adhesives	ZESTRON® SD 100 ZESTRON® SD 301 ZESTRON® SW	HYDRON® SC 300 VIGON® SC 200 VIGON® N 600 VIGON® UC 160	-
3	Misprints	Solder Pastes SMT Adhesives	ZESTRON® SD 301	VIGON® SC 200	-
4	Solder frames, Reflow-Oven, Condensation traps	Baked-on flux residues	-	VIGON® RC 303	ATRON® SP 200 ATRON® SP 300
5	Conformal Coating Pallet Cleaning	Different Coating Material i.e. Acrylic, UV Epoxy, Polyurethane			ATRON® DC



Needle Cleaning



Stencil Cleaning



Misprint Cleaning



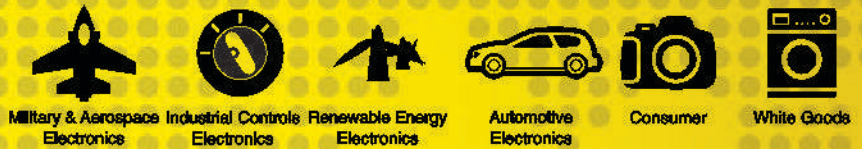
Wave Solder Chain Cleaning



Condensation traps & solder pallet cleaning



Maintenance Cleaning



HUMISEAL®, THE WORLD'S LEADING FORMULATOR OF PROTECTIVE COATINGS FOR ELECTRONICS CIRCUITS

Acrylics, Aerosol Products, Masking Products, Silicones, Strippers, Synthetic Rubber, Thinners, Urethane, UV Curable (Type AR/UR, Water Based) Supplying the most diverse range of conformal coating solution that deliver protection in all electronics applications against, humidity and condensation, airborne contamination and impurities, the influence of severe operating conditions commonly associated with lead-free manufacturing.



Coating Type	MIL Spec Thickness
Acrylics	: 25-75µ (0.001 - 0.003")
Polyurethane	: 25-75µ (0.001 - 0.003")
Epoxyes	: 25-75µ (0.001 - 0.003")
Silicones	: 50-200µ (0.002 - 0.008")

Suitable for LED Coating

Conformal Coating Features

HumiSeal : Acrylic (AR) Products

- Easy to apply
- Most forgiving of contamination
- Dry at room temperatures
- Have desirable electrical and physical properties
- Fungus resistant
- Long pot life
- No exotherm during drying- heat sensitive components
- Does not shrink
- Easy to Repair

HumiSeal : Silicone (SR) Products

- Excellent for high temperature service
- Good thermal endurance – heat generating devices
- Humidity and corrosion resistance
- One component, 100% solids – no VOC Issues
- Thermal or moisture cure
- Lower abrasion resistance- softer
- High CTE
- Mechanically repairable
 - Not solvent-soluble / Do not vaporize with heat
 - New Silicone Digesters

HumiSeal : Urethane (UR) Products

- Excellent chemical and humidity resistance
- Outstanding dielectric properties for extended period
- Excellent chemical resistance
- Available as single - or two-component
- Variety of cure types
 - Moderately repairable
 - Chemical strippers
 - Heat

HumiSeal : 1B51 Series (Synthetic Rubber)

- High flexibility
- Excellent electrical properties
- High humidity & corrosion resistance
- Good thermal stability, low outgassing
- High cohesive strength – tough
- Low CTE
- Must be repaired mechanically
 - Not solvent soluble / requires aggressive stripper
 - Does not vaporize with heat

LIQUID PROPERTIES	ACRYLICS					URETHANES				UV CURE	SILICONES & EPOXY				
	1B18 LED	1B18	1B31	1B73	1R32 A2	1A20	1A27	1A33	1A34	UV40	1CA9	1C49LV	1C51	2A53	
Available as an Aerosol	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No	No	No	No	No	
Solids Contents (%w/w)	7 ± 1 %	30	35	29.5	26	50	50	44	39	95	95	90	98	54	
Viscosity (Max)/cPs	-	250	200	250	475	130	3000	200	200	800	10500	800	780	500	
Flash Point °C (°F)	-1 (30)	-1 (30)	-1 (30)	-1 (30)	6 (43)	28 (83)	FR	-1 (30)	7 (45)	85 (176)	102 (215)	102 (215)	121 (250)	N/A	
VOC (grams/litre)	687.5	654	592	661	600	511	480	531	576	35	0	0	0	455	
Drying Time • Tack-free/mins	10	10	10	30	10	60	30	15	150	0.5	180	60	N/A	300	
• Dry	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	20hrs@88°C	20 hrs	24 hrs	N/A	24 hrs	24 hrs	15 mins	2 hrs@93°C	
Shelf Life at RT	24 Months	24 Months	24 Months	24 Months	24 Months	6 Months	24 Months	24 Months	6 Months	12 Months	12 Months	12 Months	12 Months	12 Months	
PHYSICAL PROPERTIES															
Operating Range °C	-65 +125	-65 +125	-65 +125	-65 +125	-65 +125	-65 +125	-65 +125	-65 +125	-65 +125	-65 +150	-65 -200	-65 -200	-65 -200	-65 -200	
Glass Transition Temperature (Tg)	42	42	14	42	14	71	28	26	18	45	<65	<65	<65	19	
CTE (x10 ⁻⁶ /°C) • Below Tg	67	170	170	67	193	193	170	119	85	85	N/A	N/A	N/A	N/A	
• Above Tg	340	340	340	134	338	532	N/A	225	201	197	367	323	296	N/A	
ELECTRICAL PROPERTIES															
Dielectric Constant (1M Hz @ 25°C)	2.6	2.5	2.5	2.6	2.5	3.5	3.6	3.6	3.5	2.5	2.5	2.5	2.4	3	
Insulation Resistance Per MIL-I-46058C (Ω)	5.5 x 10 ¹²	8.0 x 10 ¹⁴	8.0 x 10 ¹⁴	5.5 x 10 ¹⁴	8.0 x 10 ¹⁴	3.0 x 10 ¹⁴	2.0 x 10 ¹⁴	2.0 x 10 ¹⁴	1.7 x 10 ¹⁴	8.0 x 10 ¹⁴	5.0 x 10 ¹⁴	5.0 x 10 ¹⁴	5.0 x 10 ¹⁴	2.0 x 10 ¹⁴	
Moisture Insulation Resistance Per MIL-I-46058C (Ω)	7.0 x 10 ¹⁰	6.0 x 10 ¹⁰	6.0 x 10 ¹⁰	7.0 x 10 ¹⁰	6.0 x 10 ¹⁰	4.8 x 10 ¹⁰	1.2 x 10 ¹⁰	1.6 x 10 ¹⁰	6.3 x 10 ¹⁰	4.7 x 10 ¹⁰	1.0 x 10 ¹⁰	1.0 x 10 ¹⁰	1.0 x 10 ¹⁰	2.8 x 10 ¹⁰	
Recommended Thinner (Dip & Brush/Spray)	-	503/521,521EU	503/521,521EU	73	521EU	521,521EU	521	503/521,521EU	521,521EU	N/A	N/A	N/A	N/A	535	



What's inside the machine?

Thermal Profilers

KIC provides thermal profiling hardware and profiler software tools that help define, measure, monitor, and improve thermal processes for electronics manufacturing services. This reduces downtime, can decrease electrical expenses, and reduce your labor costs, all while improving your manufacturing quality, overall productivity, employee morale and customer satisfaction... and ultimately, profits.

Manual Products



Features:

- ◆ 3 AAA alkaline batteries, Standard or re-chargeable
- ◆ RoHS Compliant / Standard Lead Free
- ◆ Stainless steel thermal shield with cool touch
- ◆ Easy to use KIC's graphic software
- ◆ Flexible customization of Process Window
- ◆ The Process Window Index (PWI)
- ◆ 6, 7, 9 & 12 Channel Version
- ◆ Datalogger & RF Transmission Version

Optimization Software:

- ◆ Navigator (Automatic Prediction)
- ◆ Energy Optimization
- ◆ Auto-Focus
- ◆ SPC Chart

Automatic Products



Fixtures & Accessories



Specification	KIC X5	KIC Start 2
No. of Channel	7,9 or 12	6
Accuracy	±0.5°C	
Reading/Second	0.1 to 10 reading/sec	
Solder Paste Directory	Available	Not Available
Thermocouples	Type K, Standard	
Temperature Range	-150°C to 1050°C	
Optimization	Navigator (Automatic Prediction)+ Power Saving	Manual Prediction

Continuous Monitoring



KIC RPI

The KIC RPI is an automatic thermal management system

- ◆ RPI (Reflow Process Inspection)
- ◆ Around the clock process monitoring
- ◆ Continuous real time SPC & CPK charting
- ◆ Automatic profiling
- ◆ Process traceability for every product
- ◆ Eliminate periodic profile
- ◆ Instant Alarm on out-of-spec condition

Highlights :

- ◆ Barcode traceability
- ◆ Remote Process Monitoring
- ◆ LDO – Live Data Output

Optimization Software Included

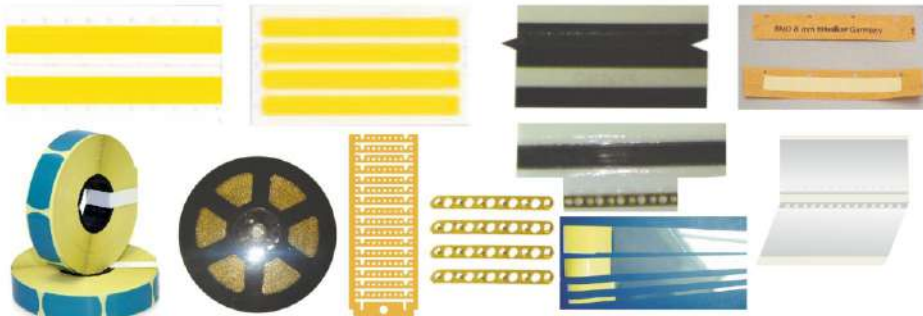
- ◆ Auto Focus
- ◆ Energy Optimization

Specification	KIC RPI	KIC ProBot
Accuracy:	± 2°F (1.2°C)	
Readings/second:	13	
Thermocouples:	Type K, each probe with 15 TC	
Temperature Range:	-150°C to 450°C	
Communications:	Ethernet, RJ-45 connector	
SPC & Cpk Charts	Standard	Optional
Process Traceability	Standard	Optional
SMEMA	Yes	





Other SMT Consumables

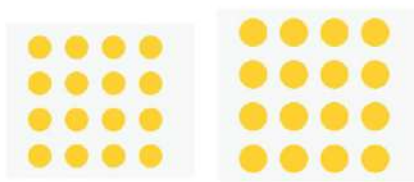


Splice Products

- Double Splice Tapes: 8, 12, 16, 24, 32 mm
- Single Splice Tapes: 8, 12, 16, 24, 32 mm
- Special Splice Tapes For Panasonic, Juki, NXT, Siemens available
- Antistatic, Halogen Free Splices available
- Splice Clips: Normal and stapler type
- Tape Extender: 8, 12, 16, 24 mm

Splice Tools

- Splice Tool for Clips
- Cutting Tool for Paper and Emboss Reel
- Stapler Splice Tool
- Splice Trolley



Kapton Dots

- Kapton Dots: 6, 8, 10 mm



Kapton / Polyimide Tape

- Kapton Tape: 5, 10, 13, 25 mm & other

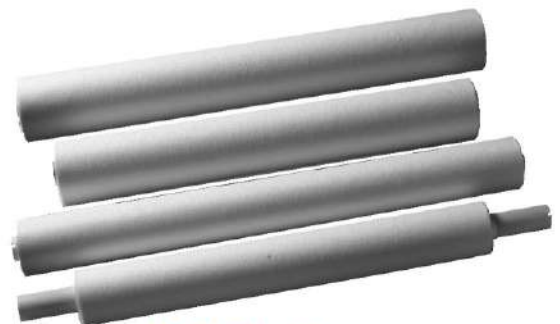
Stencil Cleaning Rolls



Yamaha Paper core



Ekra Paper core



DEK Plastic core

Stencil Cleaning Rolls

- DEK
- FUJI
- EKRA
- Panasonic
- Yamaha
- Sony
- Samsung
- Minami



Cleaning Wipes

- Microfiber
- Lint free
- Non Woven

Size Available

- 4" X 4"
- 6" X 6"
- 9" X 9"



****Stencil cleaning rolls can be customized as per requirement**

Pick & Place Nozzles, Filters & Spares

- Fuji XP
- Fuji NXT
- Yamaha
- Samsung
- Panasonic
- Philips
- Juki
- Mirae
- Sony
- Casio
- I-Pulse
- EVEST

FUJI Machine



XP Nozzles



NXT H08/12 H04 H01

JUKI Machine



KE2010~2040

KE2050~2080 FX-1

PANASONIC Machine



CM-602 Nozzle

SAMSUNG Machine



CP45-FV/CP45-NEO / SM310-320 SM400/MX MPS QP

YAMAHA Machine



YS24X/YS100/YS12F/YV88X/YV100X / YG100B/YG200X / Topaz / Emreld / Sapphire



FUJI NXT H08
P/N.:XH00120

FUJI NXT H12
P/N.:XH00800

FUJI XP
P/N.:AGFPN8150

YAMAHA FILTER
P/N.:K46-M7182-COX

PANASERT MSH
P/N.:1023710012

PANASERT MVII
P/N.:1042710035

PANASONIC
MSF FILTER

KME 201/202
P/N.:010DC181502

KEM CM602

JUKI 2060

JUKI 2000/2010
2070/2080

JUKI FX-1

SAMSUNG CP 45

SAMSUNG M320

SONY
P/N.:4769201

I-PLUS
M4/M10/M20



KME

N210069708AC

N210005449AA

N210003441AA

JUKI

CTFR内盖

CTFR内盖

CTF外盖

CTF外盖

CTFR外盖

CTF改良外盖

CTF改良外盖

NF外盖

NXT

YAMAHA

Pick & Place Feeders



Electric Feeders



Electric Feeder For Yamaha



Electric Feeder For Juki



Electric Feeder For Samsung



Label Feeder

Mechanical Feeders



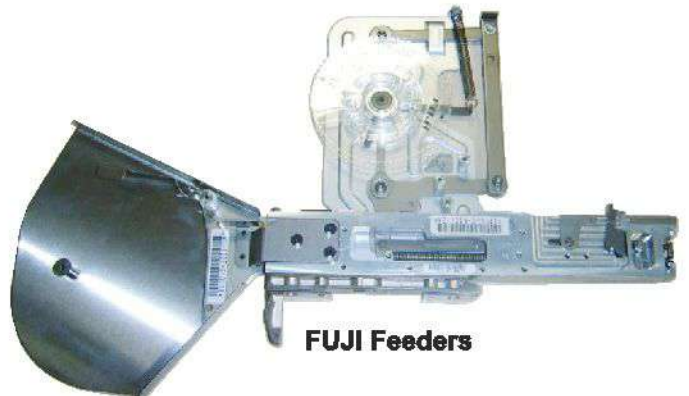
JUKI Feeder



YAMAHA Feeder



SAMSUNG Feeder



FUJI Feeder

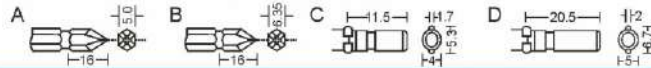
CF / CTF / FF / FTF All Series & Sizes Available

Intelligent Brushless NC Series Servo Electric Screwdriver



Model	Measuring Range N.m	No load speed (r.p.m.)	Input voltage	Diameter of screw	Screw bit
SD-NC08AT	0.01-0.08	100 - 1200	30V	M1.0-M1.7	H#4mm
SD-NC60AT	0.05-0.6	100 - 1200		M1.2-M2.5	H#4mm
SD-NC08LAT	0.01-0.08	100 - 1200		M1.0-M1.7	Ø4mm
SD-NC100LAT	0.1-1	100 - 800		M1.4-M3.0	H#4mm
SD-NC200LAT	0.1-2	100 - 1200		M1.4-M3.5	Ø5mm
SD-NC500LAT	0.5-5	100 - 1000		M2.5-M6.0	1/4hex
SD-NC100DLAT	2-10	100 - 550		M4.0-M8.0	1/4hex Ø3/8 - 7/16
SD-NC170DLAT	3-17	100 - 350		M4.5-M10	1/4hex Ø3/8 - 7/16
SD-NC250DLAT	5-25	100 - 215		M6.0-M12	1/4hex Ø3/8 - 7/16
SD-NC350DLAT	8-35	100 - 155		M8.0-M14	1/4hex Ø3/8 - 7/16

Optional specification of screwdriver bits



Intelligent Brushless Electric Screwdriver with Counter Compact Trigger-start Type



Model	Measuring Range Kgf.cm N.m	No load speed (r.p.m.)	Input voltage	Weigh (g)	Diameter of screw	Screw bit
SD-BC2000L	0.1-1.5 0.01-0.15	500-1000	30V	340	M1.0-M1.7	Ø4mm
SD-BC3000L	0.2-3.5 0.02-0.34	500-1000		340	M1.2-M2.5	Ø4mm
SD-BC4000L	0.3-6.5 0.03-0.63	500-1000		340	M1.4-M2.6	Ø4mm
SD-BC4500L	1-10 0.1-1	500-1000		540	M1.4-M3.0	Ø5mm
SD-BC4500LF	1-10 0.1-1	1300-2000		540	M1.4-M3.0	Ø5mm
SD-BC5000L	2-12 0.2-1.18	500-1000		540	M1.6-M3.0	Ø5mm
SD-BC5000LF	2-12 0.2-1.18	1300-2000		540	M1.6-M3.0	Ø5mm
SD-BC5500L	3-19 0.29-1.86	500-1000		540	M2.3-M3.5	Ø5mm
SD-BC5500LF	3-19 0.29-1.86	1300-2000		540	M2.3-M3.5	Ø5mm
SD-BC6000L	5-25 0.5-2.45	500-1000		680	M2.5-M4.0	1/4hex
SD-BC6000LF	5-23 0.5-2.25	1300-2000		680	M2.6-M4.0	1/4hex
SD-BC6200L	10-30 0.98-2.94	500-1000		680	M2.6-M4.5	1/4hex
SD-BC6200LF	10-30 0.98-2.94	1300-2000		680	M2.6-M4.5	1/4hex
SD-BC6300L	10-35 0.98-3.43	350-500		680	M3.0-M5.0	1/4hex
SD-BC7000L	15-45 1.47-4.41	350-500		680	M3.5-M5.5	1/4hex
SD-BC7300L	20-50 1.96-4.9	500-1000		680	M4.0-M6.0	1/4hex

Brand-new Normal Push Start Type



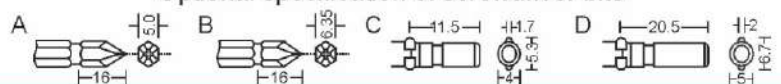
Model	Measuring Range Kgf.cm N.m	No load speed (r.p.m.) HI LO	Input voltage	Weigh (g)	Diameter of screw	Screw bit
SD-BA450P	1-10 0.1-1	1000 650	30V	540	M1.4-M3.0	Ø5mm
SD-BA450PF	1-10 0.1-1	2000 1300		540	M1.4-M3.0	Ø5mm
SD-BA500P	2-12 0.2-1.18	1000 650		540	M1.6-M3.0	Ø5mm
SD-BA500PF	2-12 0.2-1.18	2000 1300		540	M1.6-M3.0	Ø5mm
SD-BA550P	3-19 0.29-1.86	1000 650		540	M2.3-M3.5	Ø5mm
SD-BA550PF	3-19 0.29-1.86	2000 1300		540	M2.3-M3.5	Ø5mm
SD-BA600P	5-25 0.5-2.45	1000 650		680	M2.6-M4.0	1/4hex
SD-BA600PF	5-23 0.5-2.25	2000 1300		680	M2.6-M4.0	1/4hex
SD-BA630P	10-35 0.98-3.43	500 350		680	M3.0-M5.0	1/4hex
SD-BA700P	15-45 1.47-4.41	500 350		680	M3.5-M5.5	1/4hex

Super Value Trigger Start Type



Model	Measuring Range Kgf.cm N.m	No load speed (r.p.m.) HI LO	Input voltage	Weigh (g)	Diameter of screw	Screw bit
SD-A0235L	0.2-3.5 0.02-0.34	1000 650	30V	330	M1.2-M2.5	Ø4mm
SD-A0365L	0.3-6.5 0.03-0.63	1000 650		330	M1.4-M2.6	Ø4mm
SD-A1010L	1-10 0.1-1	1000 650		500	M1.4-M3.0	Ø5mm
SD-A2015L	2-15 0.19-1.47	1000 650		500	M1.6-M3.0	Ø5mm
SD-A3019L	3-19 0.29-1.86	1000 650		500	M2.3-M3.5	Ø5mm
SD-A5025L	5-25 0.5-2.45	1000 650		740	M4.0-M6.0	1/4hex

Optional specification of screwdriver bits



0.01-35 N.m DC Brushless Electric Screwdrivers



Normal Trigger Start Type



Model	Measuring Range		No load speed (r.p.m)		Input voltage	Weigh (g)	Diameter of screw	Screw bit
	Kgf. cm	N.m	HI	LO				
SD-A200DL	0.1-1.5	0.01-0.15	1000	650	30V	330	M1.0-M1.7	Ø4mm
SD-A300DL	0.2-3.5	0.02-0.34	1000	650		330	M1.2-M2.5	Ø4mm
SD-A400DL	0.3-5.5	0.03-0.63	1000	650		330	M1.4-M2.6	Ø4mm
SD-A450DL	1-10	0.1-1	1000	650		430	M1.4-M3.0	Ø5mm
SD-A450DLF	1-10	0.1-1	2000	1300		430	M1.4-M3.0	Ø5mm
SD-A500DL	2-12	0.2-1.18	1000	650		430	M1.6-M3.0	Ø5mm
SD-A500DLF	2-12	0.2-1.18	2000	1300		430	M1.6-M3.0	Ø5mm
SD-A550DL	3-19	0.29-1.86	1000	650		430	M2.3-M3.5	Ø5mm
SD-A550DLF	3-19	0.29-1.86	2000	1300		430	M2.3-M3.5	Ø5mm
SD-A600DL	5-25	0.5-2.45	1000	650		540	M2.6-M4.0	1/4hex
SD-A600DLF	5-23	0.5-2.25	2000	1300		540	M2.6-M4.0	1/4hex
SD-A620DL	10-30	0.98-2.94	1000	650		540	M2.6-M4.5	1/4hex
SD-A620DLF	10-30	0.98-2.94	2000	1300		540	M3.0-M4.5	1/4hex
SD-A630DL	10-35	0.98-3.43	500	350		540	M2.6-M4.5	1/4hex
SD-A700DL	15-45	1.47-4.41	500	350		540	M3.5-M5.5	1/4hex
SD-A730DL	20-50	1.96-4.9	1000	—		540	M4.0-M6.0	1/4hex

Economic Trigger Start Type



Model	Measuring Range		No load speed (r.p.m)		Input voltage	Weigh (g)	Diameter of screw	Screw bit
	Kgf. cm	N.m	HI	LO				
SD-A300L	0.2-3.5	0.02-0.34	1000	650	30V	330	M1.2-M2.5	Ø4mm
SD-A400L	0.3-5.5	0.03-0.63	1000	650		330	M1.4-M2.6	Ø4mm
SD-A450L	1-10	0.1-1	1000	650		430	M1.4-M3.0	Ø5mm
SD-A450LF	1-10	0.1-1	2000	1300		430	M1.4-M3.0	Ø5mm
SD-A500L	2-12	0.2-1.18	1000	650		430	M1.6-M3.0	Ø5mm
SD-A500LF	2-12	0.2-1.18	2000	1300		430	M1.6-M3.0	Ø5mm
SD-A550L	3-19	0.29-1.86	1000	650		430	M2.3-M3.5	Ø5mm
SD-A550LF	3-19	0.29-1.86	2000	1300		430	M2.3-M3.5	Ø5mm
SD-A600L	5-25	0.5-2.45	1000	650		740	M2.6-M4.0	1/4hex
SD-A600LF	5-23	0.5-2.25	2000	1300		740	M2.6-M4.0	1/4hex
SD-A620L	10-30	0.98-2.94	1000	650		740	M2.6-M4.5	1/4hex
SD-A620LF	10-30	0.98-2.94	2000	1300		740	M2.6-M4.5	1/4hex
SD-A630L	10-35	0.98-3.43	500	350		740	M3.0-M5.0	1/4hex
SD-A700L	15-45	1.47-4.41	500	350		740	M3.5-M5.5	1/4hex
SD-A730L	20-50	1.96-4.9	1000	—		740	M4.0-M6.0	1/4hex

Screwdriver Accessories



many other models available for different application.....

GT90 & GT120



System Features

- 90W & 120W systems available
- Intuitive user interface
- Password protection
- 3 temperature settings programs + 1 range setting program
- USB for firmware updates and powering peripherals
- Multiple language offerings
- Replaceable external power supply
- 1-Port system for production and single iron applications

Light Power Demand



Heavy Power Demand

System Overview

- Best in class time to temperature
- High temperature stability during soldering
- Fastest recovery time from solder joint to solder joint
- Budget friendly with choice of low cost solder tips or high thermal demand cartridges
- Adjustable temperature
 - lowers cost of inventory by needing one tip for multiple temperature applications
 - for temperature sensitive components



GT Handpiece Types: Tips and Cartridges

HP-T4

(Ideal for lower thermal demand applications and smaller components)

- Replaceable tips
- Uses Slim 4mm heater shaft
- Soldering tips up to 4mm geometries
- Shorter, lighter handpiece



HP-T6

(Compatible w/ tips & Cartridges)
Tips ideal for standard applications

- Replaceable tips
- Uses 6mm heater shaft
- Soldering tips up to 6mm geometries

Cartridges ideal for high thermal demand applications

- Replaceable cartridges
- Any type of geometry is possible



CV-5200 Connection Validation™ Soldering Station

LED equipped hand piece signals to operator when a good solder joint is formed.

Tip temperature displayed on large color screen.

Technical Specifications

CV-5200 Connection Validation Power Supply

Rated Power Consumption	125W
Output Power	80W max.
Output Frequency	13.56 MHz
Heating Method	Induction
Display	2.8" Color TFT LCD Display
Connections	Single Port
Communications	USB
Tip-to- Ground Potential	<2mV
Tip-to-Ground Resistance	<2ohms
Idle Temperature Stability	1.1°C in still air
Tip Temperature Accuracy	Meets IPC J-STD-001
Hand-piece cable length	L=183cm, burn proof, ESD safe

ENTRY LEVEL MODULAR BGA REWORK SYSTEM

- Modular Rework System
- MRS-1100A Modular Rework System is comprised of:
 - HCT-1000 Programmable Hand Held Convection Tool
 - PCT-1000 Programmable Preheater
 - ATH-1000 Adjustable Tool Holder (two versions available)
 - LM-1000 Light Magnifier (Optional)
 - HN Series Nozzles
- Each component can also be purchased separately



MONARCH Soldering System

Outstanding Performance, Reasonable Price



M70

M70 Soldering Station includes: 70 watt power supply, tip cleaning workstand, chisel tip and soldering hand-piece with 4 foot cord. Additional tips sold separately.

Features :

- 70 Watts of Power
- ± 2% Temperature Accuracy
- 3 Temperature Settings
- Easy to use touch panel
- Accurate Control
- Very Affordable
- Fast Recovery

M70 Accessories



M70-Workstand

Includes space for a sponge and brass pad to clean solder tips.



M70-Heater

Replacement heater with temperature sensor.



M70-Handpiece

Replacement hand-piece with 4 foot connection cord.

Other accessories available:

- M70-Sponge - Tip cleaning sponge
- M70-BSponge - Brass tip cleaning sponge
- M70-Enclosure - Tip Enclosure
- M70-ENut - Enclosure Nut
- M70-PCB - PCB board
- M70-XFmer - Transformer

An excellent choice for Soldering or Rework Applications

Delivering Core Technological Advantages with Best-In-Class Performance

Soldering Tools for Electronics Assembly

As the industry has been rapidly changing, Our soldering, desoldering and rework systems have evolved to keep up with lead-free processes and the demand for fast, Yet high performance soldering. Our comprehensive line of soldering, desoldering and rework systems.

- Lead Free Compatible
- Temperature Stability-No need for calibration
- Reduced risk of overshoot
- Increased Tip Life and value



Powered
by Metcal
SmartHeat®

**METCAL SOLDERING IRON
MX - 5200**

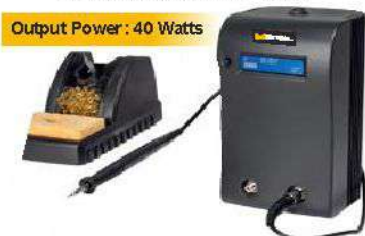
Electronics Bench Tool Solutions

Soldering Systems



Output Power : 80 Watts

Dual Port Simultaneous Soldering & Rework System MX - 5211



Output Power : 40 Watts

Production Soldering System MX - 500



Multi Function Rework System MFR Series



Output Power : 60 Watts

Production Soldering System PS Series

Hot Air Tools



Output Power : 200 Watts
06 nozzles (1.5 mm – 4.0 mm)

Digital Hot Air Pencil - HCT2-200



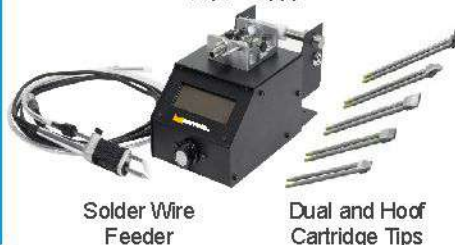
Output Power : 320 Watts
Air Flow : 6-25 l/min
Temperature : Up to 500° C

Hot Air Rework Tool HCT - 900



Output Power : 600 Watts
Air Flow : 5-25 l/min
Temperature : Up to 450° C

Programmable Hot Air Rework Tool HCT - 1000



Solder Wire Feeder

Dual and Hoop Cartridge Tips

Pre-Heater & Board Holder



Convection Bottom Preheater PCT - 100



Programmable Bottom Preheat PCT - 1000



Board Holder BH-2000



Free Standing Board Holder BH-2000



Iron tip cleaner

Desoldering System MFR-1350

Introducing the next generation of Desoldering

- Dual Switchable Ports
- 60 Watts System
- Powered by Smartheat® Technology
- Self-contained powerful pump
- 2 in 1 ergonomic and flexible hand-piece: pencil or pistol
- Collection chamber with 40% increased capacity*
- Innovative collection chamber for quick & easy change
- Compatible with previous MFR Desolder range

Technical Specification

Power Consumption:	110 Watts max. (Power Supply MFR-PS1300)
Output Power:	60 Watts Max
Idle Tip temperature stability:	+/- 1.1°C (34°F) in still air
Vacuum suction force:	0.7 bar (21in Hg at Vacuum pump at sea level)
Tip to ground Potential:	<2mV
Tip to ground resistance:	<2 Ohms
Surface Resistivity:	10 ⁵ – 10 ³ Ohms



Pencil



Pistol

Fume Extraction System



BVX - 100 Series



BVX - 200 Series

Technical Specification

	BVX-100	BVX-200
Static Pressure (suction force):	1250 Pa (5"WC)	850 Pa (3.5"WC)
Fan Capacity:	110m ³ /h (65 cfm)	250m ³ /h (150 cfm)
Flow Rate (with filter):	85m ³ /h (50 cfm)	2 x 75m ³ /h (45 cfm)
Air Inlets/Number of Stations:	1	2
Power:	85 watt	85 watt



VFX-1000 Technical Specifications

Volume Fume Extraction System

Ambient Operating Temperature	10 to 40 °C
Maximum Enclosure Temperature	55° C
Noise	<54dBA
Airflow/Pressure	350 m ³ /hr/96 mbar (206 cfm / 96 mbar)
Certification/Marking	TUV, CE
Dimensions w x d x h	590 x 375 x 415 mm (23.2 x 14.8 x 16.3")

Configuration

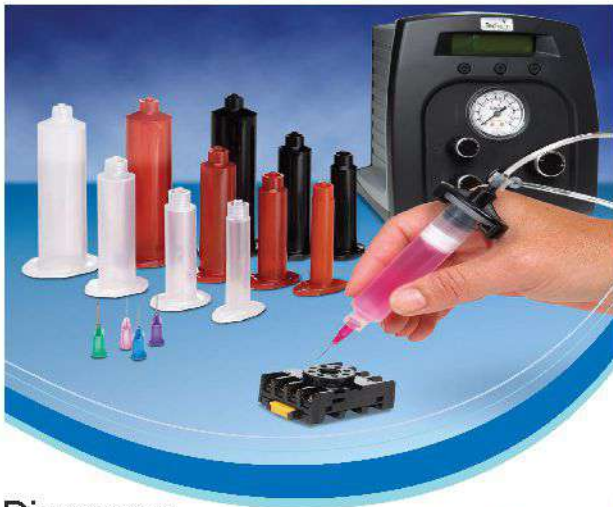
Maximum number of 32mm Arms	7
Maximum number of 50mm Arms, Cowls or Down Draft Trays	5
Maximum number of 75mm Arms,	2

Deep Pleat Pre Filter Specification

Surface Media Area	6m ² approx.
Filter Media	Glass Fibre
Filter Media Construction	Folded
Filter Efficiency	F8 (95% @ 0.9 microns)

Combined Filter Specifications

HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Gas Filter	Treated Activated Carbon
Filter Housing	Zintec Mild Steel
Filter Efficiency	99.997% @ 0.3 microns



Dispenser



Dispensing Needles
Barrel, End Cap, etc.



Dispensing Valves

Dispensing Robot

TSR2201



Applications

- Dispense dots of solder paste
- Form-in-place gasket
- Filling
- Potting
- Encapsulation
- Bonding
- Coating

Technical Specifications

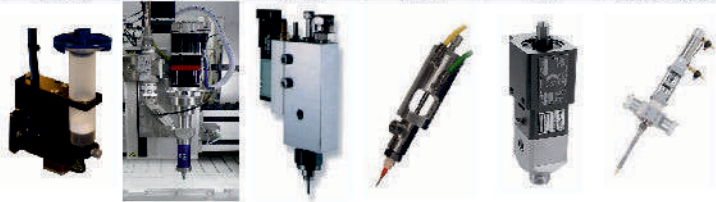
Features		TSR2201	TSR2301	TSR2401
Power Supply		100V ~ 240V AC		
Power Consumption		80W		
Number of Controllable Axes		3 axis		
Moving Range	X axis	200mm	300mm	400mm
	Y axis	200mm	300mm	400mm
	Z axis	100mm	100mm	100mm
Speed Range	XY axis	0.1~600 mm/sec		
	Z axis	0.1~200 mm/sec		
Repeatability Accuracy	XY/Z axis	0.02mm		
Resolution	XY/Z axis	0.01mm		
Loading Weight	Tool	5 kg	7 kg	7 kg
	Head	2 kg	4 kg	4 kg
Storage for Processing Files		Max. 255 files.		
Working Ambient	Temperature	0~40°C		
	Relative Humidity	20%~90% (no condensation)		
Dimension (WxDxH)		303x377x 521 mm	418x513x 521 mm	518x613x 521 mm



Fixed Ratio Meter, Mix & Dispense System



Jet Valve	PC Pump	710	715	1K Ultra-Lite	PD44
Non-contact Jet 300 shots/sec 10nI shot	Continuous 0.01-1600 cc/ml	Continuous for low viscosity material	Continuous for high viscosity material	Continuous for mid-high viscosity material	2K positive displacement valve 0.005-5 cc/cycle



Automated Precision Dispense Solutions FOR THERMAL INTERFACE MATERIALS (TIM)



Automotive Electronics

Loud speaker bonding and sealing

- 1K
 - 1053
 - 1093
 - PC Pump
- 2K
 - PR7U
 - PD44

Micro motor bonding/sealing/lubrication

- PR7C
- PD44
- AMV

Dash board bonding and sealing

- 1K Ultra-Lite
- 715

ECU potting, sealing and thermal paste

- 1K
 - 710
 - PC Pump
 - 1k Ultra-Lite
- 2K
 - PR70
 - P3-M

Harness potting and sealing

- PR70
- PD44
- 1k Ultra-Lite

Li-Battery cell bonding

- PR70
- PD44

Sensor potting

- PR7U
- PD44

Inverter potting

- PR70

PCB

Pin Protection

- 710
- 715
- PC Pump

Dam & Fill

- 1K Ultra-Lite
- PC Pump
- 710
- 715

Underfill

- Jet Valve
- PC Pump
- 710

Thermal Paste

- 1k Ultra-Lite
- PC Pump
- PD44



CLEANING MACHINES OVERVIEW

Single-chamber Cleaning Machines				Multi-bath
Super SWASH	Super SWASH Twingo	COMPACLEAN	MINI SWASH	MODULECLEAN

Process Data:

Max. effective space: WxLxH (mm) W-left/right, L-front/rear, H-height		795 x 80 x 816	2x 740 x 40 x 740	450 x 500 x 500	740 x 80 x 740 (820 x 80 x 800 optional)	800 x 100 x 770
 High density PCBA defluxing, HDI, DCB, BGA, hybrids, PoP, SiP, etc.		✓	✗	✗	✗	✓
Eurocards / hour (3U-160, 100 x 160mm)		42 pcs				112 pcs
Typical consumption / cycle (cleaning agent) - liters		0.2 - 0.3 l				0.15 - 0.25 l
 Low density PCBA, Misprints from paste and glue		✓	✓	✓	✓	✓
Eurocards / hour (3U-160, 100 x 160mm)		84 pcs	116 pcs	80 - 140 pcs	24 - 48 pcs	112 - 210 pcs
Typical consumption / cycle (cleaning agent) - liters		0.2 - 0.3 l	0.25 - 0.35 l	0.3 - 0.4 l	0.3 - 0.4 l	0.15 - 0.25 l
 Stencils (metal and plastic) from paste and glue		✓ 1 pc / 32"	✓ 2 pcs / 29"	✗	✓ 1 pc / 29"	✓ 1 pc / 29"
Stencils / hour		5 - 8 pcs	8 - 12 pcs		2 - 4 pcs	8 - 10 pcs
Typical consumption of clean- ing agent / cycle		0.12 - 0.15 l	0.15 - 0.2 l		0.15 - 0.2 l	0.05 - 0.1 l
 Maintenance parts from soldering process (Solder pallets etc.)		✓	✗	✓	✗	✗
Solder pallets / hour 500 x 500 x 80 mm (other sizes optional)		2 - 3 pcs (more pcs on request)		4 - 6 pcs		

Technical Data:

Cleaning agent volume		70 l	70 l	71 l	67 l	300 / 140 l
Max. cleaning temperature		60 °C	60 °C	60 °C	60 °C	60 °C
Max. rinsing temperature		40 °C	40 °C	40 °C	room	50 °C
Max. drying temperature		110 °C	110 °C	110 °C	85 °C	110 °C
Machine dimension WxLxH (mm) W-left/right, L-front/rear, H-height		1700 x 1150- 1400 x 1765	1700x1150- 1400x1765	880 x 1680 x 1866	1500 x 776 x 1200	4200 x 2300 x 3000
Machine weight without liquid		495-630 kg	500-625 kg	380-485 kg	240-270 kg	1800 kg

Multi-bath cleaning machines also available



Mini SWASH

Automatic Cleaning System for Stencils and PCBA

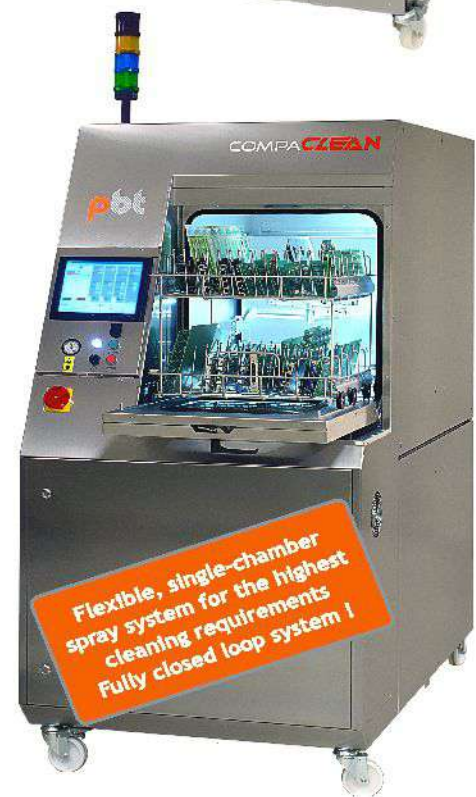
- Motor driven manifold with liquid and air knife system to ensure direct effect
- Synchronous spraying and drying from both sides
- This prevents stencil from damaging
- Rinsing by cleaner, water or DI water
- Controlled drag-out compensation
- Heating in cleaning medium



PCB Cleaning - Batch Cleaning

CompaClean Automatic Spray Cleaning System for PCB
De-fluxing, Misprint and Solder pallets

- One chamber system
- Washing / Pre-rinse / final-rinse / Drawing
- Built in DI water generation system
- Continuous monitoring of conductivity of DI water
- Can load PCB in two tier
- 66 fixed and 8 rotating spray nozzles to cover complete chamber for effective cleaning
- Oscillating basket for shadow free cleaning
- Cleans 190 Euro PCBs per cycle
- Built in exhaust system
- Window based / Touch Screen system / different level Password protected
- Multi stage chemical filtration / Low running cost / MPC® based chemical



Super SWASH / Super SWASH Twingo

Automatic Spray Cleaning System for Stencils,
Misprints and PCB Cleaning

- One chamber system
- 3-4 steps cleaning & drying
- Low consumption of cleaning material
- 3 steps filtration & Di water reclaim integrated
- Fully closed loop system
- No follow-through to waste / Zero discharge
- Extremely short cycle time
- High volume cleaning





Stencil Cleaning Machine

Semi Automatic-N29SA4

Semi Automatic dual chamber ultrasonic cleaning system with PLC



Main Features

- Water base process in close loop.
- Rinsing with filtered cleaning liquid.
- No water.
- Magnetic driven pumps to avoid leaking.
- Drying system included.
- Low cleaning process costs
- Evaporation of cleaner minimized by automatic cover.
- Product recycled permanently.
- Minimal maintenance requirements (standard filter cartridges)
- Automated maintenance alarm

Fully Automatic-N29 Auto

Fully automatic ultrasonic cleaning system with PLC

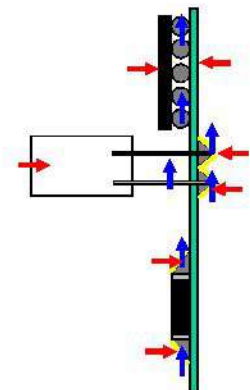
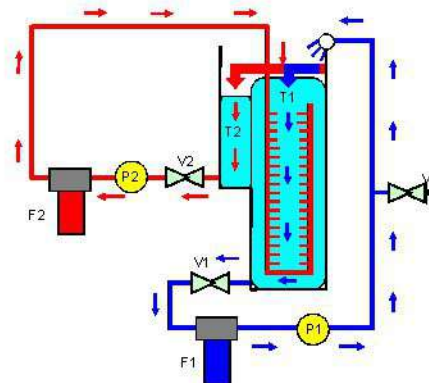
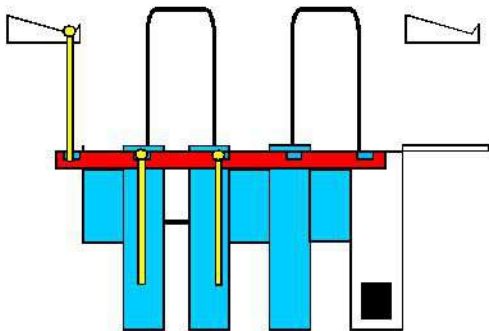


PCB Cleaning Machine

Fully Automatic-NC25



- High Mix / Low (Mid) Volume
- Water based cleaning process using immersion
Advantages: 100% coverage by cleaning agent
- 1 or 2 Rinsing steps in closed loop on activated carbon and mix bed resin with permanent monitoring of conductivity
- Cleaning and Rinsing: No discharge, Only filters to change
- PCB cleaned with high quality requirements
- Very good for low stand off, complex architecture of boards,
- Extremely low ionic contamination compare to IPC std
- Cost saving process (chemistry/water/power)
- Traceability
- Unique Drying process
- Dries better than any conventional system on the market with guaranteed results !
- You can coat boards directly after cleaning process!
- Patented cleaning liquid filtration



- Multi Chambers process
- Unique Drying process
- Semi InLine (SIL) concept
- 100% Closed loop systems

- Spray under immersion technology
- Patented Filtration of cleaning fluid to skim the surface from floating contaminants

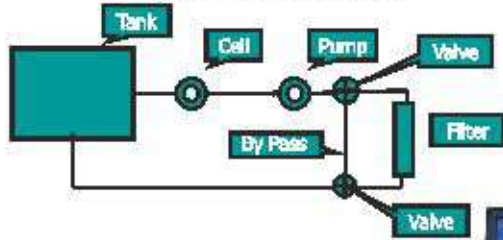
- Efficient Spray Under Immersion combined with upright agitation to replace Ultrasonics

.... and many more features to cater today's electronics manufacturing



WETTING BALANCE / SOLDERABILITY TESTER
MENISCO ST78

CT100 Schematic



IONIC CONTAMINATION TESTER CONTAMINO CT100



CT100 Characteristics

- Tank standard up to 350 x 300 x 80.
- Other sizes on order with external tank (pcb application)
- Software easy to use, measure driven by PC.
- The cell used has been designed for measuring of traces in fine chemistry.
- Pump and cell are maintenance free.
- Can manage 50 or 75 % solution
- Long life filter.

Semiconductor Equipment Corporation



**Model 860 Eagle
Omni Bonder**



**Model 450 Hot
Gas Rework
Station**

**Model 4800
Die Ejector Grid**



**Model 830
Pick and
Place System**





Microprocessor Control with Graphics Display

Reflow Soldering System

The RF 300 (3-zone) / RF 500 (5-zone) Inline SMT Reflow Soldering System's each heating zone is programmable through the controller.

The oven includes a real-time temperature profiler port. When a thermocouple is attached to the PC board, the actual Reflow temperature profile is displayed graphically as the board travels through the oven.

Standard Features

- Pb-Free Reflow Process with 100% forced air Convection
- Stainless Steel Conveyor
- 100 Menu Profile Storage
- ISO 9000 SPC fault monitoring reporting
- Password Protection



Bench Top Wave Soldering Machine

- Lead and Lead Free Models
- Dual Zone Preheater with forced air convection
- Minimal warm-up time
- Small Solder Pot with Status Light Tower
- Nitrogen inerting - optional
- Enclosed Stand - optional



WSM-310-F Wave Soldering Machine

- Dual Wave with Status light tower
- Finger conveyor for pallet-less operation
- Visibility throughout entire process with clear viewing.
- Onload and offload conveyor extensions
- Durable, rugged welded steel frame construction
- Fully dry wave, no oil intermix required
- SS solder pump impellers with external ball bearings
- Laminar wave for through hole component soldering
- Motorized conveyor width adjustment & Solder pot rollout

Manual Printer SPR-500



Solder Fountain / Mini Wave MW10



Solder Recovery System SRS500



Selective Solder Machines (ESS310 & ESS500)

Convert your hand soldering to automated selective soldering with an ESS Achieve greater throughput, accuracy, and reliability...

- Through-hole soldering flexibility - single point, drag, miniwave, or dip soldering
- Exceptional accuracy and repeatability, with adjacent components
- Ease of operation, less handling, small footprint & durable construction

Technical Data	ESS 300	ESS 500
Max. PCB Size	300 X 300 mm	500 X 500 mm
Max. Transport Speed	6m/min	
Position accuracy	± 0.1mm (± 0.004")	
Flux Tank	2L SS & Fittings, incl Flux Level Monitoring	
Flux Speed Max.	6m/min	
Spray Width (Nozzle diameter 0.3mm)	3mm - 6mm (0.12" - 0.24")	
100% IR Preheat	900W	1200W
Nozzles	Wettable, Special	
N2 Supply (Optional)	N2-covering over solder bath & pump unit	



Conformal Coating System - Multi Axis

The easycoat-450 Multi-Axis Coating System provides a reliable robotic conformal coating system application for low and medium volume batch and inline conformal coating processing.

Equipped with programmable software and stepper motor process control, the straight forward design means ease of application of conformal coating at all levels

Technical Data	
XYZ Axis drive	Stepper motors plus ball screw
XYZ Resolution	25 Micron
Velocity	350 mm/sec
XYZ Travel	430 mm x 430 mm x 50 mm
Bottom side clearance	100 mm (4")
Conveyor Type	Pin or Chain
Max. conveyor width	430 mm (17")
Edge Clearance	5 mm (0.2")
Transport Height	940 mm - 965 mm (37" - 38")
Communication	SMEMA
Dimension	L1400 mm X W1000 mm X H1550 mm

Semi-Automatic Stencil Printer

The Semi-Automatic Stencil printer has been designed for printing of a large variety of flexible and rigid substrates for application with small to medium size production volumes.

Technical Data	
Print Speed	10-170mm/s
Alignment Accuracy	±20 um
Power Consumption	1.2kW
Air Consumption	1.5Nl/min
Frame Size max.	620 x 740 mm
Print Format Max	390 x 450 mm



Stencil Cleaning Machine SIA (SC740)

- Stencil Cleaning Machine is very versatile machine. It has totally closed loop system for Cleaning with it's own spray pump and filtration system.
- Unique Up and Down moving parallel travelling spray manifolds cleans the parts with NO Shadow effect.
- Consumption as low as 0,15 l / cycle reported from users for stencil cleaning.

Technical Data	
Number of cleaning phases	2
Temperature of Liquid	max. 60°C
Drying	max. 85°C
Mechanical filtration (Cleaning)	20µm 5µm
tank volume max/min	65/30 L
Pressure on the nozzles with new filters (Cleaning)	0.85 bar
Flow with new filters (Cleaning)	48 l/min
Frame dimension max/std/min	740 x 740 x 40 mm
Speed of reciprocating arms	110 mm/sec

Solder Dross Recovery System

- ★ Rapid ROI - months not years
- ★ Saves up to 50% in solder costs
- ★ Recovery up to 75% in solder from dross
- ★ Reduces de-drossing time by up to 85%
- ★ Self-contained process reduces handling of dross
- ★ Uses no chemicals, additives or toxic substances
- ★ Can handle multiple wave soldering machine

The Process: EVS Solder Recovery System and its patented process uses heat and pressure inside a magnetised cylinder to separate and return your pure solder into the ignot tray. The remainder of the material is automatically ejected down a sealed chute into the dross bucket.

The Quality Facts: Hundreds of solder assays prove that the recovered pure solder is exactly the same specification as the solder in your wave soldering machine pot. This has been authenticated by the solder manufacturer and confirmed by the International Tin Research Institute.

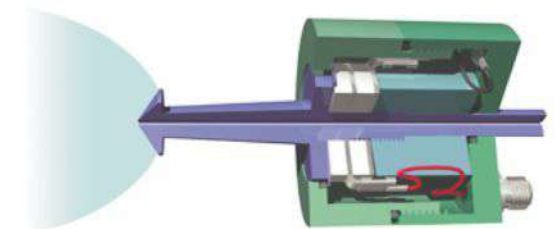


SONO•TEK

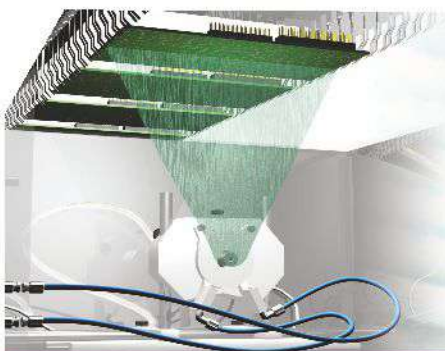
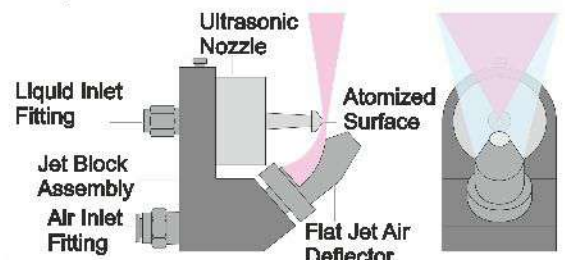
Ultrasonic Spray Fluxing for Wave Solder Machines Internal or Stand-Alone

Benefits:

- ★ Typical ROI is less than one year
- ★ Flexible configuration to retrofit into any wave soldering machine
- ★ Works with all fluxes using the same spray head
- ★ No clogging of spray nozzle
- ★ Precise Spray / No Over-Spray
- ★ Reduce consumption of wave flux (upto 70%)
- ★ Eliminate thinner
- ★ Uniform thin film coating
- ★ Reduce release of hazardous material into environment
- ★ ISO 14001 beneficial - environmentally responsible



Impact Ultrasonic Nozzle



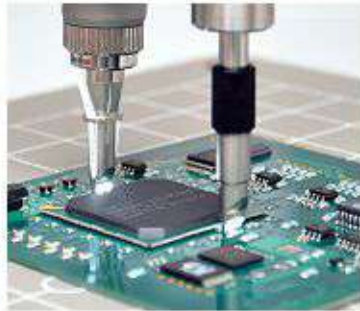


Industrial Inspection System



PCB Inspection BGA Optical Inspection

- Professional Full HD Digital Microscope for inspection.
- Systems equipped with 30x High Resolution
- Optical Zoom, quick Auto Focus,
- Large Working Distance,
- Laser Pointer for reliable,
- Ergonomic, fast visual inspection, quality control & documentation.



In-Line Inspection



Bench-Top Inspection

- W30x-HD, 30x zoom Full HD 1080p inspection system with laser pointer, incl. Joystick Control unit
- M30x-HD, EasyView, Camera with Control unit and Stand
- In-Line W30x-HD, 30x zoom Full HD Inspection System
- Bench-Top W30x-HD, 30x zoom Full HD Inspection System
- Optilia Digital BGA Inspection System, Extensive, 5.0MP, ESD-protected



Free Sight Inspection



250X Lens



500X Lens



BGA Ins Lens



20-50x varifocal



8-80x varifocal



Protecting Filter



**Close-up lens
+10 diopter**



**Side Viewing
BGA lens**



**Low Aperture 90°
Optical Probe**



Board Holder

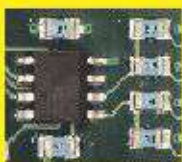


Camera Joystick



2x System

High Quality PCB Inspection System



6 Head floor Standing Pick & Place Machine

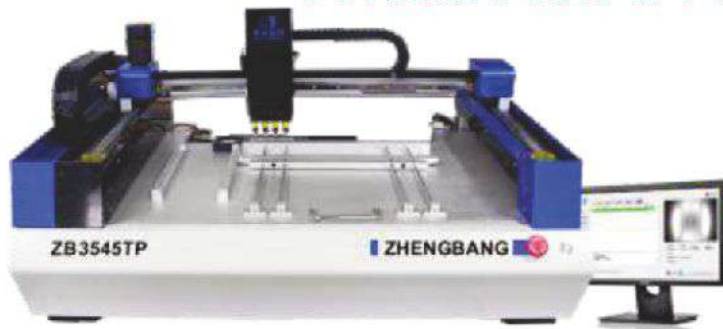


Product Characters

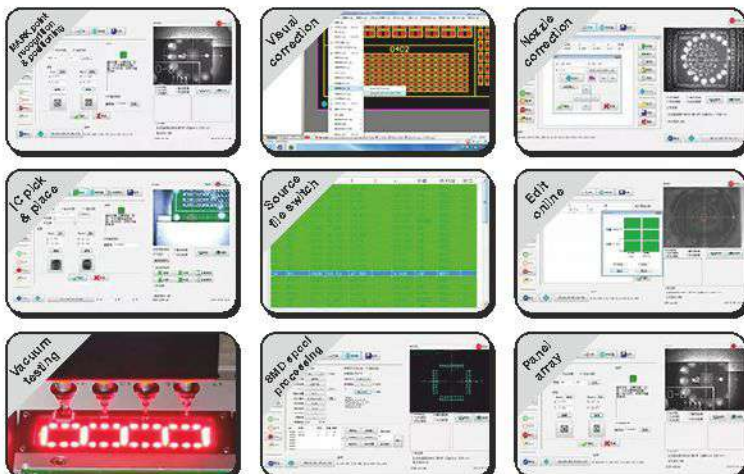


Model	ZB4050LY
Mounting Head	6PCS
Nozzle Type	Juki
No. of Feeder	64
Feeder Type	Yamaha
Theoretical Speed	11000 pcs/h
Practical Speed	9000 pcs/h
Visual Mounting	8000 pcs/h
Application	SMD : 0402 0803 0805 1206 LED : 0603 0805 3014 5050 etc Chip : SOT SOP QFN BGA etc
Min. PCB Size	45 × 45 mm
Max. PCB Size	500 × 400 mm
Program Method	Support online and offline Ways
No. of Camera	8
Mounting Precision	0.25mm
Power Supply	AC 220V ± 10% 50Hz
Power	1200 W
Pressure	0.8Mpa
Weight	440 kg
Size	L 1335 × W 1200 × H 1390 mm

4 Head Pick & Place Machine

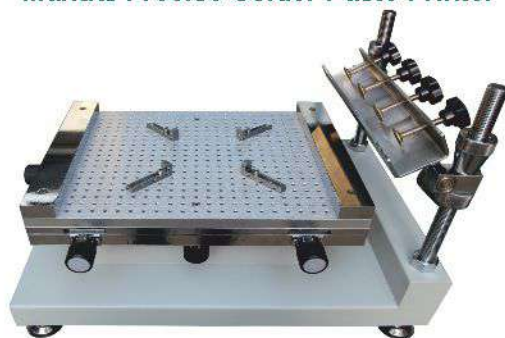


NINE BIG CORE FUNCTIONS



Model	ZB3545TP
Mounting Head	4PCS
Nozzle Type	Juki
No. of Feeder	38
Feeder Type	Yamaha
Theoretical Speed	7000 pcs/h
Practical Speed	6000 pcs/h
Visual Mounting	5000 pcs/h
Application	SMD : 0402 0803 0805 1206 LED : 0603 0805 3014 5050 etc Chip : SOT SOP QFN BGA etc
Min. PCB Size	10 × 10 mm
Max. PCB Size	350 × 450 mm
Program Method	Support online and offline Ways
No. of Camera	6
Mounting Precision	0.01 mm
Power Supply	AC 220V ± 10% 50Hz
Power	500 W
Pressure	0.8Mpa
Weight	123 kg
Size	L 1185 × W 840 × H 560mm

Manual Precise Solder Paste Printer



Model	ZB 3040H
Max Printing Size	250 x 400 mm
Workbench Size	300 x 400 mm
Max Stencil Size	370 x 470 mm
Printing Thickness	0~80 mm
Outline Size	540 x 370 x 380

Semi - Automatic Solder Paste Printer



Model	ZB 3250LY	ZB 32125LY
Max Printing Size	320 x 500 mm	320 x 1200 mm
Max PCB Size	320 x 430 mm	320 x 1230 mm
Max Stencil Size	550 x 650 mm	550 x 1550 mm
PCB Thickness	0.2~2.2 mm	0.2~5.0 mm
Outline Size (mm)	900 x 700 x 1650	1680 x 700 x 1650

2 Nozzle-3 Vision,54 Reel capacity (New Launch)



Model	ZB 3245TSS
Mounting Nozzle	02 Nos - Juki compatible
No. of reel pocket	54 No's, 8mm,
IC	Tray Available, Tube IC Optional
CPH - Practical	LED - 5000, 3500 (With Vision)
PCB Size (Max)	320 x 450 mm
Vision	3 No's CCD, 01-PCB & 02-Part
Components	0402,0603,1206, IC (20x20mm), LED up-to 5050
Drive	Stepper Servo motors, Linear guide
Operating System	Win7, 17" Monitor, Remote Assistance

2 Nozzle - Vision Pick & Place machine



Model	ZB 3245TS
Mounting Nozzle	02 Nos - Juki compatible
No. of reel pocket	27 No's, 8mm,
IC	Tray Available, Tube IC Optional
CPH - Practical	LED - 5000, 3500 (With Vision)
PCB Size (Max)	320 x 450 mm
Vision	2 No's CCD, 01-PCB & 01-Part
Components	0402,0603,1206, IC (20x20mm), LED up-to 5050
Drive	Stepper Servo motors, Linear guide
Operating System	Win7, 17" Monitor, Remote Assistance

Desktop Oven 3 & 5 Zone



Model	ZBHW-330	ZBRF-530
Heating Nones	3 (3 Up)	5 (3 Up / 2 Down)
Heating method	Infrared	Hot Air circulation
Heating Zone Length	1000 mm	960 mm
Width of Mesh Belt	300 ± 20mm	320 ± 20mm
Starting Load (Peak)	6 KW	7 KW
Running Load	2 KW	2.5 KW
Outline Size (mm)	L1700 X W710 X H650	L 1700 X W785 X H640
Weight	120kgs	150kgs

Floor Stand Oven 6 & 8 Zone - Hot Air



Model	ZBRF-630	ZBRF-830
Heating Zones	6 (3 Up / 3 Down)	8 (4 Up / 4 Down)
Heating method	Hot Air circulation	Hot Air circulation
Heating Zone Length	1060mm	1400mm
Width of Net Belt	300 mm (280mm PCB)	300 mm (280mm PCB)
Starting Load (Peak)	9 KW	11 KW
Running Load	3 KW	3.5 KW
Outline Size (mm)	L2100 X W680 X H1200	L2440 X W680 X H1200
Weight	215kgs	250kgs

12 Zones Reflow Oven



Takein Servise High Temperature and Speed Electric Motor



The Furnace Using Industrial Grade Parts That Can Be High Temperature Resistance and Corrosion Resistance, Its Up to 900 Degree.



Full-color HMI Human-computer Interface (Touch Screen) 360° Policy to Detective Temperature of the Furnace.



• PCB Computer Operate Easy and Convenient to Operate, More Fashional.



Specification

Model	ZB1230RF ZB1230RF/PC
Heat Zone Numbers	12 Temperature Zones (Up 6+Down 6)
Heat Method	Hot Wind
Cooling Zone Numbers	Two Natural Air Cooling
Heating Zone Length	2080 mm
Width of Net Belt	300mm
PCB Size	Max. 280×280mm
Height of Net Belt	880±20mm
Transport Speed of Net Belt	0-1500mm/min
Transport Direction of Net Belt	L→R(R→L)
Supply Power	AC380V±10% 50Hz
Starting Power	14KW
Working Power	5KW
Heating Up Time	About 30 mins
Time of Passing Through the Machine	3.5-5.5 mins
Range of Temperatures Control	Indoor Temperature-400 Degrees
Method of Temperature Control	Touch Screen Control (PID Close-Cycle Calculate Method)
Outline Size	L3500×W710×H1250mm
Weight	450kg

SMT Prototyping Solution for R&D & MSMEs



Manual Precise Printer



4 Nozzles SMT Machine



Hot Air Reflow Oven

SMT Solution for Mid to High Range Production



Solder Paste Mixer



Solder Paste Printer Machine



Automatic Loader



Conveyor



Automatic Unloader



Hot Air Reflow Oven



Conveyor



6 Nozzles Full Automatic Visual SMT Machine

Other Products Available



Solder Paste Mixer



Desktop Oven



Linking Conveyor



Inspection Conveyor



PCB Loader



PCB Unloader



Wave Soldering input Conveyor



Wave Soldering Output Conveyor



SMD Component Counter



LED Repair Hot Plate



1200mm MCPCB Cutting Machine



PCB Dapaneling Machine

BL-250
Magazine loader



Main function
Use in SMT line front, send PCB from magazine to downstream machine

UL-250
Magazine unloader



Main function
Use in SMT end, receive and store PCBs into magazine one by one.

DL-350
Destacker



Main function
Use in SMT line front, transport bare board, receive downstream signal, drop bare board one by one to rail, and transfer to downstream by one.

NG-250 A
Automatic Translational NG Unloader



Main function
Use in SMT line after AOI, received NG/OK signal from AOI, OK PCB transfer to OK magazine, NG PCB shuttle to NG magazine

PC-350W-ST
Traveser (single rail)



Main function
Use in SMT line, combine two line into one line, or one line separate into two line.

HB-350A-ST
Traveser (single rail)



Main function
Use in SMT line after silkprint, or use for buffer function, store 24pcs PCBs

BI-350W-ST
Automatic inverting machine



Main function
Use at SMT line turning point or cross point to change PCB direction

BR-350W-ST
Automatic 90° Turning Machine



Main function
Use for PCB invert for double sides PCB working

GC-350A
Automatic telescopic gate conveyer



Main function
Use in long SMT line as gate function



QX-250 W

Inline Anti-statics PCB Cleaner

- High-efficient cleaning
- Anti-Static cleaning
- High Quality

Specifications

Model	QX-250W
Outer size	(L)600X(W)750X(H)1450 ± 20mm
Line speed	0~100M/min
Cleaning PCB Size	100*70~(L)330*(W)250mm
Transport height	900 ± 25mm
PCB thickness	0.5~3mm
Clear roller	upper cleaning roller *2pcs
Dust adhesive paper roller	upper adhesive paper roller *1pcs
Anti-Static bar	1pcs
Single side support unit	Anti-static brush support
Input Voltage	220V(50/60HZ), Single phase
Air Pressure	8kg/cm ²
Air consumption	30L/min~160L/min
Weight	120KG



LS-DC250LP

Inline laser marker

- High-efficient, High precise
- Long life, Traceability

Specifications

Model	LS-DC250LP
Outer size	(L)1000X(W)130X(H)1670 ± 20mm
PCB size	80*50~ (L)330*(W)250mm
PCB thickness	0.5~3mm
Transport height	900 ± 25mm
Mark type	Data Matrix/QRcode/Code39/ Code 128/Graphics/Word/Number/Chinese
Mark material	non metal, PCB,FPC
Mark scope	(L)330*(W)250mm
Make speed	0.8~3s/pcs
Make recognition	According to clients requirement
Power spec.	AC 220V/50HZ 2800W
Air Pressure	0.4Mba
Weight	630KG



PM-330DL

Inline Inkjet Printer

- High-efficient, High precise
- High Stability, Reparable

Specifications

Model	PM-330DL
Outer size	(L)1000X(W)1035X(H)1510 ± 20mm
PCB size	70*50~ (L)390*(W)330mm
PCB thickness	0.5~3mm
Print scope	(L) 390 * (W) 330 mm
Print angle	0°, 90°, 180°, 270°
Print speed	0.8s/pcs
Repeat accuracy	± 0.1mm
Quantity	A one-section rail, can stop one board.
Print type	One-dimensional code, QR code, English, Number, Character, Graphic.
Print recognition	According to clients requirement on QR code size and data size, hand scanner can read normally
Power spec	AC 220V/50HZ 2300W
Air pressure	0.4 Mba
Weight	620KG

Dry Cabinet



Humidity Range	<5%RH	1~50%RH	20~50%RH	40C, <5%RH
Baking and Drying				●
LED Display	●	●	●	●
Epoxy Paint (White)		●	●	
Antistatic Paint (Black)	●			●



Options available for Dry Cabinets



Excellent Airtight Cabinet Body

- Reinforced glass window
- Antistatic 3" wheels
- Antistatic colorful window frame
- Adjustable levelers
- Unique steel structure design for excellent air tightness



Reliable Dehumidifier made of PPS material

- PPS material: 230°C heat tolerance to avoid any deforming or melting of dehumidifiers
- Modular design for easy maintenance & painless upgrade
- Silent, drip less, frostless operation

Accessories



Data Logger



Nitrogen Flow Meter



Colourful Storage Bins



Flash Alarm Tower



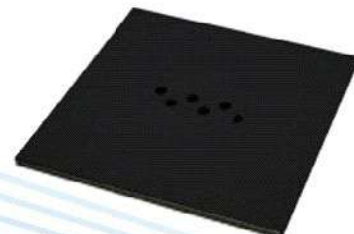
Stainless Steel Shelf



Indoor Induction Light



Shelf c/w stoppers



Adjustable Shelves

Other Utility Equipment



Video Microscope up to 140X



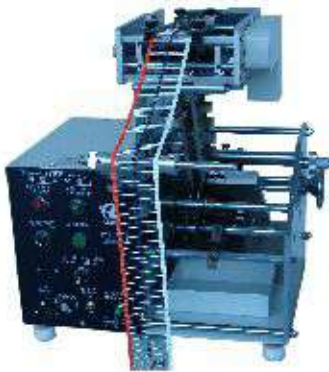
Auto focus Video Microscope



Magnifier lens



Ring Light



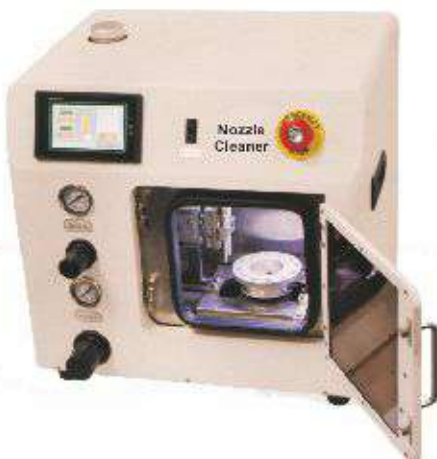
Axial Forming M/c



Full Automatic Bulk Capacitor Forming M/c



Transistor Forming M/c



Nozzle Cleaning M/c



PCB Routing Machine



Automatic glue dispenser

Personal Grounding



Cleanroom Footwear



Wriststrap with wire



Cordless Wriststrap



Antistatic Apron



Antistatic Hat



Shoe-Cover



Finger Cots



ESD Gloves



Brush & Dispensing Bottle

Bench Top Products



Tweezers



ESD UV Magnifier



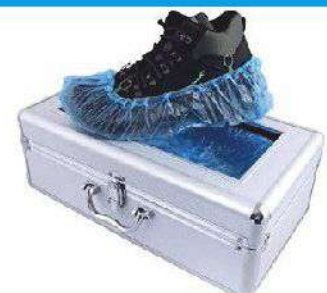
Magnifier Lamp



Fume Absorber



Floor Mat & Curtain



Shoe Cover Dispenser

Storage



Size 850 x 550 x 1390

PCB Storage Trolley



I-Tray / L-Tray



PCB Magazine Rack



Size 850 x 1350 x 1300

PCB Trolley for 4ft LED



Size 1200 x 460 x 1500 5 Layers
Size 1200 x 460 x 1800 5 Layers

SMD Component Trolley



Feeder Storage Trolley

ESD Control & Test Equipments



Bench Top Ionizer



Over head Ionizer



Ionizing Air Gun



Foot wear tester



Surface resistivity meter



Megohmmeter

PCB Backup Pin



Features & Advantages

- Reduce changeover time
- Improve mounting quality
- Eliminate damages to the components
- Apply to any type of Pick & Place machines

Height	125mm*40mm ; customized size also available
Pin Array	Adjust according to different Pick & Place machine
Hardness	38 Pins Based on standard size
	Type hardness types:
	25 shore A (Suggest to support PCB with thickness above 2.0mm)
	22 shore A (Suggest to support PCB with thickness between 1.5 to 2.0mm)
	20 shore A (Suggest to support PCB with thickness between 0.6 to 1.6mm)
	ESD Safe 10 ⁷ -10 ⁹
Life Span	Above 6K hrs based on normal working status Compliant
Application	To support the PCBA In the Pick & Place machines



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