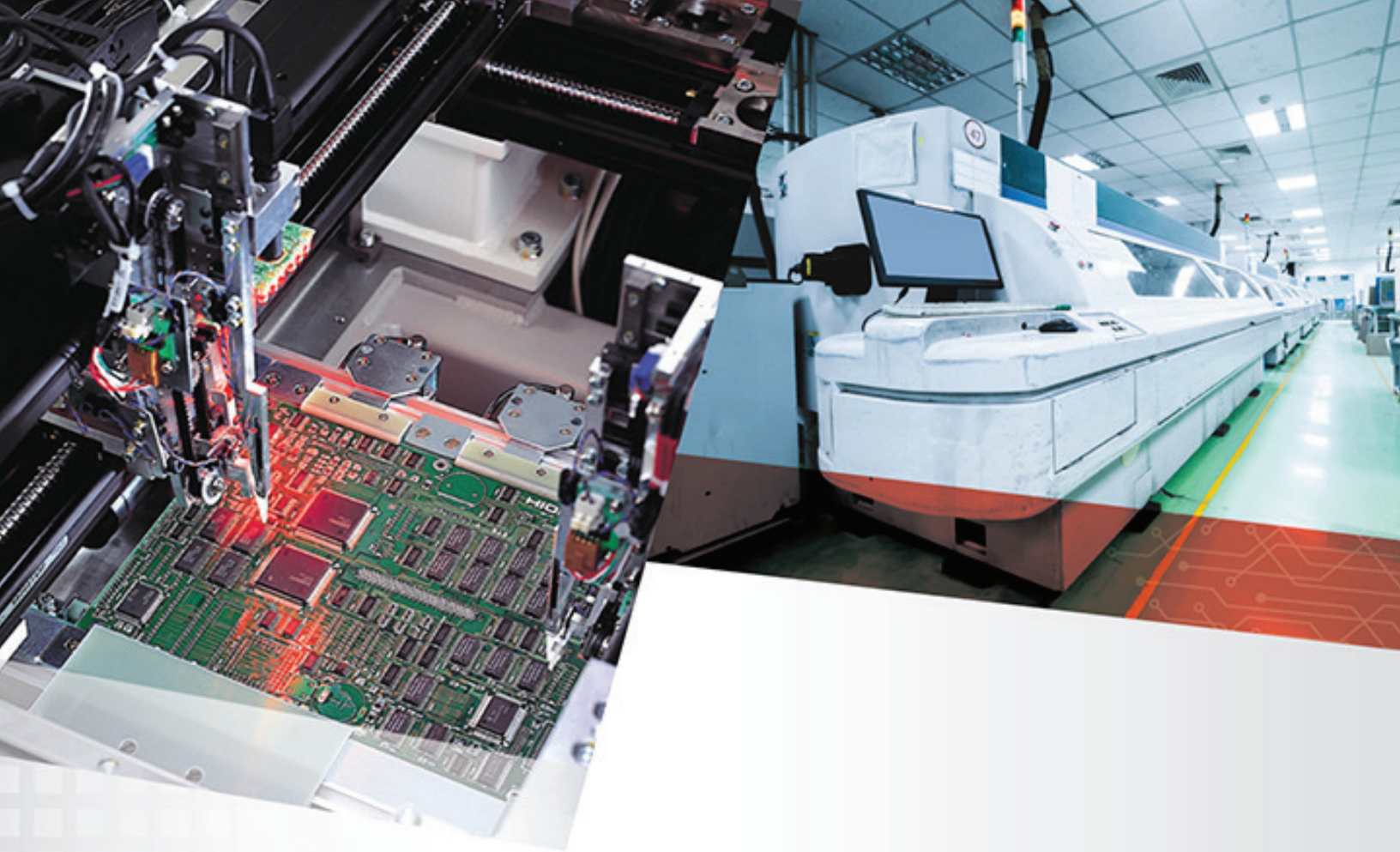




SEIKA

PRODUCT LINE CARD

WWW.SEIKAUSA.COM



ABOUT US

Seika Machinery, Inc. (SMI) is a subsidiary of Seika Corporation in Tokyo, Japan which specializes in the international distribution of advanced machinery, materials and services for a broad range of industries worldwide.

Since the establishment of Seika Corporation in 1947, we have extended our global network comprising over 800 personnel working in 15 countries and 43 locations. SMI has three offices in the United States located in Los Angeles, CA, San Francisco, CA, and Atlanta, GA.

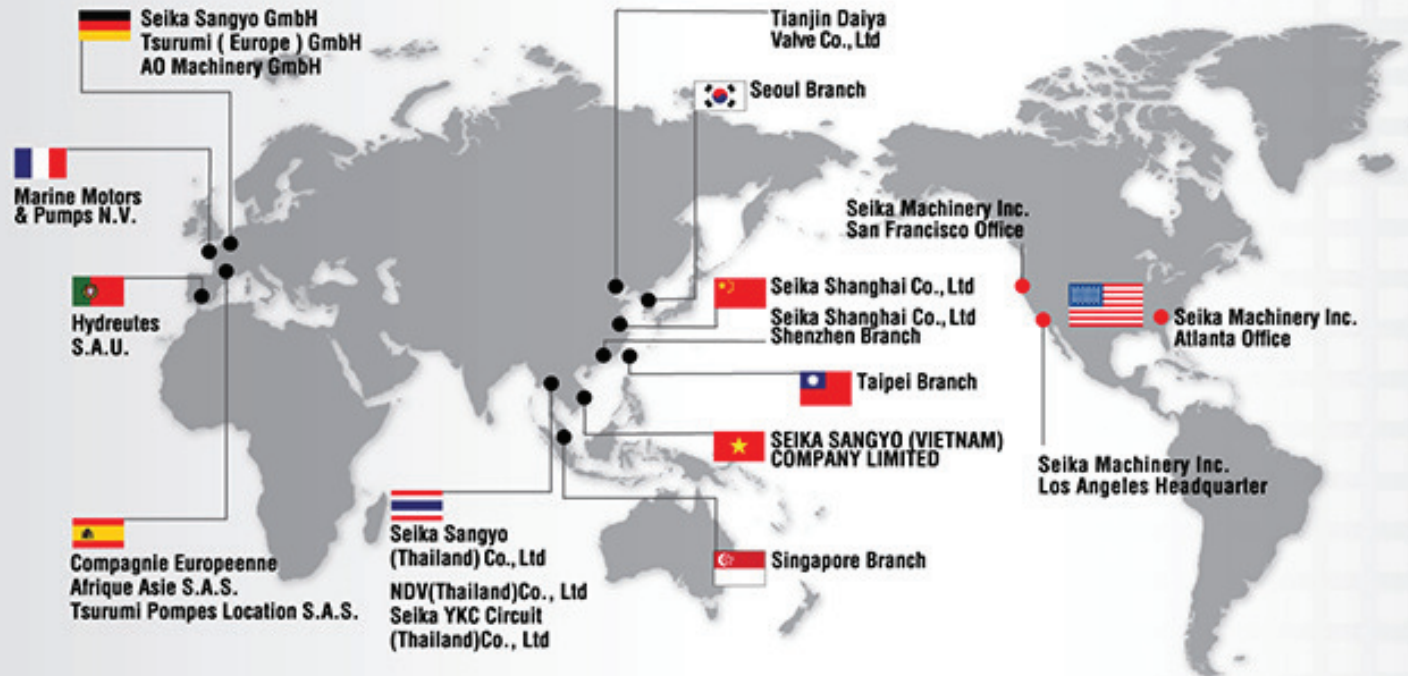
Since 1994, SMI has continuously provided a wide variety of high quality and reliable production equipment with accompanying engineering support services for the electronics and general manufacturing industries.

We cover markets in the United States, Canada, Mexico and South America. In addition, SMI maintains a broad sales and distributor network to help support our customers and products in each market.

By leveraging Seika's vast global network and resources, SMI can provide expertise and support for each product in their respective markets.



Seika Global Network



Seika Machinery, Inc (SMI)

● Los Angeles Headquarter and Demo Center

21241 S. Western Ave., #140, Torrance, CA 90501
Tel: 310-540-7310 Fax: 310-540-7930

● Atlanta Branch Office and Demo Center

1580 Boggs Rd., #900, Duluth, GA 30096
Tel: 770-446-3116 Fax: 770-446-3118

● San Francisco Branch Office

23785 Cabot Blvd., Suite 306, Hayward, CA 94545
Tel: 510-293-0580 Fax: 510-293-0940

Seika Machinery Sales Network by Territory



Lines of Business

- Sales and distribution of equipment for electronics assembly including SMT (Surface Mount Technology), automotive and other industries
- Technical services for SMT products (installation, training, etc.)
- Software application engineering for ATE (Automated Test Equipment)
- Import/Export of parts and materials
- Sales and support of test equipment for rubber & plastics industries

SURFACE MOUNT TECHNOLOGY

EIGHTECH ENERGY-SAVING AND EASY MAINTENANCE REFLOW OVENS



NJ06M-82

- Precise and uniform temperature profile with air, N2 and vacuum models
- Energy savings due to ultra-low power consumption
- Highly-insulated oven design prevents excess heat loss
- Large capacity flux collection unit to reduce maintenance down-time
- Optimal cool down with air-cooling fin system
- High performance, quality built with competitive pricing

SEITEC SELECTIVE SOLDERING SYSTEM



BRAVO STS-2533IN-SJ

Superior inline and offline selective soldering system solutions. Depending on the customer's needs, Seitec can build selective soldering and fluxing systems to cater to unique requirements with outstanding results.

The newest inline model known as "Bravo" is a one-of-a-kind modular soldering system to accommodate severe tact time requirements. It uses a programmable solder wave and special precision nozzles for perfect soldering of leads and pads.

Key features:

- * +/- 1 degree temp control of solder
- * Optional camera to monitor solder flow height with automatic adjustment
- * Nitrogen temp control
- * Simple programming
- * Quick changeover



Stand Alone Model
SAM-CT23NJ



Low-stress depanelization

- Prevent product failure such as flex-crack of chip component and solder joint breakage

Windows base user-friendly GUI operation

- Intuitive and easy to use graphical user interface and software.
- Easy to learn programming and simulation function for debugging
- QR code reading capability



Table Top Model
SAM-CT23S

Precise and clean depanelization for densely populated PCBs

- Repeatability $\pm 0.01\text{mm}$
- Automatic alignment by CCD camera
- Fixture-based highly efficient dust vacuum system



Twin Table Model
SAM-CT23W

Calibration free mechanism & low maintenance

- Robust design, calibration-free cartesian robot
- Automatic router bit depth adjustment extends bit life

PCB size (routing area size)

- 250mmx350mm(9.8"x13.8")~500mmx600mm(19.7"x23.6") NJ models
- 250mmx350mm(9.8"x13.8")~350mmx600mm(13.8"x23.6") Table top models
- 250mmx350mm(9.8"x13.8")~600mmx400mm(19.7"x15.7") Twin table models

Robot ready models & In-line models

- Sayaka PCB router is capable to work as an off-line or in-line router with factory optional interface with industrial robots.
- Sayaka offers custom in-line models (SAM-CT23BPF)



Robot Ready SAM-CT23NJ
with Kawasaki duAro robot



In-line Model
SAM-CT23BPF

SURFACE MOUNT TECHNOLOGY

TAMURA HIGH-PERFORMANCE RELOW OVENS



TNV25-508EM-X

Maximum Level Heating Performance

- Next generation, X-type heating panel provides uniform temperature at ΔT
- Highly insulated oven design creates efficient, consistent heating throughout each zone

Industry Leading, Energy Efficiency

- Low-power usage providing stable, high thermal performance at average 7.6kw
- Nitrogen consumption rate: 180L/min (380 SCFH) at 250ppm oxygen level setting (Single lane model)

Simple Maintenance

- Powerful flux recovery system equipped at the entrance and exit (Water cooled)
- Flux collection unit can be easily removed and replaced without extra tooling

Wide Variety of Model Configurations

- Air, N₂, and Dual lane models available

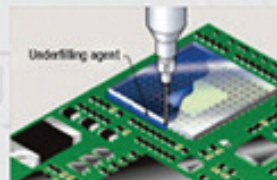
MUSASHI ENGINEERING: PRECISE DISPENSING SYSTEMS



SUPER Σ

Super Σ (Digital Controller)

- Easy programming and operation for automatic and manual modes
- Continuous dispensing with no stop gaps even at corners
- Precise, repeatable dispensing with no dripping
- Automatically calculates correct dispensing volume and pressure
- Automatically detects usage level of leftover dispensing liquid



AEROJET

AeroJet (Non-Contact Jet Dispenser System)

- Fast tact time due to no height adjustment required
- Maximum speed of up to 333 shots per second
- Precise jetting mechanism capable of super micro shot dispensing
- Capable of dispensing from side angles
- Able to dispense on to uneven surfaces with consistent time and quantity



AUTOMATIC TEST EQUIPMENT

HIOKI FLYING PROBE & IN-CIRCUIT TESTERS



HIOKI FA 1240

HIOKI FA1240 Flying Probe Tester

- Industry leading inspection speeds at up to 40 steps/second
- Standard AOI functionality for component presence, polarity and displacement check
- Soft-landing probes to prevent component and board damage
- Solder Joint Integrity Test (SJIT) that detects insufficient solder joints
- Optional UA1780 FITLINE Gerber data based programming software (can automatically test BGA and other hidden inspection points)
- Optional laser based board warp compensation
- Accurate and repeatable probing on fine pitch components
- Robust and reliable build quality from Japan



HIOKI 1220

1220 Bed-of-Nails (BON) In-Circuit Tester

- High-speed and efficient in-circuit testing
- Automatic Test Generation (ATG) function
- Remote self-diagnostic feature
- Data stored in CSV format for off-line analysis
- Wide range measurement capabilities
- Compact, space-saving footprint
- User-friendly Windows® operation

NEWLY TSUCHIYAMA AUTOMATIC FAI TESTER (N=1 CHECKER)



- Visual verification and electric measurement tests done automatically on SMD components for FAI (First Article Inspection) PCB applications.
- Perform FAI checks up to ten times faster than human inspection (average manual inspection per component: 10+ sec, average with N=1 Checker: 1 sec.
- Precise LCR testing (inductance, capacitance, resistance) done using specialized probes designed for FAI.
- Assists visual verification of SMD components with correct product specs alongside magnified image of target.
- Easy test program creation with user friendly software.
- Automatically generates test reports providing traceability for both internal and audit purposes.
- Options for large size boards, post reflow test features, etc, available.

PROCESS CONTROL

SPS SERIES PASTE MIXERS



SPS-2000 PASTE MIXER

- From refrigerator to screen printer in less than 15 minutes
- Automated operation for gentle softening, and even consistency
- Uses airtight containers preventing oxidation and humidity
- Models are available for single paste jars (up to 1kg), or dual cartridges (up to 8oz. each)

VISCOMETERS



PC-11 VISCOMETER

- Help eliminate misprints due to incorrect paste conditions
- Patented spiral-pump sensor provides dynamic, quick, easy, repeatable measurements
- Satisfies international standards for paste viscosity measurement
- Data logging of viscosity and temperature data
- Models include hand-held, table-top, laboratory, and extra-small sample size versions

WETTING BALANCE TESTERS



SWB-2 WETTING TESTER

- Evaluate the wetting profiles of through-hole and SMT components, leads, solder and flux
- Simulate the temperature profiles of wave soldering machines, or SMT reflow ovens
- Conforms to international standards for wetting balance testing
- Log and compare the test results for easy analysis

Malcom:

1. SPS Series: Last bullet point should read: "Models are available for single paste jars (up to 1kg each), or dual cartridges (up to 8oz. each)"
2. Reflow Oven Profiling & Camera System: First bullet point should read: "Complete profiling of reflow oven, including oven temperature, O2 concentration, convection air velocity, and rail vibration"

REFLOW OVEN PROFILING & CAMERA SYSTEM



RCX MODULAR PROFILING SYSTEM

- Complete profiling of reflow oven, including oven temperature, O2 concentration, convection air velocity, and rail vibration
- Verify ovens are performing at optimal conditions, and troubleshoot problem areas
- 6 and 12 channel reflow oven thermo-profiling
- O2 concentration profile data for the entire Nitrogen oven
- Convection air velocity profile data for the entire oven
- Record video of a PCB as it travels through the oven. Focus on specific areas of concern to isolate problems occurring
- Display the profile data along with the O2 concentration, air velocity, or camera image

REFLOW SIMULATORS



VDM-3 VIDEO CAPTURE SYSTEM

- True representation of a multi-zone reflow oven in a table-top form factor
- Top & bottom side heaters in conjunction with hot air convection
- Viewing windows allows you to monitor the process during reflow, and with the optional VDM-3 camera system, record video while overlaying time and temperature profile data
- The RDT-250C will allow for 330mm x 250mm PCB board, where the SRS-1C allows for a 70mm x 70mm sample board or test piece
- Reflow simulators can be run using an air or nitrogen environment



RDT-250C REFLOW SIMULATOR

UNITECH PCB BOARD CLEANER



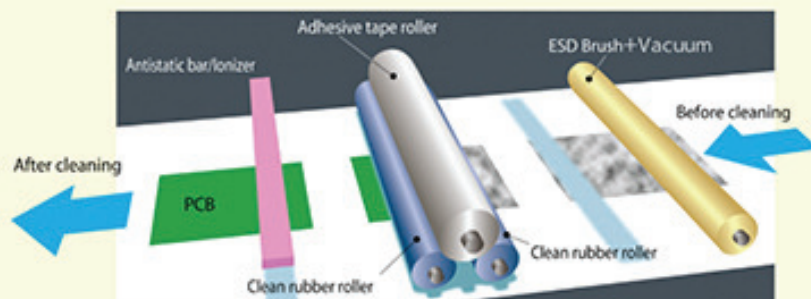
UC-250M-CV PCB CLEANER

- Three-stage PCB board cleaning system is the most effective way to remove dust & debris from the PCB surface
- The first stage is a brush & vacuum
- The second stage uses a dual rubber sticky roller system
- The third stage uses an ionized air blower for anti-static board preparation
- Select any combination of the cleaning stages to fit your needs
- Larger & custom sizes are available

MODEL UC-250M-CV

Cleaning Surface	Top-Side
Cleaning Method	Silicone Rollers & Brush-Type
Rollers	2 Silicone 1 Adhesive Tape Roller
PCB Size	W: 50 ~ 250mm L: 75 ~ 330mm T: 0.5 ~ 2.0 mm
Conveyor Height	900 ±25 mm
PCB Flow Direction	R → L -or- L → R
Conveyor Fixed Side	Front -or- Rear
Conveyor Width Adjustment	Auto (optional)
Conveyor Speed	0 ~ 9 m/min
Ionizer	Internal w/ Air Blower
PCB Anti-Warp	Inside of conveyor
PCB Anti-Warp Adjustment	Manual
PCB Counter	0 ~ 9999, Warning Buzzer, Signal Tower
Power Supply	AC 100-120V 50/60Hz 300VA
Brush Unit	Rotating brush & Vacuum
Air Supply	0.5Mpa
Options	Auto Conveyor Width Adjustment 3 Color Signal Tower Custom Paint Large PCB System (400mm PCB width) XLarge PCB System (460mm PCB width) Upgraded Ionizer/Blower Anti-Static Silicone Rollers Top & Bottom Cleaning System

*Specifications subject to change without notice



QUALITY ASSURANCE

MCDRY ULTRA-LOW HUMIDITY STORAGE CABINETS



DXU-1001A 1%RH MODEL with Data Logger

- Conforms to IPC/JEDEC J-STD 033 and ESD IEC-61340-5-1 Standards
- Dehumidifies ICs to prevent micro-cracking
- Alternative to baking, MBBs and nitrogen storage
- All models maintain 1%RH
- Powerful moisture absorbent never needs replacement
- Digital RH meter included
- ESD safe design
- Wide range of cabinets including UL/C models
- Optional chart recorder and data logger



McDry Feeder Cabinets



MB-301A
Low-Temperature Baking Cabinet



MC-1002A 1%RH MODEL

MC-1001A/MC-1002A, 1%RH PCB STORAGE CABINETS

- Low-Cost, High-Performance
- Door opening/closing frequency: Once every 1-2 hours
- Compliant to ESD standard IEC-61340-5-1 and IPC 1601
- Can maintain an RH level of 1%RH

Low Humidity Storage of Thin Multi-Layer PCBs

Multi-layered PCBs absorb moisture at a faster rate as they become thinner. Layer break off and blistering will occur during reflow if the moisture content of the PCB exceeds 0.2% (weight).

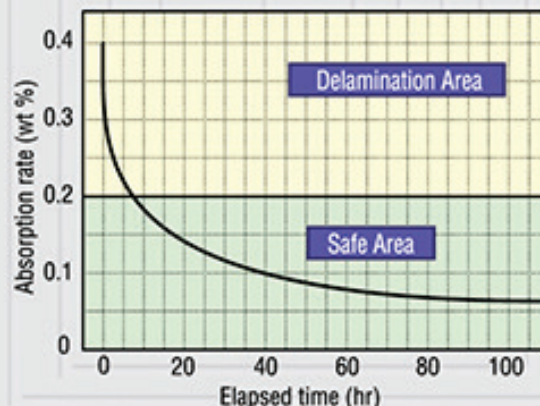
Test Sample: 6 layer Glass Epoxy PCB

Size: 50 x 100 x 1t (mm)

Pre-Treatment: Baked for 24 hours @125°C

Humidification: Steamed for 2 hours

De-Humidification: Stored in McDry Cabinet @5%RH



QUALITY ASSURANCE

SAWA ULTRASONIC STENCIL CLEANERS / MISPRINT CLEANERS

Sawa Cleaners use direct contact ultrasonic energy to dislodge solder spheres from fine-pitch apertures

STENCIL CLEANER – HANDY TYPE SC-5000GUS & SC-500HE

- Low Solvent usage and running costs
- Fast cleaning time of 1-3 minutes
- Any type of cleaning solution can be used
- Minimal waste disposal
- Portable unit can be used directly on the screen printer



SC-5000GUS



SC-AH100F-LV

SAWA ECOBRID FULLY-AUTOMATIC STENCIL CLEANER SC-AH100F-LV

- Powerful cleaning with Low-VOC cleaning agent
- Fast cleaning and drying time
- No deterioration of stencil adhesive, not affected by usage of cleaning agent
- Low usage of cleaning solution and low-running cost
- Ease of operation & ergonomic stencil insertion
- Misprinted PCB cleaner can be connected



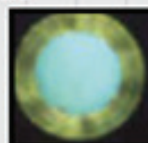
SAWA MOUNTER NOZZLE CLEANER SC-ENX ECO-NOZZLE



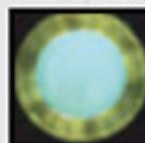
SC-ENX

- Ultrasonically-vibrated water thoroughly passed through every nozzle opening
- Double-cleaning power is generated with ultrasonic-energy cleaning and simultaneous vacuum suction
- Nozzle tips and apertures can be cleaned without leaving any residue
- Cleans using only filtered water!
- Can clean 20 nozzles at one time or more!

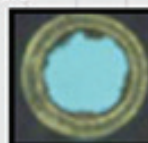
Before



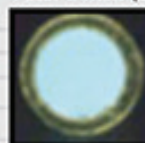
After 10 min. (Use purified water)



Before



After 5 min. (Use Sawa water)



GREEN TECHNOLOGY

SAWA ULTRASONIC WIPER ROLL CLEANER



SC-ER610FA

- Eliminates waste and saves money
- Re-use wiper rolls multiple times with stencil printer
- Standard length wiper rolls cleaned in approximately 30 minutes
- CO2 emission reduction by greatly reducing rolls being incinerated

MODEL: SC-ER610FA

Dimensions	851 x 1027 x 1100mm (33.5x40.43x43.3 inch)
Weight	150kg (330lbs)
	Material width..... 250-610mm (9.84-24 inch)
Cleaning Capability	Core width..... 250-610mm (9.84-24 inch)
	Inner Diameter..... ϕ 38mm (1.5inch)
Power	AC120V 50/60Hz 250VA
Ultrasonic Vibration	40kHz 150W
Air	0.5MPa 500NL/min
Exhaust Duct	ϕ 98mm, Exhaust Rate 5m/s

SOLDER PASTE RECYCLER



SEIKA SPR

- Converts both tin lead and lead-free solder into usable solder bar
- Reduces solder bar expenditures as a result of recovering waste
- A major decrease in disposal costs for factory waste by eliminating middle man
- Fully automatic operation
- Touch-screen panel
- Cycle time of 30-35 minutes
- Flexible heating and cooling temperatures
- Compact footprint
- Minimal maintenance

MODEL: Seika SPR

External Dimensions	29.5"(W) x 21.6"(D) x 57.5"(H)
Voltage	AC200V 3phase
Max Solder Capacity	5.5lbs Per Cycle
Recycling Efficiency	90-93%
Power Consumption	1.6KVA (max)
Exhaust Rate	9m3/min
Weight	331 lbs

TEST EQUIPMENT FOR RUBBER INDUSTRY

UESHIMA ABRASION, FRICTION & VISCOELASTICITY TESTERS



AB-2012

FPS Abrasion Tester

- Designed for polymeric material to be used for products such as tires
- Simulate lab scale rubber samples to real world material performance
- Friction force regulated abrasion testing
- Fully automatic testing



FR-7225

RTM Friction Tester

- Friction test of road surface with dry, wet and icy conditions
- Controllable road surface temperature
- Rolling resistance measurements
- Traction testing



VR-7130

Fully Automatic Dynamic Mechanical Analyzer (DMA)

- Viscoelasticity testing for polymers
- Exclusive Thermo Jetter used for chilling down to -100°C in lieu of liquid nitrogen
- Highly accurate temperature measurements
- Automatic testing of up to 60 samples at a time

AUTOMATION / ROBOTICS

KASAWASKI ROBOTICS / COLLABORATIVE ROBOT & 6 AXIS ARM ROBOTS



Collaborative dual-arm SCARA robot duAro



Collaborative operation

- Low power motors, soft body, speed work zone monitoring, and deceleration function enable the duAro to collaborate with humans.

Easy teaching with a tablet

- The direct teach function allows the users to easily teach the robot tasks by hand guided its arms.

Multitasking dual-arm SCARA robot

- Two co-axial arms cooperate, and independently work, with a single controller.

Easy and flexible deployment

- Arms are placed on the wheeled cart accomodates the contoriller enables the users to move the robot desired location without modification to the production line.

6 Axis robot Lineup

RS series
small to medium payload



CX series
large payload



CP series
palletizing robots

YAMAHA ROBOTS / INDUSTRIAL SCARA, CARTESIAN, ORBIT, ARM ROBOTS AND VISION SYSTEM

YAMAHA Industrial Robot Lineup

Orbit SCARA (YK-TW)



SCARA (YK-X)



Signal Axis Robots



Pick & Place (YP-X)



Cartesian Robots (XY-X series)



Articulated (YA series)



E-mail: info@seikausa.com
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www.seikausa.com

For more information, please scan:



Seika Machinery Website



Seika Machinery YouTube Channel

Catalog#: LC01082019