

SAWA SC-1000HE Stencil Pin Nozzle Solder Softening



✓ FCC Compliant

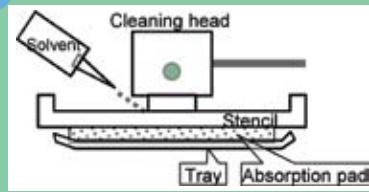
Generator	W6.30 x D8.27 x H1.69 in 4 lbs approx.
Transformer	W4.72 x D8.27 x H3.15 in AC100-240V 50/60kHz 30W
Cleaning Head	2.36 in Diameter
Tray	W10.63 x D8.27 x H1.18 in
Vibration Frequency	40kHz

BENEFITS

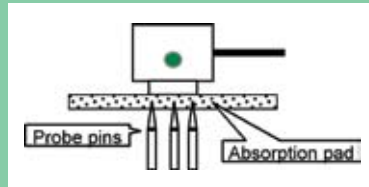
- Can be used for stencil cleaning, probe-pin cleaning, solder cleaning, and nozzle cleaning
- Improve assembly defect
- Reduce solvent usage
- Lower initial investment
- Portable size

Usage

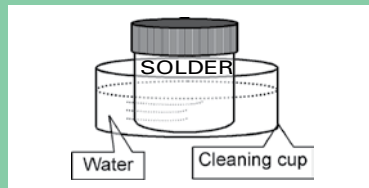
1. Stencil Cleaning



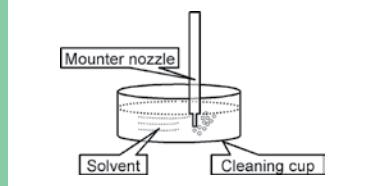
2. Probe-Pin Cleaning



3. Solder Softening



4. Nozzle Cleaning



Ultrasonic Stencil Cleaners

With normal cloth wipe cleaning of stencils, solder paste residue is left behind causing quality problems especially in fine pitch applications. Small amounts of solder balls have a tendency to adhere to the edges of apertures. Sawa Stencil Cleaners remove all solder paste residue utilizing ultrasonic vibration.



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SAWA SC-145GAE Squeegee Scraper Misprinted PCBs



Cleaner (SC-145A) Generator (SC-5000-62T)

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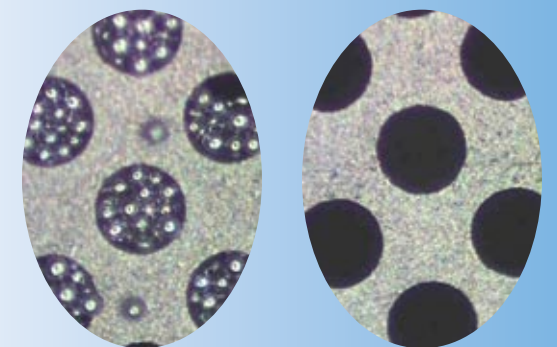
Generator (SC-5000-62T)	W10.04 x D14.17 x H6.34 in 26 lbs approx.
Cleaner	W25.98 x D11.61 x H9.45 in 24 lbs approx.
Tank Size	W24.41 x D7.09 x H6.30 in
Vibration Frequency	40kHz

BENEFITS

- Squeegees, scrapers, and test printed PC boards may be cleaned in the tank
- Most of solvents can be used for cleaning.
- Easy automatic operation with a timer
- Can be connected with a metal stencil cleaner

Stencil Cleaning by Sawa

- ❖ Sawa Cleaners use direct contact ultrasonic energy to dislodge solder spheres from fine-pitch apertures.
- ❖ Sawa Cleaners are hand-held, portable units that can be used in-line on the printer without removing the stencil.
- ❖ Sawa Cleaners are quick, effective, versatile and environmentally safe.
- ❖ Sawa Cleaners are economical.



before

after



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Manufactured by Sawa Corporation, Japan

Sawa Product Line

SAWA SC-5000GUS Stencil Misprinted PCB

The Sawa 5000GUS removes solder balls from stencil apertures after normal wipe cleaning. A powerful hand held ultrasonic cleaning head (W4.61xD4.61xH3.94 in) is manually applied over apertures with IPA, water, or a non-VOC solvent. During application of the cleaning head, the stencil is laid on a foam pad soaked with solvent contained within a large tray. The foam is utilized to capture solder balls dislodged by the cleaning head.



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Generator	W10.04 x D14.17 x H6.34 in 22 lbs approx.
Transformer	AC100-240V 50/60kHz 170VA (Built-in transformer)
Cleaning Head	W4.61 x D4.61 x H3.94 in
Tray	32 x 32 in
Foam Pads	30 pcs
Vibration Frequency	40kHz

BENEFITS

- Applies ultrasonic vibration directly to the stencil providing powerful cleaning capability.
- Cleans apertures as effectively as fully automatic stencil cleaners that can cost three times as much.
- Stencils can be cleaned in just a few minutes.

Stencil Cleaning Evaluation

* Sawa Cleaner VS. Manual Wiping Method

Evaluated Sawa Ultrasonic Stencil Cleaner ~ Cleaning Results
Provided By: Customer Manufacturing Telecommunications Equipment



QFP: 0.4 mm pitch

→

Before SAWA cleaning
Aperture

→

After cleaning by SAWA clean
Aperture

Conclusion:
SAWA CLEAN achieves a conspicuously better cleaning effect comparing to hand wiping.
*Image for reference only

SAWA SC-500HE Stencil



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The Sawa 500HE removes solder balls from stencil apertures after normal wipe cleaning. A small hand held ultrasonic cleaning head (1.89 in diameter) is manually applied over apertures with IPA, water or a non-VOC solvent. During application of the cleaning head, a small tray containing a foam pad soaked with solvent is held underneath the stencil to capture solder balls dislodged by the cleaning head.

Generator	W3.15 x D7.48 x H1.69 in 3 lbs approx.
Transformer	AC100-240V 50/60kHz 40W
Cleaning Head	2.36 in Diameter
Tray	W10.63 x D8.27 x H1.18 in
Foam Pads	20 pcs
Vibration Frequency	40kHz

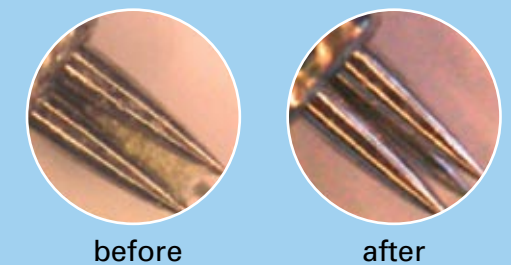
BENEFITS

- Can clean stencils without removing them from the printing machine.
- Stencils can be cleaned in just a few minutes.
- Portable

* Sawa Application Merits

Ease of Operation & Time and Labor Saving

METHOD	TIME	OPERATION	NOTES
Sawa Clean	15 Seconds	Use Sawa cleaner with solvent to clean stencil.	Powerful ultrasonic energy making direct contact to the stencil dislodges solder spheres from the apertures quickly.
Hand Wiping	4 Minutes	Manually clean stencil with cloth and solvent.	Cleaning time may vary depending on the size of stencil and other factors.



before

after

SAWA SC-139GAE

Pin Squeegee Scraper Misprinted PCB



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For most SMT lines, IC testers are used to uncover product defects. However, the precision of IC testers can be greatly affected by the cleanliness of the pins. SAWA CLEAN SC-139GAE is uniquely designed for accessible and complete cleaning of ICT fixtures and may also be used for squeegees, scrapers and misprinted PCBs.

Generator (SC-5000-63T)	W10.04 x D14.17 x H6.34 in 22 lbs approx.
Transformer	AC100-240V 50/60kHz 450VA (Built-in transformer)
Cleaner	W26.77 x D21.85 x H7.09 in 40 lbs approx.
Tank Size	W23.03 x D16.14 x H2.76 in
Solvent Volume	12 liter
Vibration Frequency	40kHz

BENEFITS

- Fast and Effective ICT Pin Cleaner
- No need to remove pins from ICT fixture
- Cleans all pins at one time in five minutes
- Eliminates flux residue on ICT fixture
- Enhances accuracy of IC Tester
- Capable of cleaning squeegees, scrapers and misprinted PCBs.