

Engineered for Zero Risk.

The SME-5200 Pallet Cleaning System





The Hidden Hazard in Plain Sight.

Traditional solvent-based cleaning introduces a constant risk of fire and explosion. Volatile Organic Compounds (VOCs) are a threat to both your people and your compliance record.

In today's manufacturing environment, this is a risk we can no longer afford to manage. It must be eliminated.

The Mandate for a Safer Factory



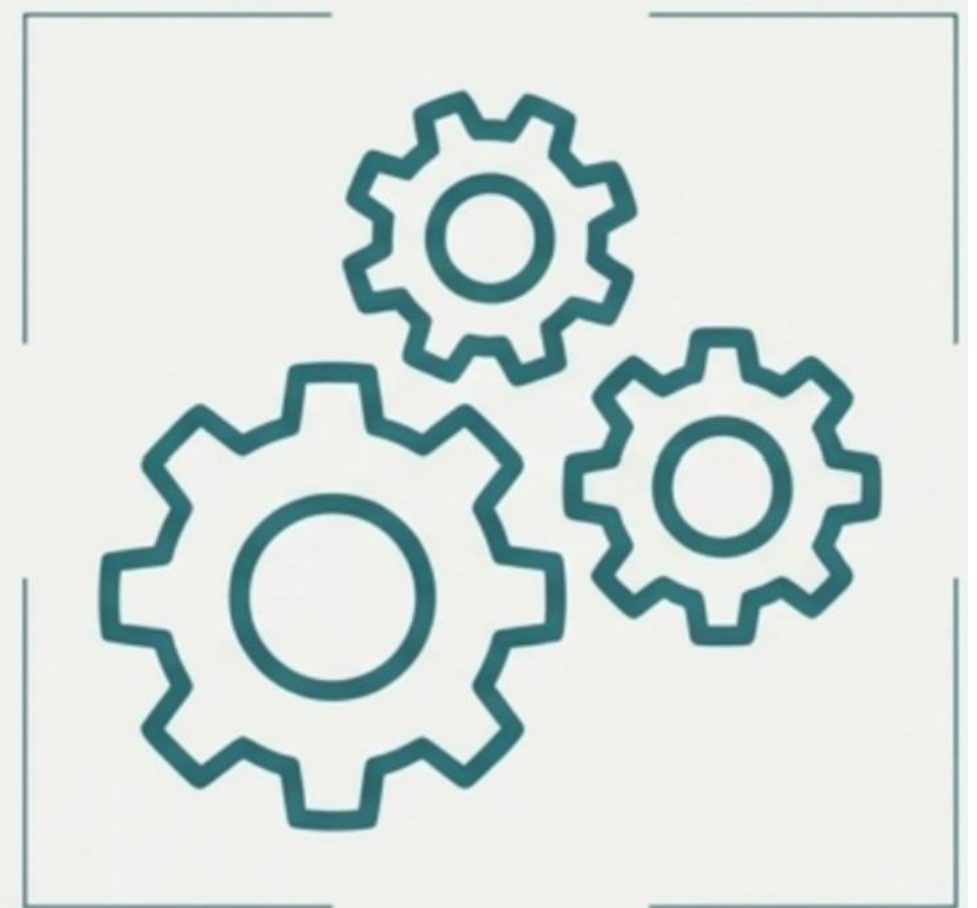
Protecting Personnel

Ensuring a safe working environment for every operator.



Ensuring Compliance

Meeting and exceeding factory safety regulations.

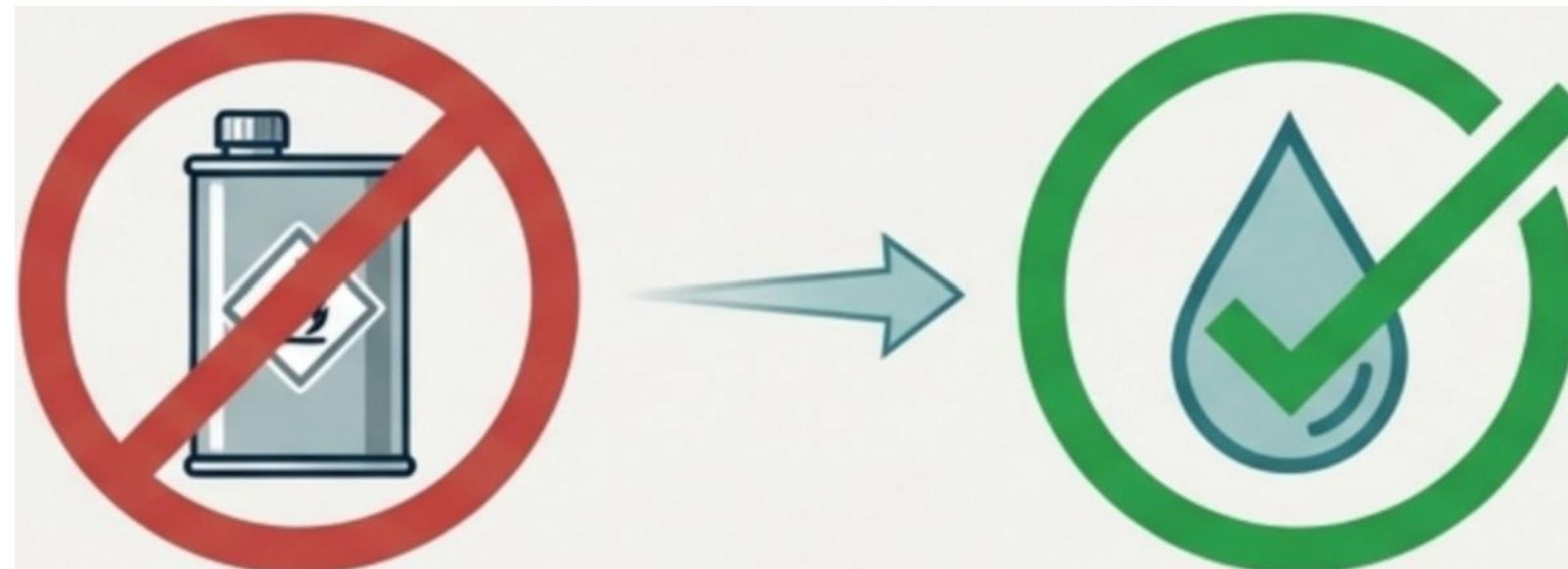


De-risking Production

Removing a critical point of failure from your process chain.

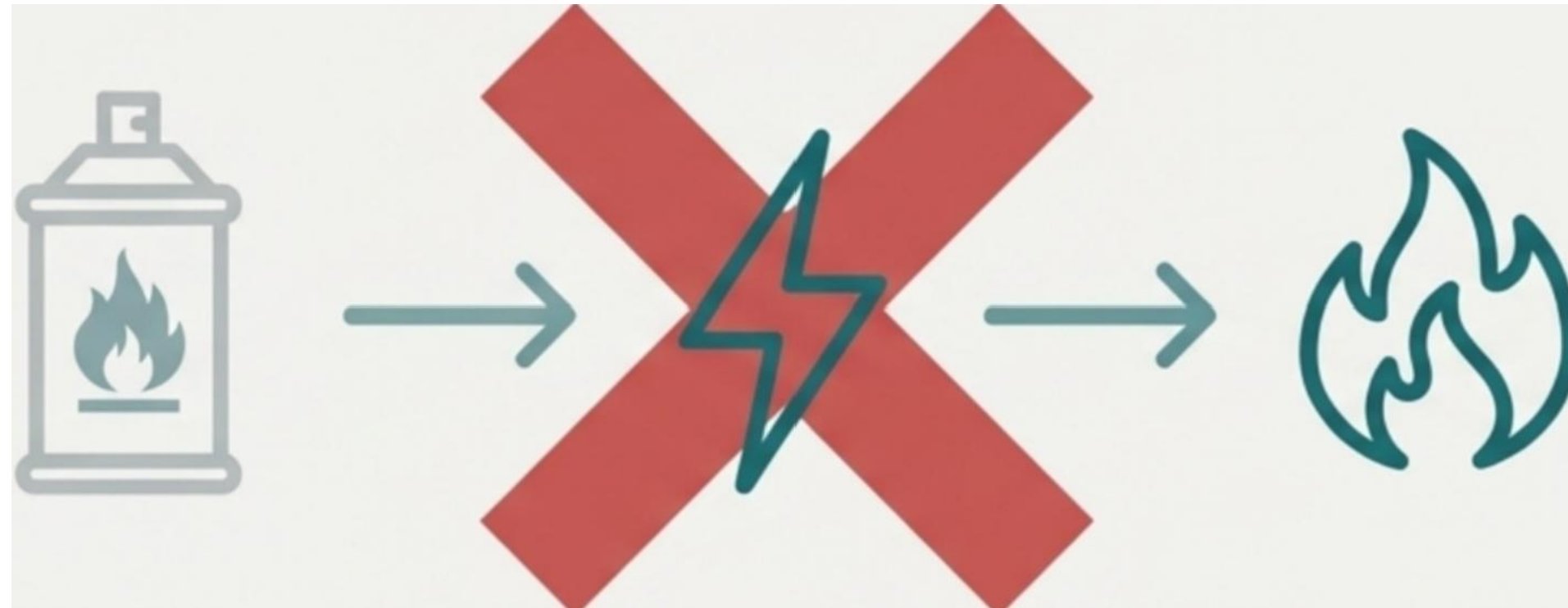
A Foundational Choice: Water-Based by Design.

"Volatile organic cleaning solvent are strictly forbidden to use on this machine or else it may cause fire or explosion."-SME-5200 User Manual



The SME-5200 is engineered from the ground up for one chemistry: modern, safe, water-based cleaning agents. This isn't an option; it's the core of its design. By rejecting solvents entirely, we don't just manage risk—we design it out of the equation.

Eliminating the Hazard at its Source



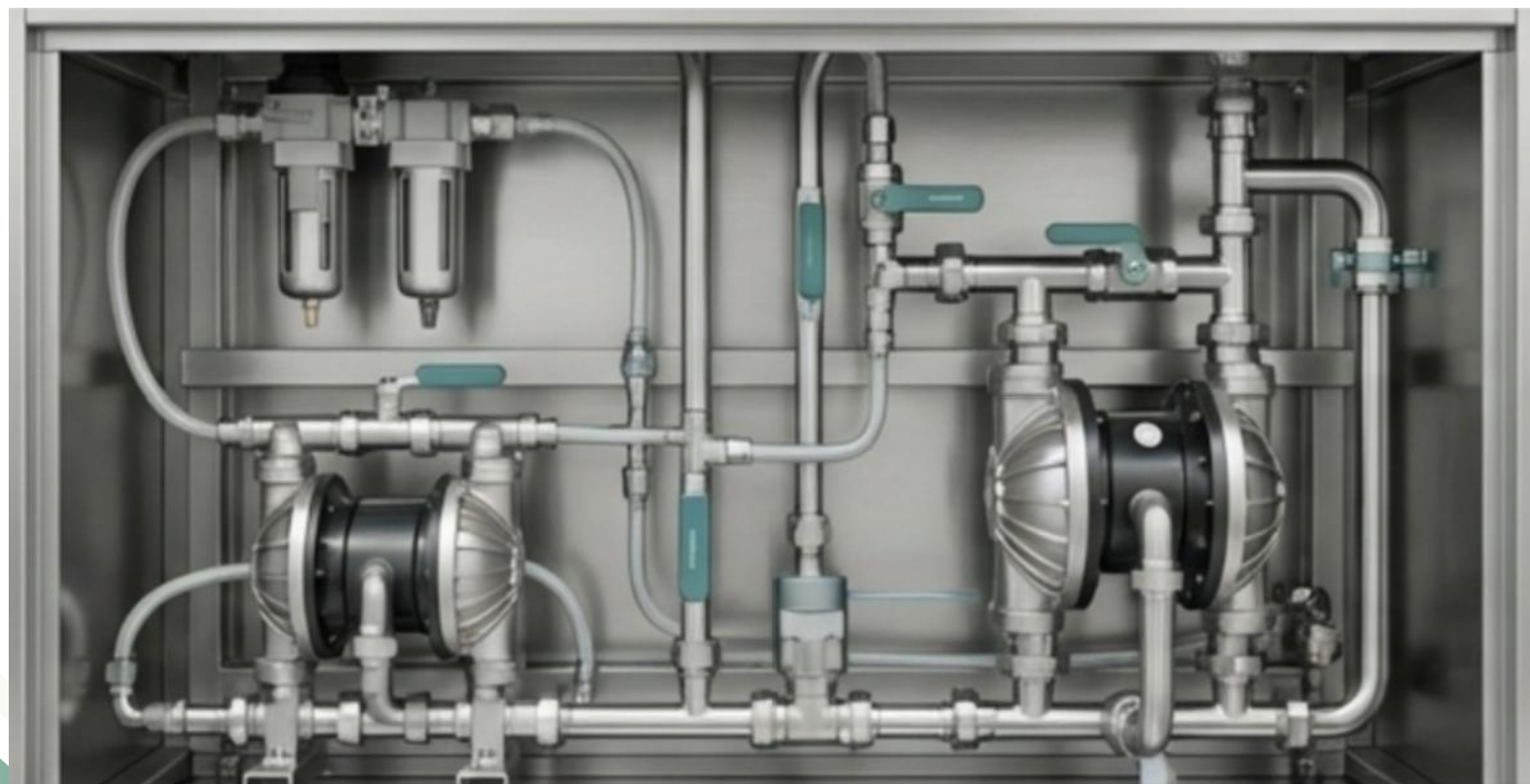
The risk of fire or explosion doesn't come from the cleaning process itself. It comes from the chemistry. By designing a system that is fundamentally incompatible with flammable solvents, the SME-5200 removes the root cause of the hazard.

An Ecosystem of Engineered Safety.

Safety extends beyond chemistry. Every component is selected to create a secure, reliable, and operator-friendly process.

Automated Liquid Handling

- Pneumatic diaphragm pumps manage automatic liquid filling and draining.
- **Benefit:** Reduces operator exposure and eliminates risks from manual lifting and spilling.



Built for Durability

- The entire machine structure, piping, and tanks are made of SUS304 stainless steel.
- **Benefit:** Ensures long-term resistance to acid and alkali corrosion, preventing leaks and maintaining structural integrity.



Intelligent Controls for Proactive Protection.

The SME-5200 actively monitors itself to protect the machine, the operator, and your process.

- **Pressure Limits:** Alarms trigger if pressure is too low (<2.0kg/cm²) or too high (>7.0kg/cm²), protecting the system.
- **Heater Overheat Protection:** A +10°C tolerance alarm prevents thermal runaway.
- **Tank Level Sensors:** Protect pumps from running dry and prevent tank overflows.
- **Door Safety Sensor:** The machine stops immediately if the cleaning chamber door is opened mid-cycle.



The SME-5200: Zero Risk, Uncompromising Performance.

SME-5200

The tangible result of a safety-first philosophy. A fully automatic, heavy-duty cleaning system for wave soldering pallets, reflow oven coolers, and SMT fixtures that delivers exceptional results without compromise.

Key Specs:

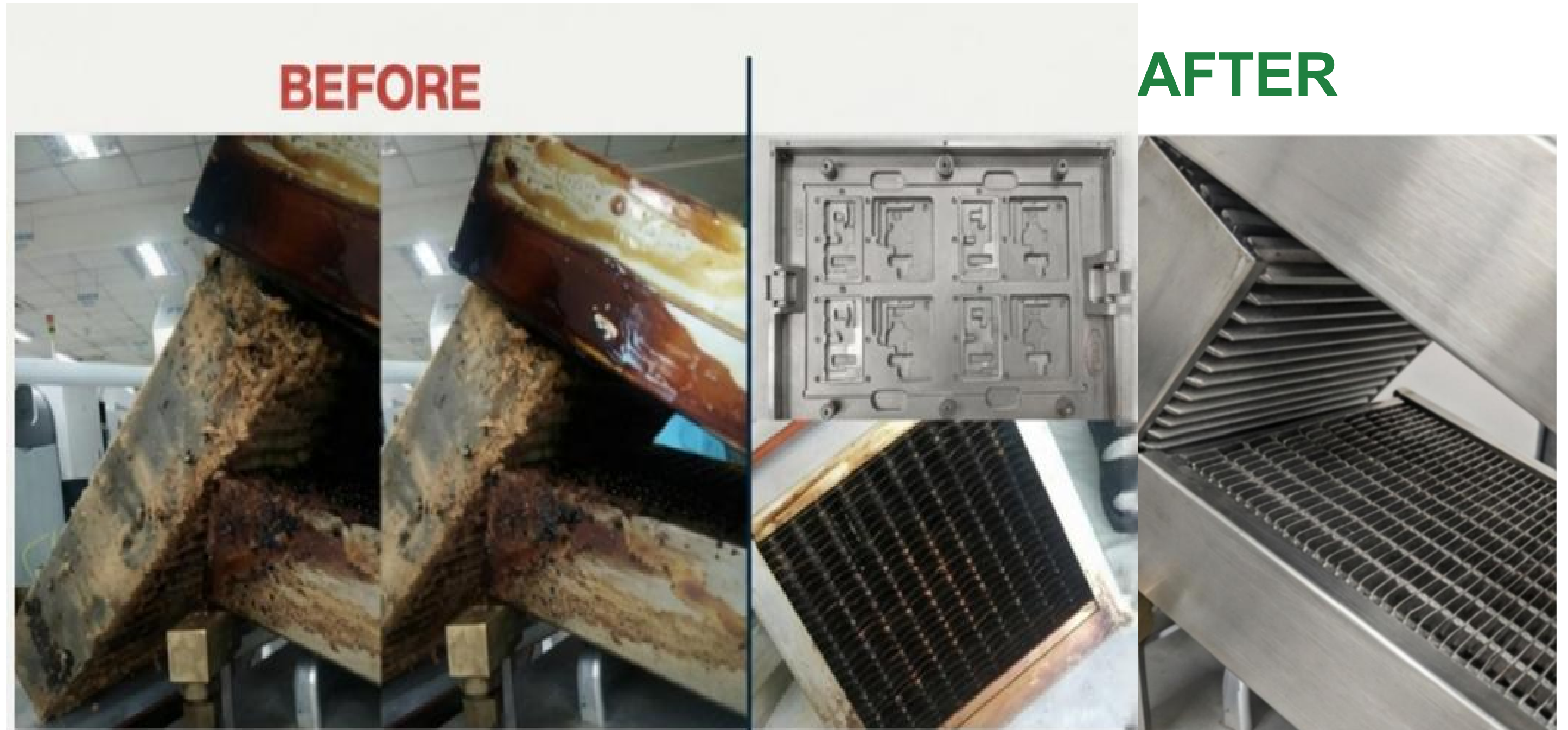
Key Specs:

- **Basket Size:** ϕ 1000mm x200mm(H)
- **Construction:** SUS304 Stainless Steel
- **Control:** Mitsubishi PLC



The Proof is in the Results.

Achieve superior cleaning for even the most challenging residues—from heavy flux to baked-on grease—all without the risks of solvents.



Total Process Control and Repeatability.

Designed for the precision and control required by process engineers.

Manual Menu 1/0 Menu Auto Menu Alarm Menu Setting Menu Procedure Setting

	Clean time (sec)	Alr bloe after Clean	Rinse tied (sec) after linse	Dry time (sec)	Liouid 1C 16uperature	Sinee e 16Rperature	Dry C tesperature	Turn scaed UT' 61)	
SV	600	180	600	120	900	35.0	35.0	80.0	15
PV	148	0	0	0	37.2	43.3	42.1	15	

Procedure Main Menu

Auto Ran Condition: OFF

Up cover: CLOSE

Heat status: Heating OK, Heating OK

Total time: H8

Clean tank level: 3.54

Rinse tank level: 0.11

Start **Pause** **Stop**

- **PLC 'Recipe' Management:** Easily edit, save, and select cleaning programs (wash/rinse/dry times, temperatures) for different parts and soil levels.
- **Password Protection:** Software settings are password-protected (default: 147369) to prevent unauthorized changes and ensure process integrity.
- **Quality Components:** Built with industry-leading components like Mitsubishi PLC and Schneider contactors for maximum reliability.



Mechanical Engineering for a Perfect Clean.

A combination of powerful mechanics and intelligent filtration ensures a flawless result, every cycle.

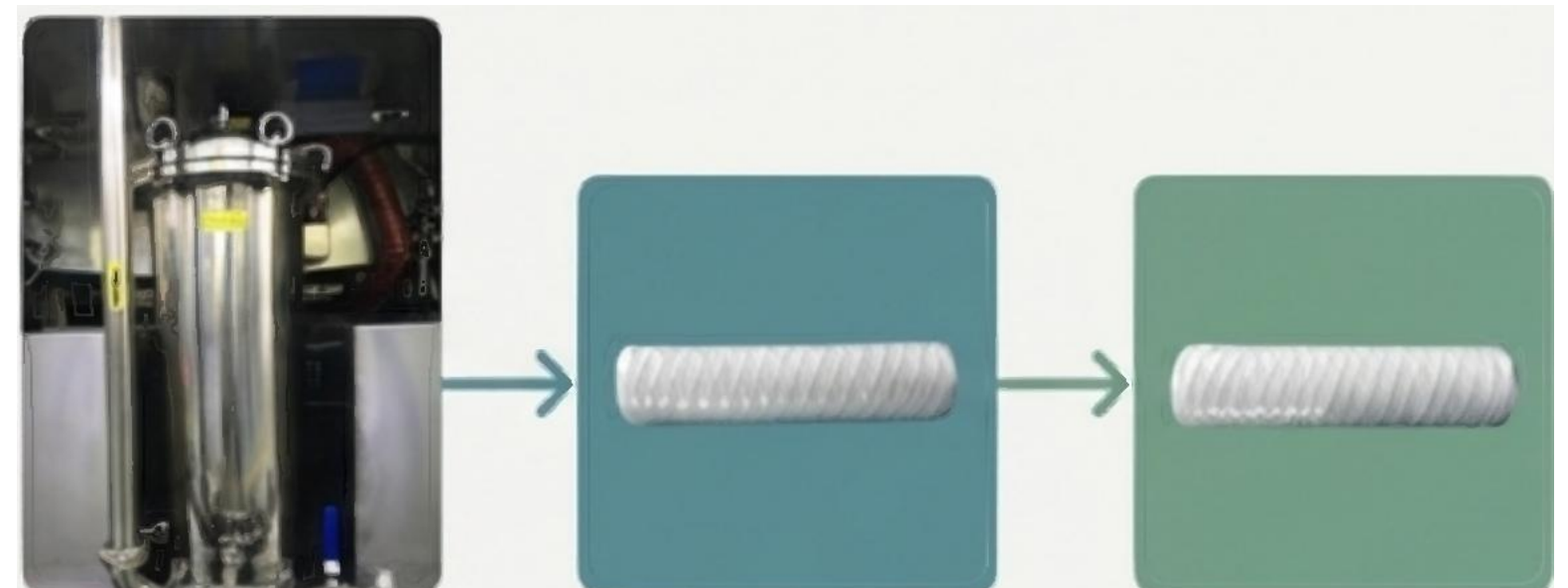
720° Spray Coverage

A large rotating basket and multiple spray rods ensure the high-pressure liquid curtain reaches every angle, eliminating blind spots.



3-Stage Closed-Loop Filtration

Liquid is continuously filtered to remove contaminants, extending its useful life and protecting your parts.



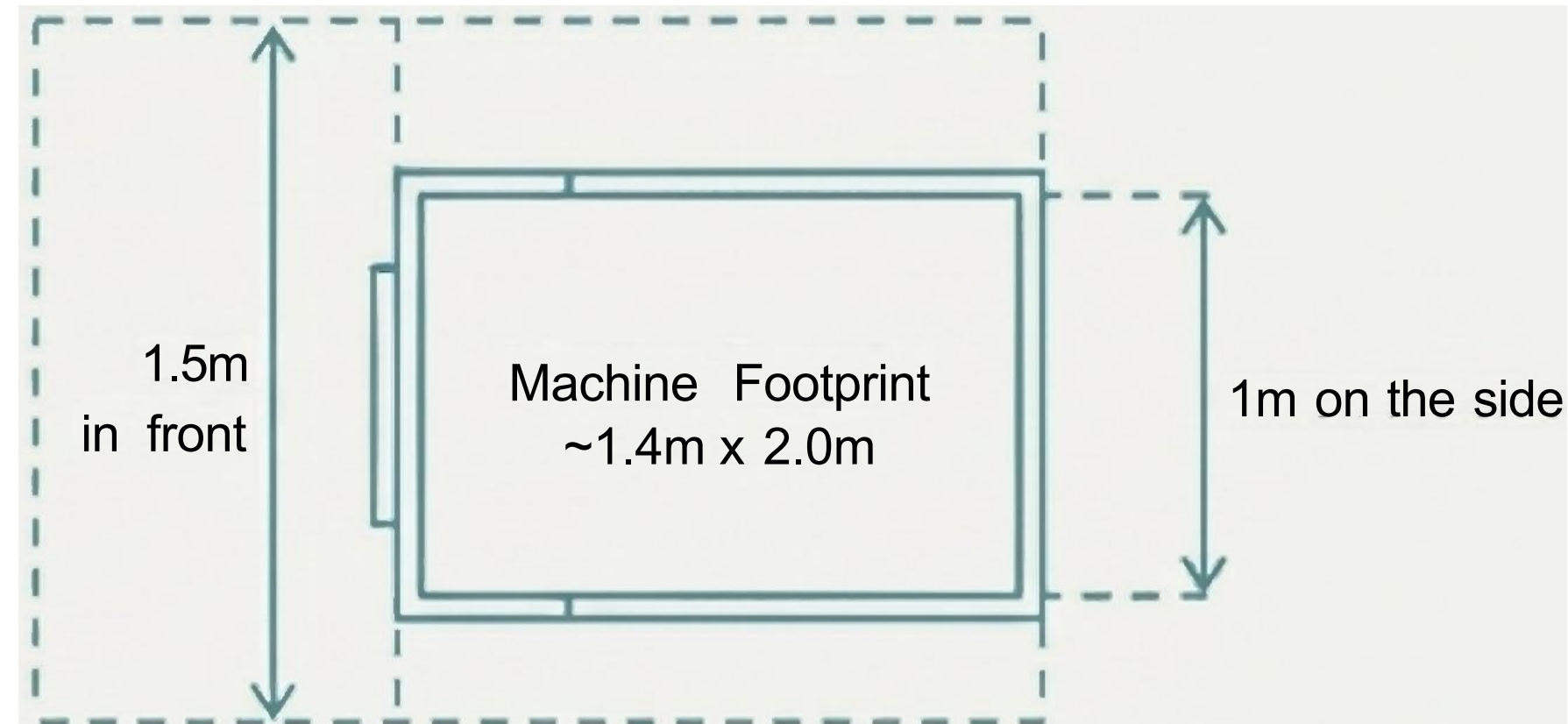
Grade 1:
2mm screen
(protects pump)

Grade 2:
100µm screen
(filters solids)

Grade 3:
20µm filter cores
(removes fine flux)

Designed for Your Factory Floor.

We've considered the practical realities of integrating new equipment into your facility.



- **Maintenance-Friendly Footprint:** The physical footprint is ~1.4m x 2.0m, with recommended clearance of **1.5m in front** and **1m on the side** for easy maintenance and liquid handling access.
- **Low-Noise Operation:** Machine covers are adhered with sound-proof cotton to keep noise levels at or **below 70 dB**, improving the work environment.

The Strategic Advantage of the SME-5200.



Eliminated Fire Risk

Inherently safe by design through the mandatory use of water-based chemistry.



Assured Compliance

Meets modern factory safety standards and reduces operator exposure to hazardous materials.



Uncompromising Performance

Delivers superior, repeatable cleaning results for complex fixtures and heavy residues.

Let's Engineer the Right Solution for Your Line.

To ensure a perfect fit for your production, let's discuss your specific needs.

We're ready to review:

- Your available floor plan and utility connections.
- The dimensions of your largest or most complex fixtures.
- Your required cleaning throughput per shift.



**SOUTHERN
MACHINERY**

www.smthelp.com
info@smthelp.com

SME-5200: Key Specifications at a Glance

Specification	Value
Machine Dimensions (LWH)	1400mm × 2000mm × 1500mm
Machine Weight	~600kg
Basket Size (Φ x H)	1000mm × 200mm (Custom sizes available)
Liquid Tank Capacity	80L
Rinse Tank Capacity	80L
Total Power	~33KW (3-phase 380V, 63A)
Air Supply	0.5~0.7 Mpa, 400~600L/Min
Noise Level	≤70 dB
Filtration Accuracy	20 μm (Final Stage)
Standard Warranty	One year from installation