Flagship Model for SMT PCB Cleaning

UC-250M-CV

Hybrid Double Cleaning System

A hybrid PCB cleaner that efficiently removes contaminants ranging from visible particles to fine dust in a single machine, helping stabilize SMT line quality.

Cleaning Process

The Hybrid Double Cleaning System combines 'Brush + Vacuum' and 'Rubber Roller + Adhesive Tape Transfer' in a unique two-stage cleaning structure. By optimizing the cleaning method according to contaminant size and adhesion, it efficiently removes even fine particles, helping improve printing quality and reduce mounting defects.

①	Counter-Rotating Cleaning Brushes + Vacuum	Counter-rotating brushes catch contaminants from the PCB surface, where they are immediately removed by the Vacuum system.
②	Rubber Roller + Adhesive Tape Transfer	Fine particles remaining after brush cleaning are collected by the Rubber Roller and transferred to the Adhesive Tape for secure retention.

Key Features

- **Two-Stage Removal Optimized for Contaminant Size**
  Step-by-step collection optimized for everything from coarse particles to fine dust. Contributes to stable SMT line printing quality and reduced mounting defects.
- **Two-Stage Cleaning to Capture Remaining Particles**
  The second stage captures particles remaining after the first cleaning stage, minimizing residual contamination and ensuring highly reliable cleaning performance.
- **Gentle on PCB Surfaces with Soft Brush Material**
  The dust-removal brushes and rubber rollers are made of supple, flexible materials to protect the PCB surface from damage. (Please contact us for material details.)
- **Prevents Reattachment of Collected Particles**
  Collected contaminants are securely retained on adhesive tape, preventing secondary dispersion.
- **Standard Ionizers at Inlet and Outlet**
  Static elimination at both the inlet and outlet ensures high-reliability mounting, helping reduce quality risks across the entire SMT line.



Four Operating Modes Selectable via Touch Panel

Simple touch-panel operation allows you to select from four modes tailored to the board type and application.

Mode	Brushes + Vacuum	Rubber Roller + Adhesive Tape Transfer	Description
①	**ON**	**ON**	Double Cleaning ON – Both Cleaning Systems Active
②	**ON**	OFF	Brush Only – Optimized for Larger Particles
③	OFF	**ON**	Rubber Roller Only – Optimized for Fine Particles
④	OFF	OFF	Pass Mode – PCB Passes Through Without Cleaning

Basic specifications:Model No.UC-250M-CV

Cleaning area	Top side of PCB *except slit inside
Cleaning method	Hybrid cleaning system by Brush+Vacuum&Sticky Roller
Brush part config	Rotating nylon brush (ESD) 1 pc. & Vacuum unit with Dust box
Roller part config	Rubber roller: 2 pcs. for Top φ50x300mm Adhesive sticky tape: 1 pc. for Top 300x20m
Applicable PCB Size	Width: 50.0 - 250.0mm Length: 100.0 - 330.0mm Thickness: 0.5 - 2.0mm * PCB thickness adjustable system as option
Conveyor height	900±25 ㎜ *Negotiable
PCB flow direction	Right to Left or Left to Right *Specify
Conveyor fixed side	Front or Rear *Specify
Conveyor width	Manual *handle operation, or Auto mode as option
Conveyor speed	0 - 7.5m/min *Variable
Ionizer (Air knife)	Machine inlet and outlet (with air-blow)
Interface	SMEMA interface as standard
Display language	English, Chinese or Japanese *Selectable
PCB support system	PCB anti-warp support brush system attached inside the machine
PCB counter	0-999999 as max
Buzzer	ON when count-up or machine occur error
Signal tower	Red as standard
Power supply	AC100V as standard *Negotiable
Air input	0.45 ～ 0.6Mpa φ6 for General 0.45 ～ 0.6Mpa φ10 for Vacuum

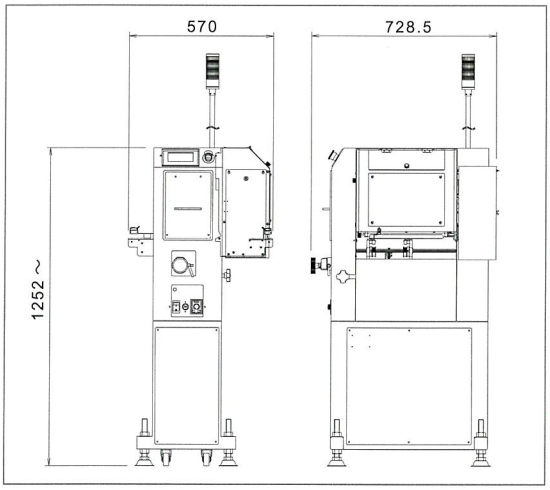
■[Key Optional Features]

・Automatic conveyor width adjustment mechanism. ・Custom machine color options.
・Signal tower (3-color display with configurable lighting conditions).
・Top and Bottom Brushes for Inlet Unit (with Additional Bottom Brush). ・Conveyor Extension. ・Conveyor Dust Cover
・External communication capabilities (Integration with MES and line management systems).

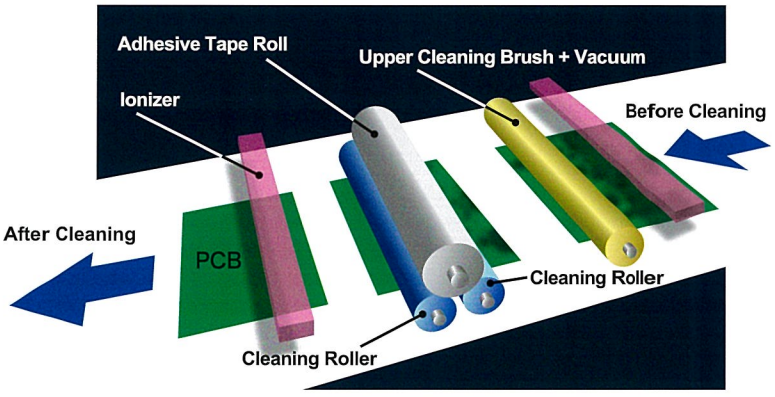
[Lineup Variations]

・Depending on your application, the following models are also available in our lineup:
・Double-sided (top/bottom) PCB cleaning model. ・Large PCB compatible model.
・Dual Conveyor Model (Compatible with major mounter manufacturers).
・Detailed documentation and demonstration units are available for each machine.

We also offer flexible customization to meet your specific requirements and applications.
For more details, please contact our sales representatives.



PCB Conveying Process



Safety precautions! | **Please read the instruction manual carefully before use,and use it correctly.**

Specifications listed in this catalog are subject to change without prior notice for improvement purposes. Your understanding is appreciated in advance.

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