



# Micro Particle Picker 'CAP-series'

~This contributes to yield rate improvement by removing foreign matter on image sensers and in the semiconductor post process~

We, PFA CORPORATION, have been selling Micro Particle Picker 'CAP-series' which is cleaning equipment to remove particles attached to image sensors or semiconductors in the bonding process.



Micro Particle Picker 'CAP-series'

#### Market background and equipment outline

One of the challenges in the manufacturing process for high accuracy image sensors, camera modules or semiconductor chips is deterioration of product's quality and yield rate caused by the foreign matter attached to the chip surface. Traditionally, it is common to clean particles off electronic components with drug solution or ultra sonic, but floating foreign matter may be reattached after cleaning which causes the deterioration of yield rate.

PFA has developed Micro Particle Picker 'CAP-series' with a concept of "Remove foreign matter right before the mounting." We have manufactured this thoroughly clean conscious equipment with high-speed image detection for particles, foreign matter removal methods and the cleanness of the equipment itself with PFA's original expertise.

## **CAP-series' key features**

- 1. Thorough clean measures
  - •There is no working structure area on the carrier which may become a dust generation source, so it doesn't generate particles.
  - ·Upper gel stick replacement robot and robot cables are clean specifications.
  - •The gel sticks with a tray can be set to the equipment as it is, so there is no contamination.
  - Downflow form HEPA filter keeps the cleanness in the equipment ISO Class 3.

- 2. Detect minute particle with a wide field angle of view
  - •The field angle of view is 10mm square wide enough to detect the minimal particle of  $2\mu m$  with one shot.
- 3. Great workability
  - •Gel stick can be supplied during equipment working.
- 4. Connection with pre-equipment or post-equipment
  - •It can support the connection of various data communications and map information with preequipment or post-equipment.

### **Standard specifications**

Model name	Micro Particle Picker
Туре	CAP-series
Equipment dimension	W1010×D900×H1650mm(Body area)
Target workpiece	Image sensor, Glass filter, other semiconductor products
Target workpiece size	5×5~15×15mm
Target carrier size	W45×L186~W95×L300mm T=2mm
Cleanness	ISO Class3 supported
Power source · Air	Single phase AC200~220V, 20A
	0.5MPa, 20NL/min, Dry air

<sup>\*</sup>A part of appearance or specifications can be changed for performance improvement.

#### **Contact details**

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