

We' are always doing the best to satisfy customer needs!

# DUST REMOVAL

## Dust Removal

**SCB** SERIES



**SCH** SERIES



**SCT** SERIES



**SUNJE**

# NON CONTACT DUST REMOVAL SCB SERIES

## SCB Series

Purpose : to remove non-adhesive particle

Composition : Air knife / Dust collecting hood / Ionizer

How To Remove : Air knife separates the particle and collects it



### Key Features

- ▶ High efficient air knife uses less air
- ▶ Easy control for air knife angle and height
- ▶ Compact size with profile structure
- ▶ Zero Electrostatic with installed ionizer

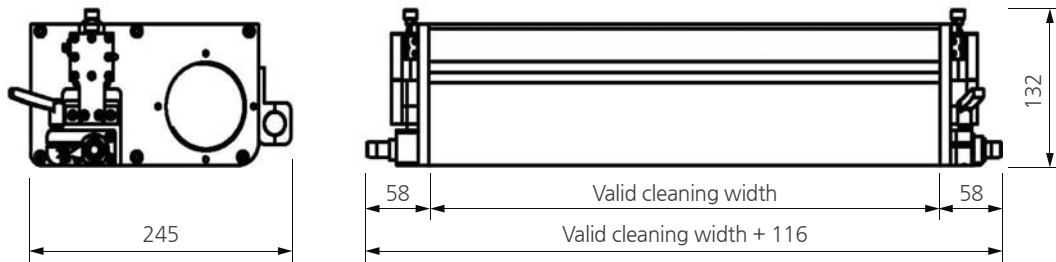
### Description

- ▶ Non Contact Type Dust Removal
- ▶ Maximize the performance using vacuum force formed between the object and dust removal and high pressure air
- ▶ Matching direction of air spray and the dust collection brings excellent performance
- ▶ Excellent cleaning with uniform air spray to the front

### Specifications

No.	Parameter	Description / Value
1	Application	Glass / Film / Printing Front End / Laminating / Cutting Back End / Molding Injection Back End / Steel Winding And Anodizing / Furniture etc.
2	Valid Cleaning Width(mm)	50 ~ 2,700mm
3	Size	(Dust Removal Valid width+116mm) × 245mm × 132mm [Length × Width × Height]
4	Cleaning Tool Height	Control 0~5mm
5	Removing Tool Type	Air Knife
6	Removing Tool Angle	0~90degree (goniometer attached)
7	Ionizer	1ea
8	Dust Removal Body	Profile Structure
9	Option	Dust Collector / Utility Parts / Control System

## Dimensions



## Feature Comparison

Parameter	Standard Type (Other Company)	SCB Series (SUNJE)
Concept Image		
Removing Tool	Jet Nozzle	Air Knife
Capacity	Over 20~50 $\mu$ m	Over 10~15 $\mu$ m
Feature	<ul style="list-style-type: none"> <li>▶ Direct air spray type</li> <li>▶ While spraying the air, leaking air between the gap can cause 2nd contamination</li> <li>▶ Unbalanced air flow issue can appear in clean room</li> <li>▶ Some area cannot be effective due to the use of jet nozzle</li> </ul>	<ul style="list-style-type: none"> <li>▶ Removing dust with vacuum + air pressure</li> <li>▶ Same direction of air spray and dust collecting prevents the secondary contamination</li> <li>▶ Proper way of removing dust for Clean room                             <ul style="list-style-type: none"> <li>※ This does not affect air flow balance in clean room</li> </ul> </li> <li>▶ Air knife and dust chamber design using Coanda effect makes the performance excellent</li> <li>▶ Uniform removal level without dead zone</li> </ul>

## Test Image

No.	Before Removal	Input Particle	After Removal	Test Condition And Result
1				<ul style="list-style-type: none"> <li>▶ Application : LED Lamp</li> <li>▶ Particle Type : Plastic</li> <li>▶ Air Pressure : 5kg/cm<sup>2</sup></li> <li>▶ Height : 2.0mm</li> <li>▶ Result : No particle</li> </ul>
2				<ul style="list-style-type: none"> <li>▶ Application : Glass</li> <li>▶ Category : Glass Powder</li> <li>▶ Air Pressure : 5kg/cm<sup>2</sup></li> <li>▶ Result : No Particle</li> </ul>

# NON CONTACT DUST REMOVAL SCH SERIES

## SCH Series

Purpose : to remove non-adhesive particle

Composition : Brush / Air knife / Dust collecting hood / Ionizer

How To Remove : First brush, Second air knife



### Key Features

- ▶ Air knife installed for brush cleaning
- ▶ Brush RPM Control system attached
- ▶ Convenient control for brush height and replacement
- ▶ Compact size from profile structure
- ▶ No electrostatic with installed ionizers

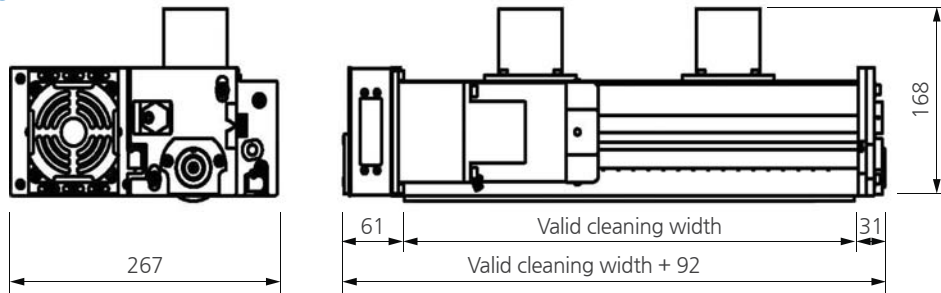
### Description

- ▶ Contact + Non Contact Type Dust Removal
- ▶ Double removal available  
(1st brush and 2nd air knife)
- ▶ Removable for Non adhesive or less adhesive particle

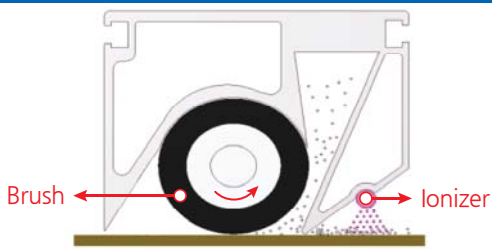
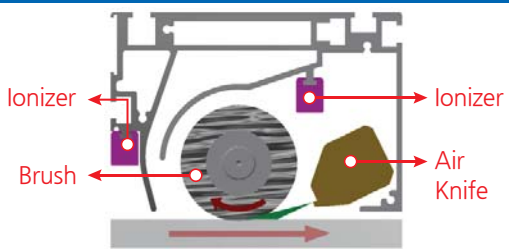
### Specifications

No.	Parameter	Description / Value
1	Application	Bobbin / LED Lamp Trim Process / Belt Conveyor / Steel Winding Or Zinc Plating / PCB Substrate / Glass Fiber / Furniture etc.
2	Valid cleaning width(mm)	50 ~ 2,700mm
3	Size	(Dust Removal Valid width+92mm) × 267mm × 168mm [Length × Width × Height]
4	Brush Size	φ60
5	Brush RPM	0 ~ 400 RPM
6	Brush Height Control	± 6mm available
7	Ionizer	2ea
8	Removing Tool Type	Air Knife + Brush
9	Option	Dust Collector / Utility Parts / Control System


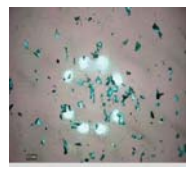




## Dimensions



## Feature Comparison

Parameter	Standard Type (Other Company)	SCH Series (SUNJE)
Concept Image		
Capacity	Over 20~50 $\mu$ m	Over 10~15 $\mu$ m
Ionizer	1ea	2ea
Removing Tool	Brush	Brush + Air Knife 1st brush (contact type) 2nd Air knife (non contact type)
Dust Chamber Structure	Slit (Gap:6mm) + Inverted Triangle Type	Slit (Gap:15mm) + Streamline Type (based on air foil principle)
Feature	<ul style="list-style-type: none"> <li>▶ Some area still remains particle after using brush</li> <li>▶ If the ionizer is located in improper position, this can bring particle drop on removal zone</li> <li>▶ Narrow width of chamber brings the limit of collecting dust</li> </ul>	<ul style="list-style-type: none"> <li>▶ Double removal available</li> <li>▶ Air knife makes no dead zone after brushing</li> <li>▶ With the air knife position changed, it prevents particle drop to removing zone</li> </ul>

## Test Image

No.	Before Removal	Input Particle	After Removal	Test Condition And Result
1				<ul style="list-style-type: none"> <li>▶ Application : LED Lamp</li> <li>▶ Particle Type : Aluminum</li> <li>▶ Overlap Amount : 1mm</li> <li>▶ Brush RPM : 200</li> <li>▶ Result : No particle</li> </ul> ※ Adhesive Particle Test
2				<ul style="list-style-type: none"> <li>▶ Application : Bobbin</li> <li>▶ Particle Type : Mixed</li> <li>▶ Overlap Amount : 1mm</li> <li>▶ Brush RPM : 200</li> <li>▶ Result : No Particle</li> </ul>

# NON CONTACT DUST REMOVAL SCT SERIES

## SCT Series

Purpose : to remove non-adhesive particle

Composition : rotating nozzle / collecting dust hood / ionizer

How To Remove : Spinning nozzles creates the wind, makes the particle float and then collects particle in the air



### Key Features

- ▶ Fast speed rotating nozzle
- ▶ Low pressure, High efficient performance
- ▶ Compact size from profile structure
- ▶ Electrostatic free using installed ionizer

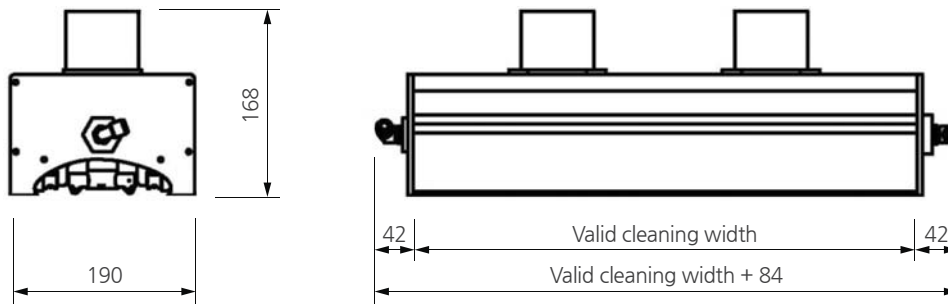
### Description

- ▶ Non Contact Type Dust Removal
- ▶ Suitable for removing fine particle with high speed rotating nozzle
- ▶ Available for removing particle from not only 2D but also 3D (Various shape applicable)

### Specifications

No.	Parameter	Description / Value
1	Application	Glass / PCB Assembly / Plastic / Molded Parts / Sandwich-Panel / Tray Removal / Painting / BLU Assembly / Other 3D Shape
2	Valid cleaning width(mm)	50 ~ 2,700mm
3	Size	(Dust Removal Valid Width+84mm) × 190mm × 190mm [Length × Width × Height]
4	Ionizer	2ea
5	Removing Tool Type	Rotating Nozzle
6	Dust Removal Body	Profile Structure
7	Option	Dust Collector / Utility Parts / Control System

## Dimensions



## Feature Comparison

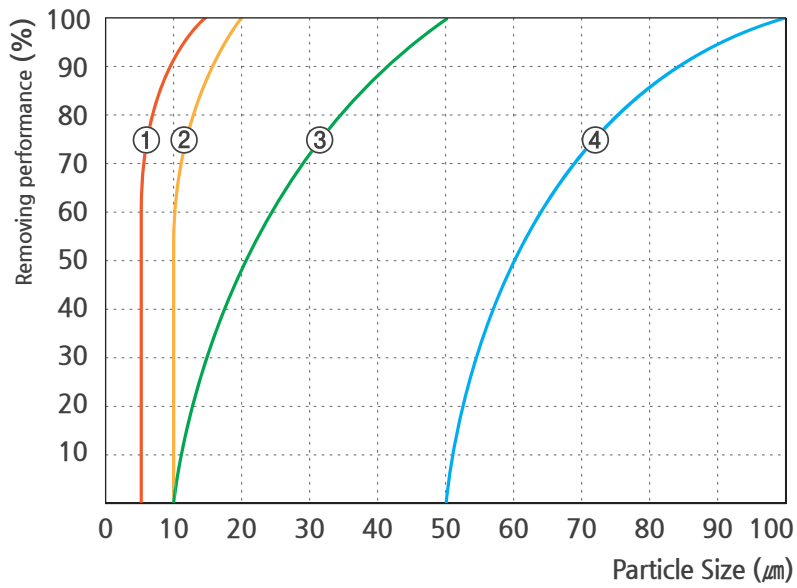
Parameter	Standard Type (Other Company)	SCT Series (SUNJE)
Concept Image		
Removing Tool	Jet Nozzle	Rotating Nozzle
Capacity	Over 20~50 $\mu$ m	Over 5~10 $\mu$ m
Feature	<ul style="list-style-type: none"> <li>▶ Direct air spray type</li> <li>▶ While spraying the air, leaking air through the gap can cause 2nd contamination</li> <li>▶ Unbalanced air flow issue can appear in clean room</li> <li>▶ Jet nozzle brings dead zone</li> </ul>	<ul style="list-style-type: none"> <li>▶ Maximized performance by using rotating nozzle</li> <li>▶ Available for removing particle from not only 2D but also 3D (various shape applicable)</li> <li>▶ Easy to remove dust from the narrow gap</li> </ul>

## Test Image

No.	Before Removal	Input Particle	After Removal	Test Condition And Result
1				<ul style="list-style-type: none"> <li>▶ Application : PDP Lower Plate</li> <li>▶ Particle Type : Glass Powder</li> <li>▶ Air Pressure : 1.0kg/cm<sup>2</sup></li> <li>▶ Height : 8.0mm</li> <li>▶ Result : No Particle</li> </ul>
2				<ul style="list-style-type: none"> <li>▶ Application : BLU Assembly</li> <li>▶ Particle Type : Dust</li> <li>▶ Air Pressure : 3.0kg/cm<sup>2</sup></li> <li>▶ Height : 16mm</li> <li>▶ Result : No Particle</li> </ul>

# NON CONTACT DUST REMOVAL PERFORMANCE

## Dust Removal Performance comparison



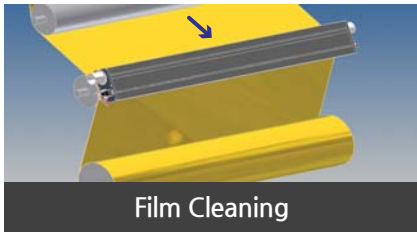
	Parameter	Capacity
Sunje	① SCT Series	Over 5 ~ 10 $\mu$ m
	② SCB Series / SCH Series	Over 10 ~ 15 $\mu$ m
Other Company	③ previous removal	Over 20 ~ 50 $\mu$ m
	④ previous removal (Vacuum Type)	Over 50 ~ 100 $\mu$ m

▶ Like the table above, SCB / SCH / SCT series shows twice better performance than previous one.



# Dust Removal Application

## SCB Series



Film Cleaning



Cutting 후 Cleaning (Film, Glass)



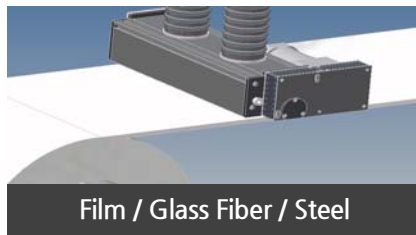
Glass Cleaning-Horizontal

TSP Camera Lens Cleaning / TSP Camera Module Cleaning / TSP Cover Glass Cleaning / Automotive Interior Material Cleaning / Automotive Air Conditioning Panel Cleaning / Steel Plate Cleaning / Optic Film Cleaning / Film Cleaning / Glass Cleaning

## SCH Series



Conveyor Belt Cleaning



Film / Glass Fiber / Steel



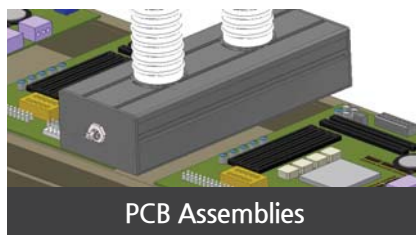
PCB Cleaning

TSP Camera Lens Cleaning / TSP Camera Module Cleaning / TSP Cover Glass Cleaning / Lumina Film cleaning / Optic film cleaning / Steel plate cleaning / Laser machine table cleaning / LED Lamp Cleaning / Automotive air conditioning panel cleaning

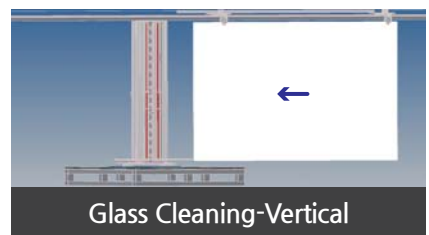
## SCT Series



Tray Cleaning



PCB Assemblies



Glass Cleaning-Vertical

TSP Camera Lens Cleaning / TSP Camera Module Cleaning / TSP Cover Glass Cleaning / Microwave door cleaning / Fridge front glass cleaning / Cosmetic bottle cleaning / Tray Cleaning / Grinding tool cleaning / Molding cleaning / PCB Cleaning / F-PCB Film Cleaning / Copper film cleaning / Scanner assembly cleaning / Curved TV backlight cleaning / Backlight Cleaning / LCD Cleaning / 7G LCD Glass cleaning / 8G LCD Glass cleaning / Glass Chip Cleaning / Wafer Cleaning / Semiconductor cleaning / Automotive gauge cleaning / Automotive components cleaning / Automotive air conditioning panel cleaning / Motor Core Cleaning

*We' are always doing the best to satisfy customer needs!*



**Main Office & Factory (Busan)**

8, Cheonggwang-gil, Ilgwang-Myeon, Gijang-Gun, Busan, Korea

TEL : 051-720-7500 / FAX : 051-720-7501

**Central Sales Office (Hwaseong)**

3F, Ilshin B/D, 4, Namnyeoul 2-gil, Hwaseong-si, Gyeonggi-do, Korea

TEL : 031-203-9034 / FAX : 031-202-9034

**Southern Sales Office (Gumi)**

35-2, Seojungni 3-gil, Seokjeok-eup, Chilgok-gun, Gyeongsangbuk-do, Korea

TEL : 054-476-9033 / FAX : 054-476-9034

**SUNJE**  
[www.sunstat.com](http://www.sunstat.com)