

Per un processo di produzione in totale assenza di contaminazioni

## Ion air cleaning unit

To prevent and remove the contamination...



### ☹ Problems encountered from contamination... ☺ To prevent such cases

- ☹ Contamination in grocery packages
- ☹ Contamination at heat sealing process
- ☹ Contamination at shrinking process
- ☹ Contamination sticking at painting process
- ☹ Contamination mixed at filling process
- ☹ Contamination sticking at deposition and courting process

- ☺ Ion air-wash before shipment
- ☺ Ion air-wash after static eliminating process
- ☺ Ion air-wash before shrinking process
- ☺ Ion air-wash after static eliminating process (All process before painting)
- ☺ Ion air-wash after static eliminating process (All process before filling)
- ☺ Ion air-wash after static eliminating process (All process before courting)

### ☹ Facts that decreases the productivity... ☺ To prevent such cases

- ☹ Need static eliminating process and soon go to next process
- ☹ Need to reduce worker at cleaning process
- ☹ Resin product sticks on molding die and causes breakage.
- ☹ Tools get contaminated when processing the material

- ☺ Ion air blow at conveying process. This would be the best layout
- ☺ Install Ion air dust removing unit immediately
- ☺ When die is released, blow air by intermittent blow system
- ☺ Blow Ion air at processing point

### For environmental reason and Cost saving...

☹ Want to stop using liquid type solvent for cleaning.

☺ Ion air blow is competent for all contaminations except sticky contaminations.

### Propose your high quality product processed by Ion air dust removing unit...

- ☺ Your customers will understand the big difference and your business will rise!

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## Ion air dust removing system This system cleans the contamination by ionized air

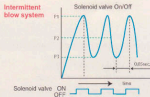
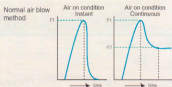
Cleaning by ordinary air blow system would encounter static electricity problem. This static electricity is made by the friction between the air and product. Some contamination will be left sticking on the product because of static electricity.

Ionized air by corona discharger would not perform static electricity and also remove the static electricity on the contamination.

Dust-blow function has a unique function that is called **Intermittent blow system** (patent No.3112987).

This air blowing method causes shock wave and blows off the contamination. Blown contaminations are collected by vacuum cleaner.

This **Intermittent air blow-vacuum function** all most has same performance but not lower than liquid cleaning system. Air blow cleaning is for dry materials, not for greasy or sticky materials.



### Ion air dust removing unit to have high performance

1. Ionized air is produced by DC corona system.
2. Electro magnetic valve is special type for intermittent air blow system.
  - 1) Intermittent air blow prevents the occurrence of laminar air flow on material surface.
  - 2) Vibration by shock wave blows off the contamination.

#### Vibration by shock wave



#### Prevent laminar flow of air on material surface

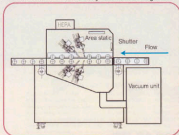


### Merit of installing Ion air dust removing unit

1. Uses the compressed air directly from the factory. (Cost saving)
2. No drying section needed like liquid cleaning system.
3. No drain outlet or water recycling system needed because this system is dry system.

### Image of Ion air cleaning

Ionized air eliminates the static electricity and intermittent air blow function blows off the contamination. All the contaminations are collected by vacuum cleaning unit.



### Ion air dust removing unit is used in such cases



Electric parts cleaning



Circuit board cleaning



- Molded parts  
Cleaning before electrostatic coating (dust)
- Electric parts  
Cleaning before casing (Fabric dust, Metal powder)
- Circuit board  
Cleaning before installing (dust)
- Relay / Switch  
Cleaning before casing (Molding dust)
- Parts for mobile phone  
Cleaning of Liquid crystal cell
- Plastic lens  
Cleaning after molding, before vapor deposition
- Others  
Medical equipments, Grocery cases

## Ion air dust removing unit NH-10 / NH-10M

Independent type

Ionizing unit, electro magnetic valve and controller (for intermittent air blow) are installed in this unit. Connect AC power and compressed air to the unit. Install this unit to the existing production line for spot cleaning.

Applicable for cell type production, test before shipping, process after human work.



NH-10 (1-Nozzle type)



NH-10M (2-Nozzles type)

### Specifications

Power	AC100V 50/60Hz 3P plug with ground connection
Machine weight	Amp: 1,040g Output unit: 660g excl. nozzle
Cable	Standard 3m
Power consumption	16.8w
Machine dimension	Amp unit: 110(W)x160(D)x49(H) mm
Nozzle	NH-100 : 1 nozzle attached NH-10M : 2 nozzles attached (Select from 5 specifications)

## Ion air dust removing unit NH-20 / NH-20M

Line installing type

Electro magnetic valve is controlled by outside controller. Ion air dust removing unit is installed in the production line.

To systemize your production line, we can customize the machine for individual use.



NH-20 (1-Nozzle type)



NH-20M (2-Nozzles type)

### Specifications

Power	AC100V 50/60Hz 3P plug with ground connection
Machine weight	Amp: 1,040g Output unit: 660g excl. nozzle
Cable	Standard 3m
Power consumption	4.8w
Machine dimension	Amp unit: 110(W)x160(D)x49(H) mm
Nozzle	NH-20 : 1 nozzle attached NH-20M : 2 nozzles attached (Select from 5 specifications)

## Gun type ion air cleaner NPG-500

Small & light gun type ionizer

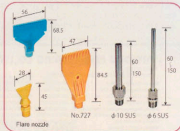
### Specifications

power	AC100V 50/60Hz 3P plug with ground connection
Machine weight	Amp: 800g Output unit: 310g
Cable	Standard 3m
Power consumption	9.6w
Machine dimensions	110(W)x160(D)x49(H) mm (Amp)
Nozzle	1 nozzle attached (Select from 5 specifications)



### Nozzle

NH-10 series · NH-20series ·  
NSE-20series · NPG-500 Common use



## Ion air static eliminator NSE-20 / NSE-20M

Blow type

This type is applicable for spot static elimination and for also cleaning. Especially cleaning of resin molded parts.



NSE-20 (1-Nozzle type)



NSE-20M (2-Nozzles type)

### Specifications

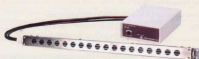
Power	AC100V 50/60Hz 3P plug with ground connection
Machine weight	Amp: 470g Output unit: 250g
Cable	Standard: 3m
Power consumption	4.8w
Machine dimension	Amp unit: 110(W)x160(D)x41(H) mm
Nozzle	NSE-20: 1 nozzle attached NSE-20M: 2 nozzles (Select from 5 specifications)

## Ion air static eliminator NL series

Bar type

This type is specialized for wide material like sheet, film, tape, etc. Bar type nozzle is specialized to blow the air in wide range for static elimination.

\*Amp is common use with NSE-300N series.  
One-touch joint for φ6 air pipe attached.



### Bar size

Model	NL-200	NL-300	NL-400	NL-500	NL-600	NL-700	NL-800
Bar length(mm)	200	300	400	500	600	700	800

## Ion air static eliminator NF series

Fan type

Amp is installed in this unit and ionized air blow is made by fan. NF-600 would be mounted by clamp stand. NF-60A is down sized & low cost type of NF-600. This series is suitable for assembly line of electrical parts, vibration unit of parts feeder, etc.

### Specifications

Model	NF-600	NF-60
Power	AC100V 50/60Hz	DC24V 0.5A
Power consumption	23w	Max. 8w
Machine weight	Output unit: 860g /excl. Stand	300g / Main unit
Machine dimension	180(W)x145(D)x100(H)	80(W)x40(D)x125(H)



NF-600 (Incl. Stand)

NF-60 (Incl. AC adapter + bracket)

### The mechanism of static elimination

Static eliminator produces "+" & "-" ions. These ions combine with the opposite electrical charge which the contamination has. Electrical charge gets neutralized and contamination will not stick to the material.

1. Direct current is used for main power. → Attenuation of "+" & "-" ions will be minimum.
2. It is possible to control the amount of "+" & "-" ions. → Can customize the spec regard to work environment.
3. Grand electrode (SUS) is used to stabilize & increase the Corona discharging.

\* The machine specifications are subject to change without notice.

### NSE-001 Static locator



This device is to measure the static electricity. Use this device to check the performance of static eliminator. It is possible to measure wide range of electricity by selecting the range level. (2 ranges)



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