Our wide product range enables selection of product best suited for the coating line.

Electrostatic Automatic Gun Series

Rotary Electrostatic Automatic Gun
SUN-BELL-ECOII ESA200VP

Micro Rotary Electrostatic Automatic Gun
NC BELL ESA100

Aiming for eco-friendly and human-friendly coating

“Ec’Coater” is formed from the words “Ecology” and “Coater (coating machine).”
“Ec’Coater” represents our concept born through our corporate principle.
Our wide product range enables selection of product best suited for the coating line.

Electrostatic Automatic Gun Series

Electrostatic Automatic Gun Series friendly to people and environment for its high transfer efficiency and superior coating quality

We Offer Products for All Kinds of Coating Lines

Air-atomized Electrostatic
EAB70T
EAB80
EAB200

Air-wrapped Airless Electrostatic
APEG25

Rotary-atomized Electrostatic
ESA88
ESA100
ESA120
ESA200
ESA200VP

We offer a full range of accessories and peripheral equipment

What is Electrostatic Coating?

Electrostatic coating is a process that atomizes and then efficiently charges the coating material. When the coating particles approach the surface to be coated, they are electrostatically attracted to the surface. Based on an air spray or airless coating method, electrostatic coating offers higher transfer efficiency. Major electrostatic coating methods are indicated below.

Air-atomized Electrostatic

A coating process that uses air to atomize the coating material sprayed from the paint nozzle. The atomized coating particles are applied with high voltage to coat the surface. This process is the mainstream of electrostatic coatings.

Air-wrapped Airless Electrostatic

The coating material is atomized by paint pressure of 2~16MPa and wrapped with low-pressure air sprayed from the air cap on the gun top. Efficiently, the spray pattern is electrostatically charged to coat the surface. The coating process offers high transfer efficiency and thick film coat.

Rotary-atomized Electrostatic

A coating process that uses centrifugal force to spread the coating material, which is sprayed from the center of the cup, on the conical cup edge. The electrostatic charging method is same as air electrostatic coating, however since the cup and air rotary device are applied with high voltage, the cup edge is used as an electrode. The process offers high transfer efficiency and high-quality finish.
Rotary Electrostatic Automatic Gun

SUN-BELL-ECO II ESA200VP

highly functional, automatic gun that has adopted a variable pattern system to realize excellent coating efficiency.

- An air cap switchable between small and wide diameters produces an optimum coating pattern according to the product shape and thereby helps reduce the paint consumption.
- Even for products with many small details, excellent productivity can be achieved using a small pattern, which is useful for coating recessed details.
- The inside of the cup is cleaned by an automatic cleaning system between takt times even during a serial production run to remove the grit to be sprayed out of the gun and consequently contribute to the yield improvement.

Rotary Electrostatic Automatic Gun

SUN-BELL-ECO ESA200

Automatic gun with an angle on the gun top that provides both ensured verticalness to the coating surface and superior coating in every hole and corner

- The combination of bell cup and air cap brings uniform particle distribution and provides high quality coating film for design coatings such as metallic and pearl paints.
- The angle on the gun top improves robot handling and verticalness to the surface to achieve superior coating in every hole and corner and increased coating efficiency.
- The cup inner side automatic washing system enables shorter washing time using only a small amount of thinner which result in preventing defects due to foreign objects and improving the first run rate.

Micro Rotary Electrostatic Automatic Gun

NC BELL ESA100

Automatic gun that offers superior atomization and high transfer efficiency by the combination of air cap and bell cup.

- High speed rotating air bearing (maximum rotation speed 80,000 r.p.m.)
  - offers superior atomization and even coating quality.
  - The higher transfer efficiency helps improving the environment of coating line.
  - Superior gun interior washing efficiency reduces washing time and amount of washing wastewater.

Rotary Electrostatic Automatic Gun

SUN-BELL ESA120

Automatic gun best suited for metallic coatings with its newly developed air cap.

- The centrifugal force of new type air cup and bell cup enables superior atomization that offers high quality finish for metallic coatings.
- The new type bell cup offers superior transfer efficiency that will reduce paint consumption and improve the environment of coating line.
- Its unique shroud shape prevents adhesion of dirt and eliminate spraying clot from the gun and defectives due to dirt.
Rotary Electrostatic Automatic Gun

**ESPO-TURBO II ESA88**

Compact size rotary atomization electrostatic automatic gun with simple structure.

- The base compound and hardening material are supplied separately from two paint valves.
- Mixed coating that use two coating material mixed inside the atomizing cup is available.
- The air motor equipped with a turbo fan offers Max.30,000rpm.
- Metal bellows is used for the paint valve to offer high responsiveness of coating material ON and OFF.
- This lightweight and compact rotary atomization electrostatic automatic gun has achieved remarkable results.

---

Air-atomized Electrostatic

Air Electrostatic Automatic Gun

**ROBO-GUN II EAB90**

Compact automatic gun with wide application suited for robot coating.

- Maintenance is easier for the gun and bracket can be removed and attached easily.
- The smooth structure prevents accumulation of coating material, improves washing efficiency and reduces fraction defective.
- Fully compliant with international safety standards. (EN)

Air Electrostatic Automatic Gun

**SUN-GUN II EAB200**

Max. 90kV of applied voltage brings high transfer efficiency and superior atomization!

- Superior in safety for the built-in high voltage generator
- The easily removed valve unit enables easy maintenance in shorter time.
- We offer two types (with dump valve or without dump valve) according to your application.

Twin Head Air Electrostatic Automatic Gun

**TWIN GUN EAB70T**

An innovative automatic gun that improved coating quality with two atomization heads and separate coating material paths.

- By overlapping two spray patterns, high quality coating is realized.
- The two individual coating material paths and coating spray control enables high quantity spraying and use of high viscosity coating materials.
- Applicable to high-speed production lines by the optimal spray control at the independently controlled built-in paint valves.

---

Air-wrapped Airless Electrostatic

Air-Wrap Electrostatic Automatic gun

**APEG25**

Air-wrap electrostatic automatic gun with higher coating efficiency due to air wrap and electrostatic effect

- The air-wrap electrostatic mechanism which brings greater coating efficiency reduces coating consumption and increases production efficiency.
- The high pressure coating up to 21MPa enables spraying of high viscosity coatings such as environment-friendly high solid coatings.
- Excel in safety for its built-in high voltage generator.
Automatic Coating Systems & Accessories

- Control devices for electrostatic coating

**BPS260**
Electrostatic coating control device for EAB800, ESA100

**BPS290**
Electrostatic coating control device for EAB720, EAB2010, ESA88

**BPS300**
Electrostatic coating control device for ESA100, ESA2030, ESA200VP

- Coating robots and controllers

Variations of wrists
We offer three types of wrists, RBR, BBR, and 3R.
- 3R (We offer two type of hose built-in type which inside diameter is ø40mm and ø70mm)

Large Coating Robot AF32

- Reciprocators and controllers

**YR type** (Horizontal type) reciprocator
**TR type** (Lightweight type) reciprocator

- Electrostatic automatic gun application table

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>ESA200/VP</th>
<th>EAB200</th>
<th>ESA120</th>
<th>ESA100</th>
<th>ESA88</th>
<th>EAB200</th>
<th>EAB200</th>
<th>EAB90</th>
<th>EAB70F</th>
<th>APEG25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotary-atomized Electrostatic</td>
<td>High transfer efficiency</td>
<td>High transfer efficiency</td>
<td>High transfer efficiency</td>
<td>Thin film precision</td>
<td>General purpose atomization</td>
<td>Compact body</td>
<td>Multifunction</td>
<td>Twin head</td>
<td>Thick film coating</td>
<td></td>
</tr>
<tr>
<td>Air-atomized Electrostatic</td>
<td>High transfer efficiency</td>
<td>High transfer efficiency</td>
<td>High transfer efficiency</td>
<td>Thin film precision</td>
<td>General purpose atomization</td>
<td>Compact body</td>
<td>Multifunction</td>
<td>Twin head</td>
<td>Thick film coating</td>
<td></td>
</tr>
<tr>
<td>Air-atomized Airless Electrostatic</td>
<td>High transfer efficiency</td>
<td>High transfer efficiency</td>
<td>High transfer efficiency</td>
<td>Thin film precision</td>
<td>General purpose atomization</td>
<td>Compact body</td>
<td>Multifunction</td>
<td>Twin head</td>
<td>Thick film coating</td>
<td></td>
</tr>
</tbody>
</table>

Adaptation

- Metallic/Pearl
- Solid
- Primer
- Secondary coating
- Water based
- Emulsion
- Material:
  - Metal general
  - Small resin parts
  - Automotive, Large size work
  - Wood work
  - Structural rust prevention

Note: Optimal | Appropriate | Available | Not available
### Electrostatic Automatic Gun Series

#### SPECIFICATIONS

**● Rotary-atomized Electrostatic**

<table>
<thead>
<tr>
<th>Model</th>
<th>ESA20VP</th>
<th>ESA200</th>
<th>ESA120</th>
<th>ESA100</th>
<th>ESABB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. flow rate</td>
<td>500mL/min</td>
<td>500mL/min</td>
<td>400mL/min</td>
<td>200mL/min</td>
<td>600mL/min</td>
</tr>
<tr>
<td>Max. out put voltage</td>
<td>DC-90kV</td>
<td>DC-90kV</td>
<td>DC-90kV</td>
<td>DC-90kV</td>
<td>DC-90kV</td>
</tr>
<tr>
<td>Air consumption</td>
<td>2,600mL/min(ANR)</td>
<td>960mL/min(ANR)</td>
<td>960mL/min(ANR)</td>
<td>360mL/min(ANR)</td>
<td>550mL/min(ANR)</td>
</tr>
<tr>
<td>Max. turbine speed</td>
<td>60,000 r.p.m. (no load)</td>
<td>40,000 r.p.m. (no load)</td>
<td>40,000 r.p.m. (no load)</td>
<td>80,000 r.p.m. (no load)</td>
<td>80,000 r.p.m. (no load)</td>
</tr>
<tr>
<td>Length</td>
<td>432mm</td>
<td>432mm</td>
<td>310mm</td>
<td>274mm</td>
<td>74mm</td>
</tr>
<tr>
<td>Weight</td>
<td>5,400g</td>
<td>5,400g</td>
<td>3,200g</td>
<td>900g</td>
<td>4,600g (valve included)</td>
</tr>
<tr>
<td>Electrostatic Controller</td>
<td>BPS200</td>
<td>BPS200</td>
<td>BPS300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**● Air-atomized Electrostatic**

<table>
<thead>
<tr>
<th>Model</th>
<th>EAB200WS</th>
<th>EAB90</th>
<th>EAB70T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. flow rate</td>
<td>500mL/min</td>
<td>500mL/min</td>
<td>1,000mL/min</td>
</tr>
<tr>
<td>Built-in valve</td>
<td>Trigger/Dump valve (Trigger valve for EAB200S)</td>
<td>Trigger valve</td>
<td>Trigger valve x 2</td>
</tr>
<tr>
<td>Max. output voltage</td>
<td>DC-90kV</td>
<td>DC-60kV</td>
<td>DC-90kV</td>
</tr>
<tr>
<td>Air consumption</td>
<td>360mL/min(ANR)</td>
<td>360mL/min(ANR)</td>
<td>600mL/min(ANR)</td>
</tr>
<tr>
<td>Length</td>
<td>285mm</td>
<td>240mm</td>
<td>330mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1,900g</td>
<td>1,400g</td>
<td>2,500g</td>
</tr>
<tr>
<td>Electrostatic Controller</td>
<td>RPS290</td>
<td>RPS290</td>
<td>RPS290</td>
</tr>
</tbody>
</table>

*Air-wrapped Airless Electrostatic*

<table>
<thead>
<tr>
<th>Model</th>
<th>APEG25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. flow rate</td>
<td>1,000mL/min</td>
</tr>
<tr>
<td>Max. output voltage</td>
<td>DC-90kV</td>
</tr>
<tr>
<td>Air consumption</td>
<td>150mL/min(ANR)</td>
</tr>
<tr>
<td>Max. coating pressure</td>
<td>21MPa</td>
</tr>
<tr>
<td>Length</td>
<td>345mm</td>
</tr>
<tr>
<td>Weight</td>
<td>2,100g</td>
</tr>
<tr>
<td>Control Device</td>
<td>BPS290</td>
</tr>
</tbody>
</table>

**● Electrostatic Controller**

<table>
<thead>
<tr>
<th>Model</th>
<th>BPS260</th>
<th>BPS290</th>
<th>BPS300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nu-law generated voltage</td>
<td>DC-80kV x 3kV</td>
<td>DC-90kV x 3kV</td>
<td>DC-80kV</td>
</tr>
<tr>
<td>Power source</td>
<td>AC100-240V ±10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power supply frequency</td>
<td>50/60Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0-45℃</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions H x W x D</td>
<td>120 x 300 x 230mm</td>
<td>120 x 300 x 220mm</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>4,000g</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**● Rotary Controller**

<table>
<thead>
<tr>
<th>Model</th>
<th>TTC200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbine speed settings</td>
<td>10,000-120,000 r.p.m. (by 1,000 r.p.m.)</td>
</tr>
<tr>
<td>Power source</td>
<td>AC100-240V ±10%</td>
</tr>
<tr>
<td>Power supply frequency</td>
<td>50/60Hz</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0-45℃</td>
</tr>
<tr>
<td>Dimensions H x W x D</td>
<td>90 x 300 x 105mm</td>
</tr>
<tr>
<td>Weight</td>
<td>2,700g</td>
</tr>
</tbody>
</table>

---

**Caution for Safety**

For correct and safe use of the equipment, please refer to the Operation manual provided for it.

*Appearances and specifications of the equipment shown on this booklet are subject to be changed for the purpose of its improvement, without pre-announcement.*

---

代理商:
百富科技有限公司
百富科技有限公司
地址: 台湾省新北市土城区忠孝路8号9楼
电话: +886-2-2268 4088
传真: +886-2-2268 4086
Website: www.bfcoating.com
E-mail: taipei@bfcoating.com

分公司服务专线：
台中 : 006-4-23500755
台南 : 066-6-2709257
北京 : 86-10-64882666转8008
天津 : 86-22-58853955
上海 : 86-21-64839459
昆山 : 06-512-5740500

宁波 : 006-574-50020052
北京 : 86-10-64882666转8008
厦门 : 86-592-6074228
杭州 : 86-573-63866883
上海 : 86-21-64839459
深圳 : 86-757-8139110
重庆 : 86-22-67700577

This brochure is printed on recycled paper using SOY INK. 043-3E 211148