

# 除煙寶運水式靜電除油煙機

**CrystalVent Electrostatic Precipitator with Continuous Water Spray** 



Model 型號 BS266LL

- 全自動清洗 Fully Auto Cleaning
  - 罩式設計 Hood Type Design
  - 容易操作 Easy Operation
    - 具經濟效益 Cost Effectiveness
  - 可長時間保持高除油煙效率 Maintain High Sustained Oil Mist Removal Efficiency

### The Problem of Oil Mist Exhaust from Restaurant Kitchen

Restaurant kitchen exhaust usually creates air pollution to the environment and nuisances to the nearby residents and that is a frequent target of complaint. At present, water spray hoods, air washers and traditional electrostatic precipitators (EPs) are usually used to reduce oil mist. These types of equipment are simply ineffective. Spray hoods and washers using water spray cannot intercept the fine oil mists effectively. Traditional EPs use plate-and-wire high voltage electric field design to collect oil mist, which when

accumulated on the collection plates can quickly cause electric discharge and the performance of the EP will drop. Laborious and very frequent cleaning is required. Besides, traditional EPs are in-line duct-type design and have to be installed in the ceiling of the kitchen or in open areas outside the restaurants. Maintenance will be very difficult when EPs are installed in the ceiling while it is often cumbersome to get landlord's permission to install the EP in open areas outside the restaurants.

### The Best Solution – New Advanced "CrystalVent" Electrostatic Precipitator with Continuous Water Spray

Hong Kong Productivity Council (HKPC) in collaboration with an electrostatic precipitator manufacturer in China have developed a new advanced "CrystalVent" Electrostatic Precipitator with Continuous Water Spray. This new device combines water spray hood design and advanced electrostatic precipitation technology to maintain a high oil mist removal efficiency without the need for frequent manual cleaning.

New advanced "CrystalVent" has the following benefits:

- Use of advanced cylindrical honeycomb design of the electric field incorporated with continuous water spray, thus removing over 95% oil mists.
- With the fully auto-cleaning function for the EP, a high sustained oil mist removal efficiency can be maintained without the need for frequent manual cleaning, thus saving time and maintenance fee.
- With exhaust hood design type, it can be installed directly above the cooking stoves. There is no need to install it outside the restaurant.
- Low water consumption by collecting and recirculating water for the EP.
- With built-in smart programmable logic controller (PLC) control, easy operation and user friendly instruction can be achieved.
- Low level discharge is applicable.
- One control panel can connect up to 4 no. of spray hoods.
- With modular design, all major components can be removed easily for maintenance and replacement.
- Certificate of safety compliance with international

standard has been obtained, ensuring its safety and reliability.



採用「圓筒形蜂巢式」 的静電場設計 Use of advanced cylindrical honeycomb design of the electric field

New advanced "CrystalVent" Electrostatic Precipitator with Continuous Water Spray is the best solution for restaurants to solve the oil mist problem and comply with environmental standards. Apart from our standard CrytalVent model, we can also offer tailor design to suit the requirements of different applications.



### The Problem of Oil Mist Exhaust from Restaurant Kitchen

Restaurant kitchen exhaust usually creates air pollution to the environment and nuisances to the nearby residents and that is a frequent target of complaint. At present, water spray hoods, air washers and traditional electrostatic precipitators (EPs) are usually used to reduce oil mist. These types of equipment are simply ineffective. Spray hoods and washers using water spray cannot intercept the fine oil mists effectively. Traditional EPs use plate-and-wire high voltage electric field design to collect oil mist, which when

accumulated on the collection plates can quickly cause electric discharge and the performance of the EP will drop. Laborious and very frequent cleaning is required. Besides, traditional EPs are in-line duct-type design and have to be installed in the ceiling of the kitchen or in open areas outside the restaurants. Maintenance will be very difficult when EPs are installed in the ceiling while it is often cumbersome to get landlord's permission to install the EP in open areas outside the restaurants.

## The Best Solution – New Advanced "CrystalVent" Electrostatic Precipitator with Continuous Water Spray

Hong Kong Productivity Council (HKPC) in collaboration with an electrostatic precipitator manufacturer in China have developed a new advanced "CrystalVent" Electrostatic Precipitator with Continuous Water Spray. This new device combines water spray hood design and advanced electrostatic precipitation technology to maintain a high oil mist removal efficiency without the need for frequent manual cleaning.

New advanced "CrystalVent" has the following benefits:

- Use of advanced cylindrical honeycomb design of the electric field incorporated with continuous water spray, thus removing over 95% oil mists.
- With the fully auto-cleaning function for the EP, a high sustained oil mist removal efficiency can be maintained without the need for frequent manual cleaning, thus saving time and maintenance fee.
- With exhaust hood design type, it can be installed directly above the cooking stoves. There is no need to install it outside the restaurant.
- Low water consumption by collecting and recirculating water for the EP.
- With built-in smart programmable logic controller (PLC) control, easy operation and user friendly instruction can be achieved.
- Low level discharge is applicable.
- One control panel can connect up to 4 no. of spray hoods.
- With modular design, all major components can be removed easily for maintenance and replacement.
- Certificate of safety compliance with international

standard has been obtained, ensuring its safety and reliability.



採用「圓筒形蜂巢式」 的靜電場設計 Use of advanced cylindrical honeycomb design of the electric field

New advanced "CrystalVent" Electrostatic Precipitator with Continuous Water Spray is the best solution for restaurants to solve the oil mist problem and comply with environmental standards. Apart from our standard CrytalVent model, we can also offer tailor design to suit the requirements of different applications.



| 新改良型號 | 『除煙寶』的規格(BS266LL型號)  |
|-------|--|
| 除油煙效率 | 超過百分之九十五的油煙,出風口不容易察覺有油煙排放  |
| 選用物料  | 全不銹鋼   |
| 設計風量  | 每小時4000立方米   |
| 輸入總功率 | 1,950瓦特  |
| 用水量   | 每小時少於3公升   |
| 所需電源  | AC 220-230/1/50(220-230伏特、單相、50赫)  |
| 風阻    | 150帕斯卡   |
| 尺寸    | 2000 x 1150 x 860毫米 (長、闊、高) (煙罩部分)<br>700 x 485 x 1800毫米 (長、闊、高) (控制櫃部份) |
| 淨重    | 370公斤(煙罩部分),105公斤(控制櫃部份)   |

| Specifications of New Advanced "CrystalVent" (Model: BS266LL) |   |  |
|---|---|--|
| Oil mist removal efficiency                                   | >95% with effectively no visible emission at the exhaust outlet                                 |  |
| Materials of construction                                     | Stainless steel   |  |
| Design air flow rate  | 4000 m <sup>3</sup> /hr   |  |
| Total power input   | 1,950 W   |  |
| Water consumption   | < 3 litres / hr   |  |
| Power supply  | AC 220-230/1/50 (220-230V, single phase, 50Hz)  |  |
| Pressure drop   | 150 Pa  |  |
| Dimension   | 2000 x 1150 x 860 mm (L x W x H) (spray hood)<br>700 x 485 x 1800 mm (L x W x H)(control panel) |  |
| Net weight  | 370 kg (spray hood), 105 kg (control panel)   |  |

For any further enquiry,

please contact us at 2635 2268

