

# **Dehumidifying Dryer**

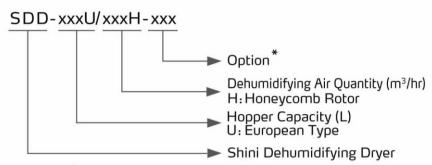
SDD-160U/120H-D



Refer carefully to this manual before operation.

# SDD Series

#### Coding Principle



Notes:\*

LC= PLC+HMI D = Dew-point Monitor CE = CE Conformity
P=For Polished Hopper Inside DC=Dew-point Control



SDD-160U/120H-LC-D

#### Features

#### Standard configuration

- The SDD dehumidifying dryers use honeycomb dehumidifiers with an eye-catching semi-integral appearance.
- Each model combines dehumidifying and drying functions into a single unit.
- Insulated drying hopper features dry air down-blowing and cyclone exhaust design. This improves drying efficiency and reduces energy consumption while maintain a steady drying effect.
- The dehumidifying section of the SDD series adopt cooler to ensure a low return air temperature and low dew-point.
- Compact in size for ease of movement and space saving.
- Microprocessor is the standard equipment.



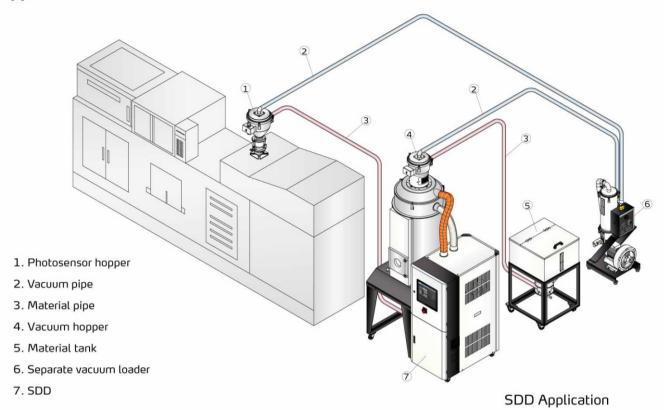
Control Panel

#### Accessory option

- Dew-point monitor is available as option.
- Suction box and hopper loader are optional for conveying material conveniently.
- PLC control plus LCD touch screen is optional for convenient centralized control.
- For models with energy-saving drying management, add "ES" at model behind, standard equipped with HMI touch control, which can save up to 41% of total power consumption. Volume used per hour is settable between 40~100% as drying capacity to save the totally power consumption of 35%~0; Standard equipped with heat regenerative recycler which recycles the regeneration air exhausted heat via plate heat exchanger and can save 3%~6% of total power consumption.
- For models optional with dew-point control, add "DC" at model behind. "ES" by setting if dew-point value to control the regeneration required temperature automatically and lowers power consumption of the regenerative heater; According to -40°C~+10°C of dew-point value, the total power consumption can save 0~10%.
- For models optional with drying heat recycler, add "HE" at model behind. Dehumidified low temperature
  air via plate heat exchanger to recycle the heat of hot-wet return air, which can higher the air temperature
  in drying heater and lower the power consumption of the heater, the total power consumption can save
  0%~19%.

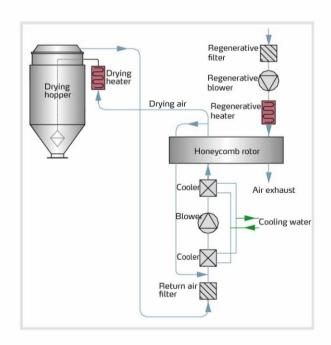
# SDD Series

### Application



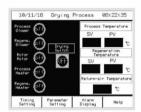
## Working Principle

Damp and hot air from dry material barrel is blown into rotor after cooled. Moisture from the air is absorbed by rotor and is then adsorbed by regeneration heating air. Two strands of airflow function on the rotor. And with the rotation, moisture from the air is absorbed and expelled after absorbed regeneration air to form stable low dew-point air, which is dried to the drying temperature and then is blown into material barrel to closed circle to dry material.





## Options



Touch Screen (LCD with PLC Control)

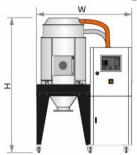


Dew-point Monitor (Installed on the machine)



SCD-OP High Efficiency Particulate Absorbing Filter

#### Outline Drawings





### Specifications

|                                    | Model          |       | 20U/<br>40H | 40U/<br>40H | 80U/<br>40H | 120U/<br>80H | 160U/<br>80H | 160U/<br>120H | 230U/<br>120H | 300U /<br>200H | 450U/<br>200H | 600U/<br>400H | 750U/<br>400H | 900U/<br>700H | 1200U/<br>700H |
|------------------------------------|----------------|-------|-------------|-------------|-------------|--------------|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|
| Regen. Heater (kW)                 |                |       | 4           |             |             | 3            |              |               |               | 4              |               | 7.2           |               | 10            |                |
| Regen. Blower<br>(kW, 50/60Hz)     |                |       | 0.2/0.3     |             |             | 0.2          |              |               |               | 0.4            |               | 0.75          |               | 1.5           |                |
| Drying Heater<br>(kW)              |                |       | 4           |             |             | 6            |              |               |               | 12             |               | 18            |               | 24            |                |
| Drying Blower<br>(kW, 50/60Hz)     |                |       | 0.12/0.12   |             |             | 0.75         |              |               |               | 1.5            |               | 3.75          |               | 5.5           |                |
| Dry Air Volume<br>(m³/hr, 50/60Hz) |                | 40/45 |             |             | 80 12       |              |              | 20            | 200           |                | 400           |               | 700           |               |                |
|                                    | ulated<br>pper | L     | 20          | 40          | 80          | 120          | 160          |               | 230           | 300            | 450           | 600           | 750           | 900           | 1200           |
|                                    |                | gal   | 5.3 10.6    |             | 21          | 31.7         | 42.3         |               | 60.8          | 79.3           | 118.9         | 158.5         | 198           | 237.8         | 317            |
| Dimension                          | н              | mm    | 1260        |             | 1650        | 1780         | 1740         |               | 2010          | 2040           | 2440          | 2380          | 2610          | 2640          | 3070           |
|                                    |                | inch  | 49.6        |             | 65          | 70           | 68.5         |               | 79            | 80.3           | 96            | 93.7          | 102.8         | 104           | 121            |
|                                    | W              | mm    | 960         |             | 1060        | 1075         | 1220         |               |               | 1450           |               | 1745          |               | 2140          |                |
|                                    |                | inch  | 37.8        |             | 41.7        | 42.3         | 48           |               |               | 57             |               | 68.7          |               | 84.3          |                |
|                                    | D              | mm    | 860         |             |             | 855          |              |               |               | 1050           |               | 1255          |               | 1380          |                |
|                                    |                | inch  | 33.9        |             |             | 33.7         |              |               |               | 41.3           |               | 49.4          |               | 54.3          |                |
| Weight                             |                | kg    | 150         | 165         | 190         | 250          | 255          | 265           | 295           | 420            | 550           | 620           | 650           | 830           | 870            |
|                                    |                | lb    | 331         | 364         | 419         | 551          | 562          | 584           | 650           | 926            | 1213          | 1367          | 1433          | 1830          | 1918           |

Notes: 1) Plastic materials can be fully dried by drying air with dew-point temperature ≤-20°C. 2) Power: 3Φ, 230/400/460/575VAC, 50/60Hz.

We reseve the right to change specifications without prior notice.

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#### Factories:

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