



## **"All-in-One" Compact Dryer**

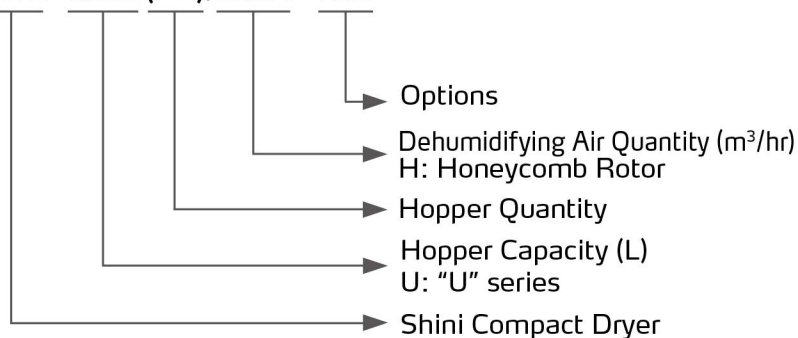
SCD-230U/120H



Refer carefully to the manual before operation.

## ■ Coding Principle

SCD- xxxU(×2)/xxxH - xxx



SCD-600U/400H-LC-D



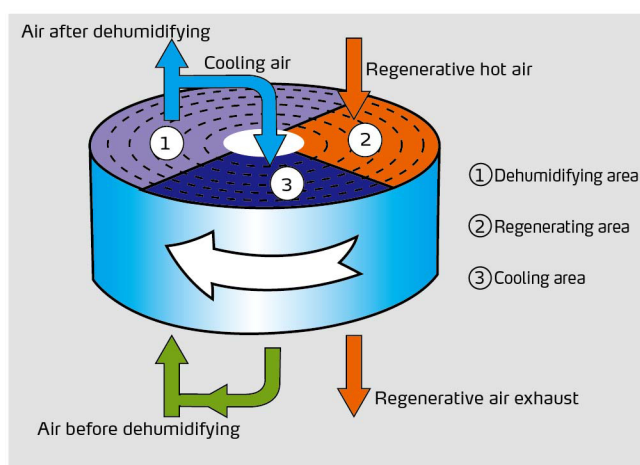
SCD-120U/80H-D-OP-M2

## ■ Features

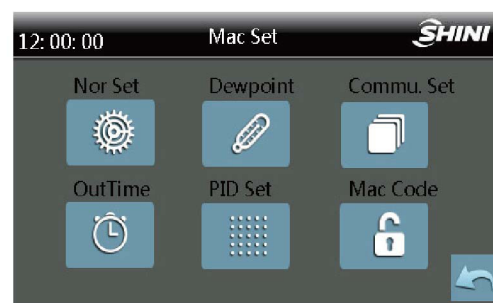
- Combine the function of dehumidifying, drying and two-stage conveying into a single unit.
- Adopt molecular sieve structure honeycomb rotor, which provides low dew-point dry air. The honeycomb rotor structure is superior to double-barrel dehumidifier that will contaminate raw material due to damaged molecular sieve.
- Feeding system is equipped with shut-off valve to ensure no dry materials remain in the material line and avoid dry material from regaining moisture.
- Equipped with microprocessor to accurately control drying temperature.
- Insulation drying hopper adopts down blowpipe design and collocates with cyclone air exhaust to avoid heat lost and improve drying efficiency.
- SCD with two drying hoppers, the drying temperature of single hopper can be individually controlled. It mainly applied to two component molding machine, which can process dehumidifying and drying to two different drying materials.
- Equipped with weekly timer, machine can automatically operate.
- All new highly efficient drying hopper with 14~20% less floor space than the previous version (40U~230U model).



SCD-80U×2/100H



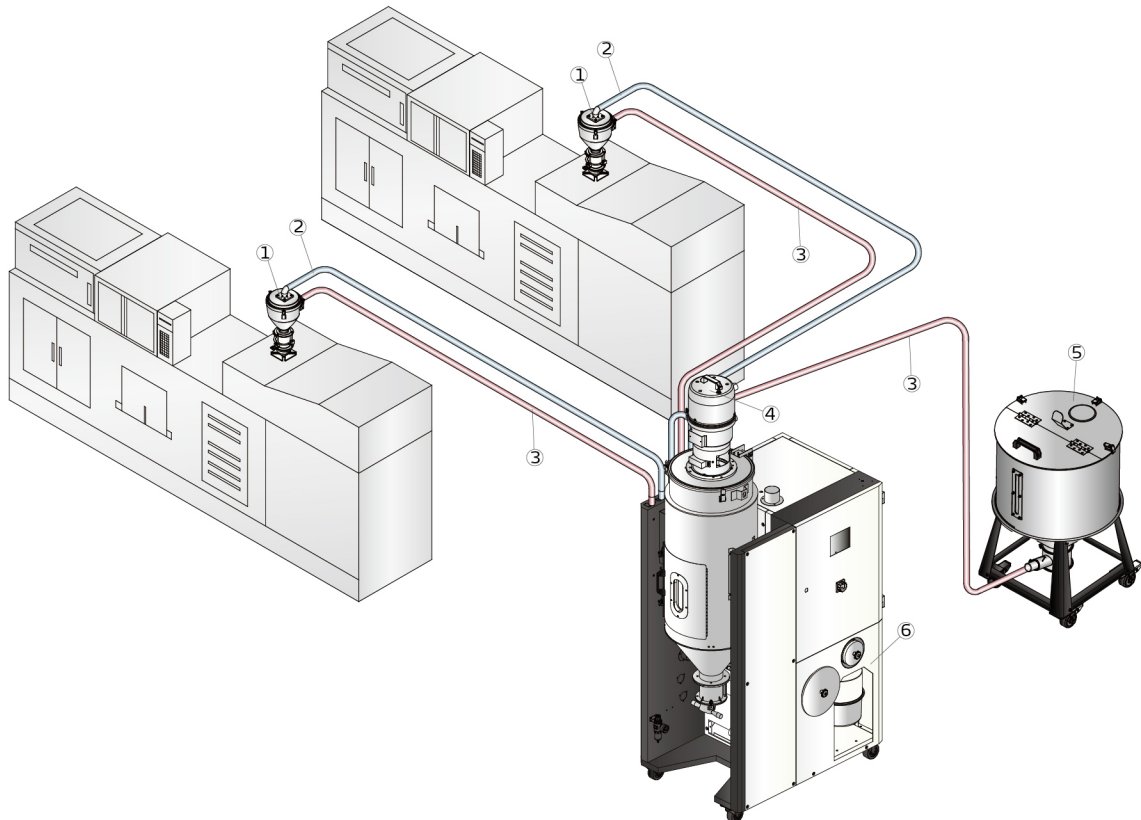
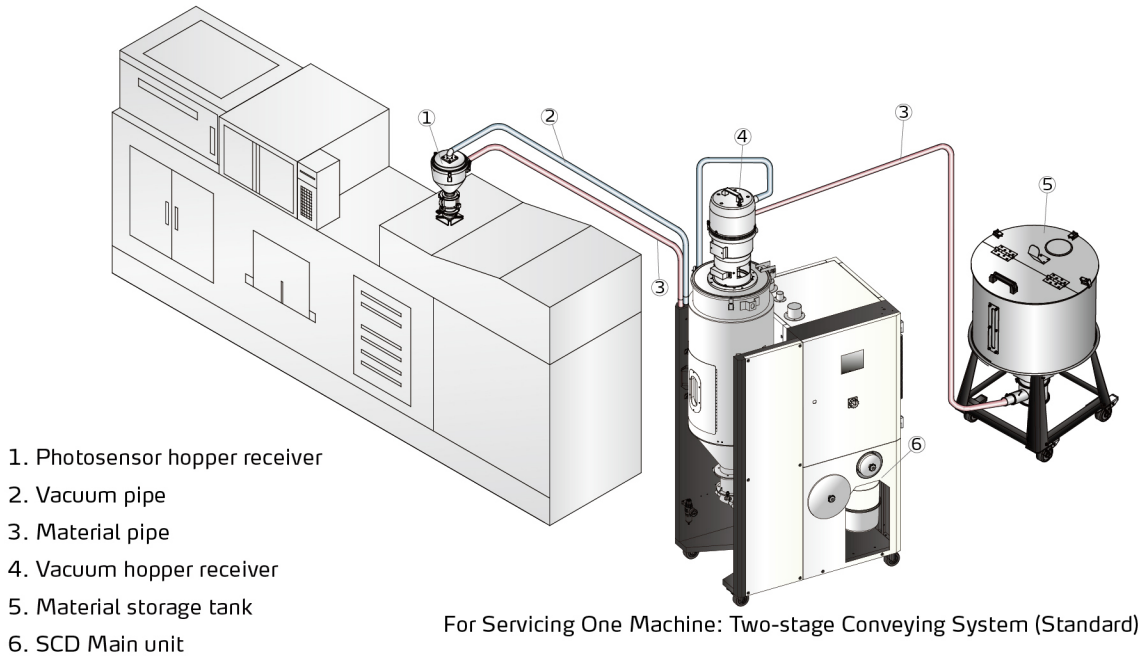
Honeycomb Rotor Working Principle



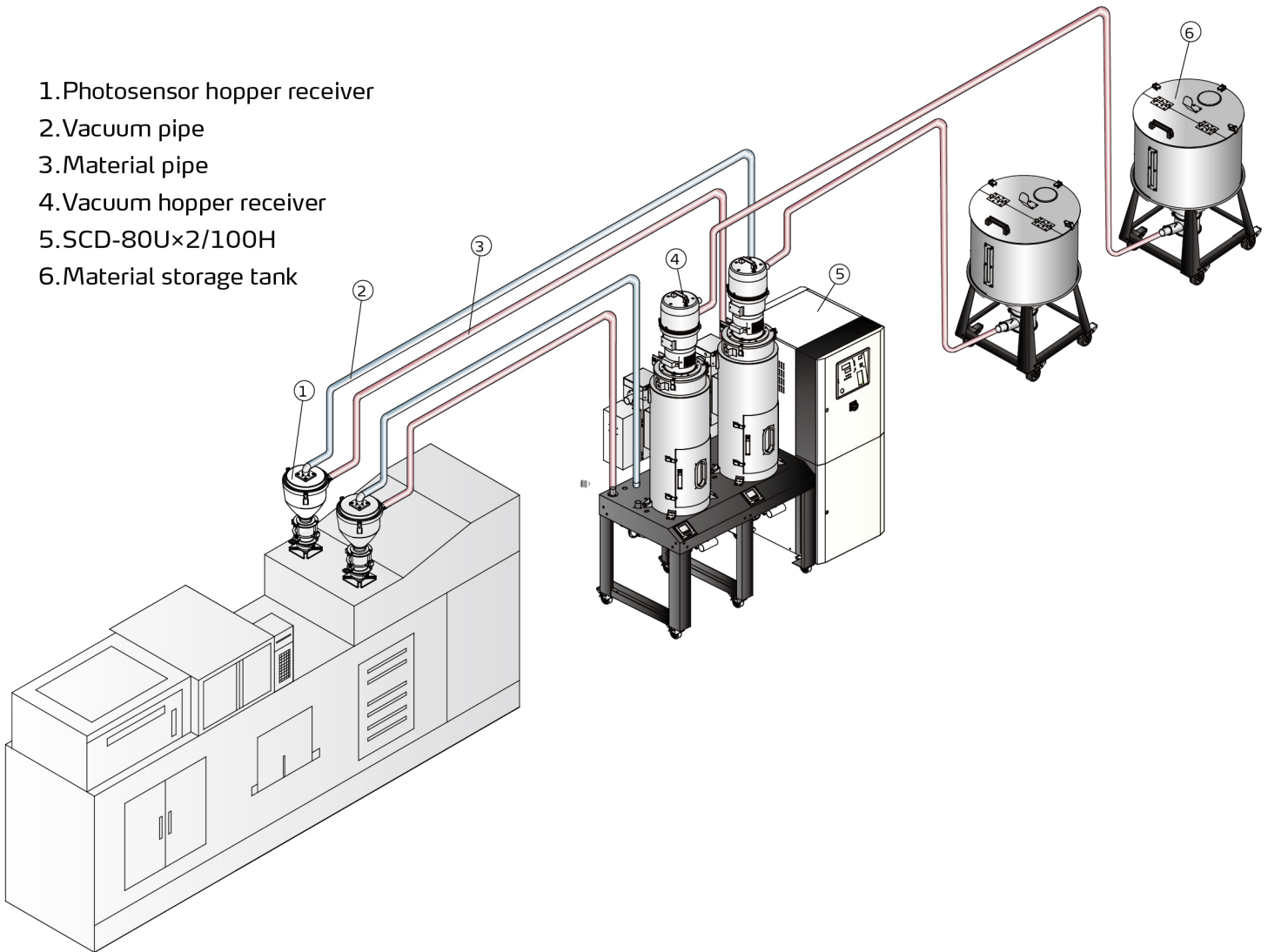
Touch Control Panel

## Application

SCD "All-in-One" portable compact dryers are mainly used for drying, dehumidifying, and conveying hygroscopic plastics, such as PET, PA, and PC etc. The one-to-one (for one set of IMM) or one-to-two (for two sets of IMMs) SCD compact dryers can be used according actual production demands. Besides, the double drying hoppers can be selected to meet the production demands of two component IMM. In addition, there're multiple options and accessories to meet various demands. If dry materials are volatile, it must use the EOF filter, such as PA.



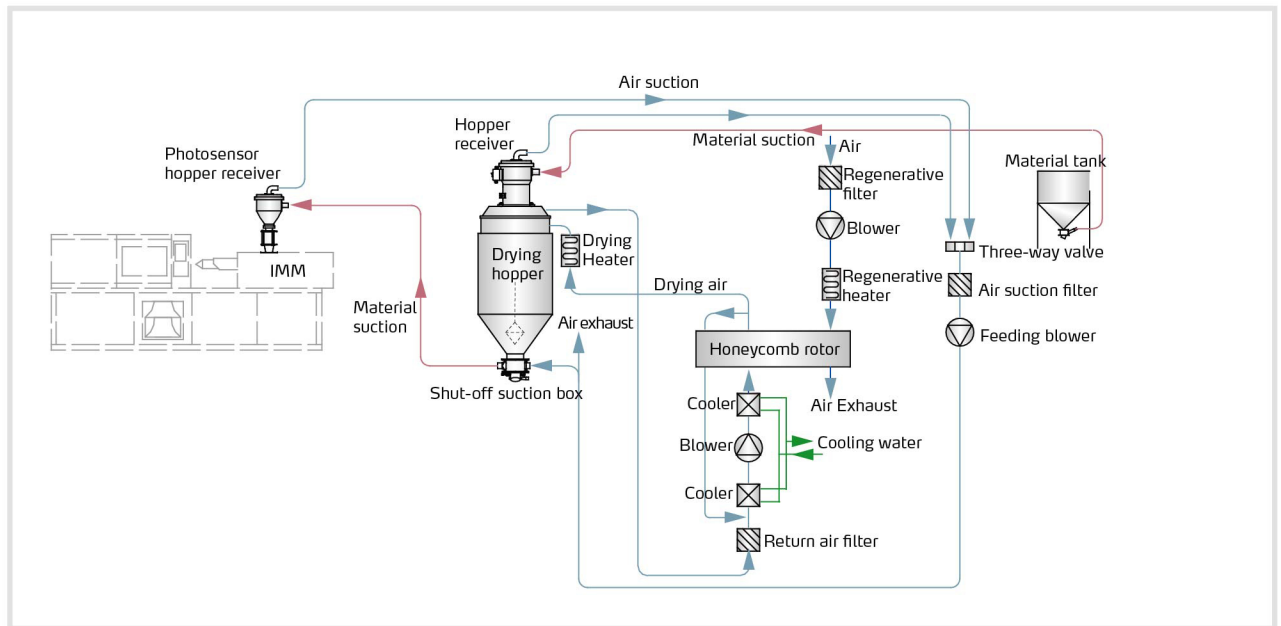
1. Photosensor hopper receiver
2. Vacuum pipe
3. Material pipe
4. Vacuum hopper receiver
5. SCD-80U×2/100H
6. Material storage tank



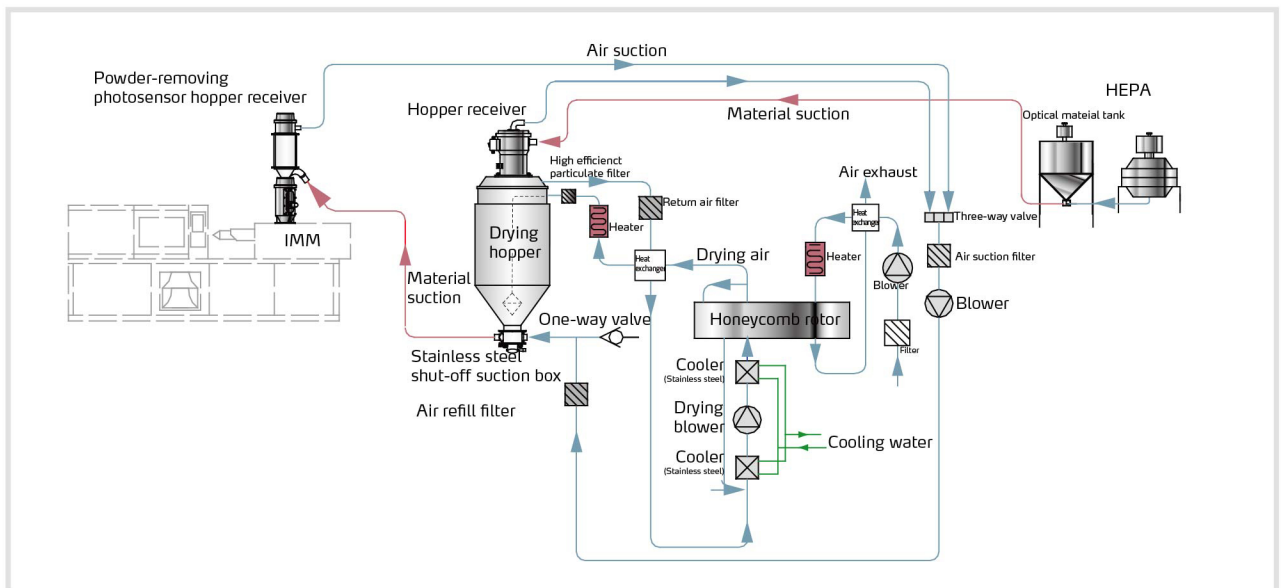
The diagram of "One-to-Two" Compact Dryer



## Working Principle



SCD Working Principle



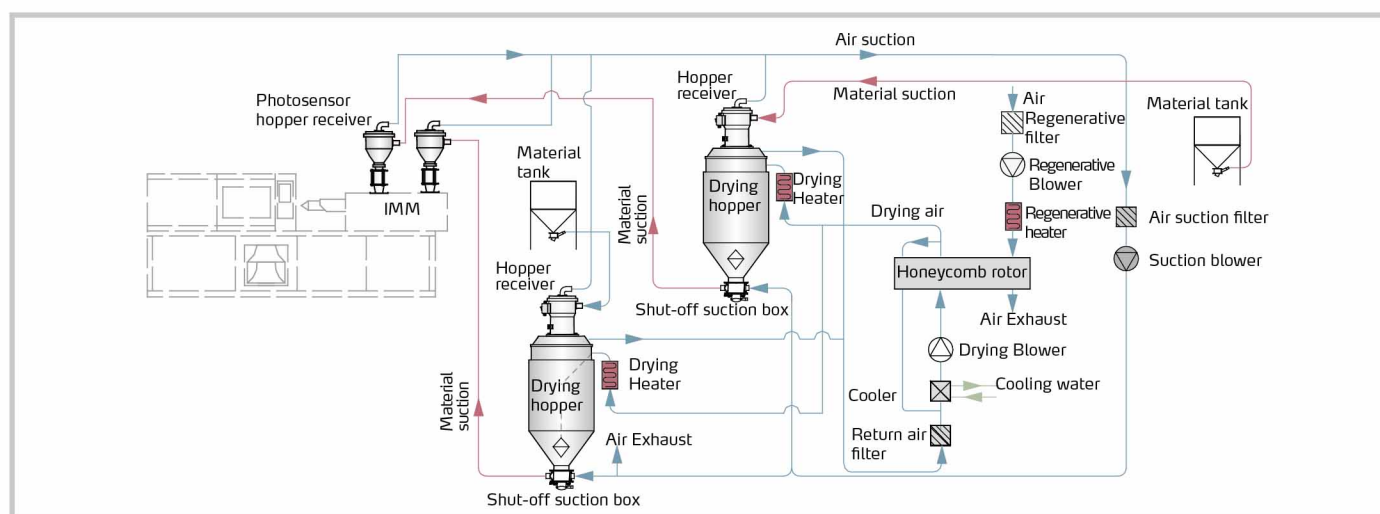
SCD-OP-ES Working Principle



3D animation  
(Tencent)



3D animation  
(Youtube)



SCD-Ux2/H Working Principle

## Options

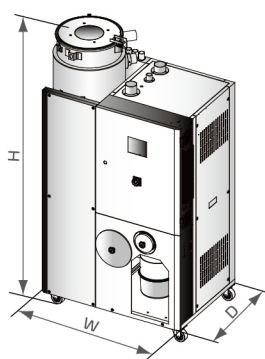
- For models optional with energy-saving drying function, add "ES" at the end of the model code. Standard equipped with touch panel human-machine interface, it can automatically adjust the energy consumption as per material dosage. Collocated with regenerative heat recycler, total power consumption can be saved up to 41%.
- For models with drying heat recycler, add "HE" at the end of model code. Dehumidified low temperature air recycles the heat of hot-wet return air via plate heat exchanger, which can raise the air temperature in drying heater and reduce the power consumption of the heater, as well as reduce 0%~19% of total power consumption.
- For SCD, three-stage conveying function is available to simultaneously feed two sets of injection molding machines. Add "M2" at the end of the model code.
- For models with polished hopper inside, add "P" at the end of the model code.
- Optional air cooling function is available for SCD, which is no need of cooling water, and add "A" at the end of the model code. It is applicable for (SCD-40U/40H~SCD-230V/120H).
- Upgraded to PLC & touch panel, add "LC" at the end of the model code.
- The optional built-in dew point monitor is available, which is used to monitor real-time dew point. Add "D" at the end of the model code.

# SCD Series

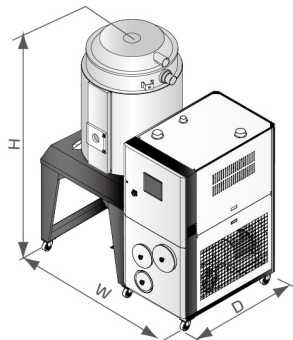
## Specifications (Hermetic)

| Model                |                                                 | SCD- | 20U/30H<br>-OP | 40U/30H<br>-OP | 80U/50H<br>-OP | 120U/80H<br>-OP | 40U/<br>40H | 80U/<br>40H | 120U/<br>80H | 160U/<br>80H | 160U/<br>120H | 230U/<br>120H | 300U/<br>200H | 450U/<br>200H |
|----------------------|-------------------------------------------------|------|----------------|----------------|----------------|-----------------|-------------|-------------|--------------|--------------|---------------|---------------|---------------|---------------|
| Drying System        | Drying Heater (kW)                              |      | 3              | 3              | 4              | 6               | 4           | 4           | 4            | 4            | 6             | 6             | 12            | 12            |
|                      | Drying Blower (kW)                              |      | 0.4            | 0.4            | 0.4            | 0.75            | 0.18        | 0.18        | 0.75         | 0.75         | 0.75          | 0.75          | 1.5           | 1.5           |
|                      | Hopper Capacity                                 | L    | 20             | 40             | 80             | 120             | 40          | 80          | 120          | 160          | 160           | 230           | 300           | 450           |
|                      |                                                 | gal  | 5.3            | 10.6           | 21.1           | 31.7            | 10.6        | 21.1        | 31.7         | 31.7         | 42.3          | 60.8          | 79.3          | 119           |
| Dehumidifying System | Regenerative Heater (kW) (50/60Hz)              |      | 3/3            | 3/3            | 3/3            | 3/3             | 3/3         | 3/3         | 3/4          | 3/4          | 4/4           | 4/4           | 4/6           | 4/6           |
|                      | Regenerative Blower (kW)                        |      | 0.4            | 0.4            | 0.4            | 0.4             | 0.12        | 0.12        | 0.18         | 0.18         | 0.18          | 0.18          | 0.4           | 0.4           |
|                      | Dehumidifying Air quantity (m <sup>3</sup> /hr) |      | 30             | 30             | 50             | 80              | 40          | 40          | 80           | 80           | 120           | 120           | 200           | 200           |
| Conveying System     | Conveying Blower (kW)                           |      | 1.5            | 1.5            | 1.5            | 1.5             | 1.5         | 1.5         | 1.5          | 1.5          | 1.5           | 1.5           | 1.5           | 1.5           |
|                      | Dia. of Material Pipe (inch)                    |      | 1.5            | 1.5            | 1.5            | 1.5             | 1.5         | 1.5         | 1.5          | 1.5          | 1.5           | 1.5           | 1.5           | 1.5           |
|                      |                                                 |      |                |                |                |                 |             |             |              |              |               |               |               |               |
|                      | SVH-L                                           | L    | 3*             | 3*             | 3*             | 3*              | 3           | 6           | 6            | 6            | 6             | 12            | 12            | 12            |
|                      |                                                 | gal  | 0.8*           | 0.8*           | 0.8*           | 0.8*            | 0.8         | 1.6         | 1.6          | 1.6          | 1.6           | 3.2           | 3.2           | 3.2           |
|                      | SHR-U                                           | L    | 3              | 3              | 6              | 6               | 3           | 6           | 6            | 6            | 6             | 12            | 12            | 12            |
|                      |                                                 | gal  | 0.8            | 0.8            | 1.6            | 1.6             | 0.8         | 1.6         | 1.6          | 1.6          | 1.6           | 3.2           | 3.2           | 3.2           |
| Dimension            | H                                               | mm   | 1400           | 1500           | 1670           | 1710            | 1672        | 1751        | 1957         | 2102         | 2102          | 2012          | 2160          | 2350          |
|                      |                                                 | inch | 55             | 59             | 65.7           | 67.3            | 65.8        | 68.9        | 77           | 82.8         | 82.8          | 82.8          | 85            | 92.5          |
|                      | W (mm)                                          | mm   | 1050           | 1050           | 1240           | 1240            | 1051        | 1066        | 1125         | 1125         | 1125          | 1223          | 1460          | 1460          |
|                      |                                                 | inch | 41.3           | 41.3           | 48.8           | 48.8            | 41.4        | 42          | 44.3         | 44.3         | 44.3          | 48.1          | 57.5          | 57.5          |
|                      | D (mm)                                          | mm   | 900            | 900            | 1000           | 1000            | 903         | 903         | 903          | 903          | 903           | 903           | 1020          | 1020          |
|                      |                                                 | inch | 35.4           | 35.4           | 39.4           | 39.4            | 35.6        | 35.6        | 35.6         | 35.6         | 35.6          | 35.6          | 40.2          | 40.2          |
| Weight               |                                                 | kg   | 235            | 280            | 330            | 385             | 295         | 325         | 340          | 350          | 390           | 420           | 565           | 595           |
|                      |                                                 | lb   | 518            | 617            | 728            | 849             | 650         | 1433        | 750          | 772          | 850           | 926           | 1246          | 1312          |

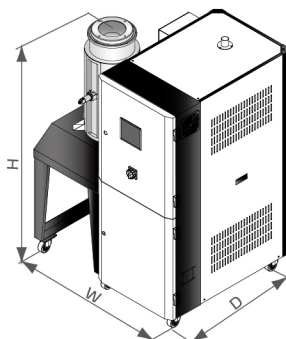
## Outline Drawings



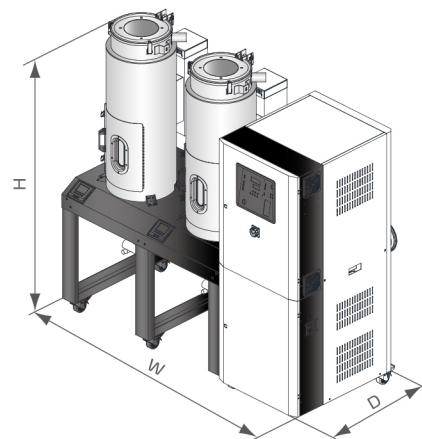
SCD Hermetic



SCD Semi-open



SCD-OP



SCD-Ux2/H

## Specifications (Semi-open)

| Model                |                                             | SCD- | 600U/400H | 750U/400H | 900U/700H | 1200U/700H | 40Ux2/80H  | 80Ux2/80H  | 120Ux2/120H | 160Ux2/200H |
|----------------------|---------------------------------------------|------|-----------|-----------|-----------|------------|------------|------------|-------------|-------------|
| Drying System        | Drying Heater (kW)                          |      | 18        | 18        | 24        | 24         | 3x2        | 3.9x2      | 3.9x2       | 6x2         |
|                      | Drying Blower (kW, 50/60Hz)                 |      | 3.75/4.5  | 3.75/4.5  | 7.5/8.6   | 7.5/8.6    | 0.75/0.9   | 0.75/0.9   | 0.75/0.9    | 1.5/1.72    |
|                      | Hopper Capacity                             | L    | 600       | 750       | 900       | 1200       | 40x2       | 80x2       | 120x2       | 160x2       |
|                      |                                             | gal  | 158.5     | 198       | 237.8     | 317        | 10.6x2     | 21.1x2     | 31.7x2      | 42.2x2      |
| Dehumidifying System | Regenerative Heater (kW)                    |      | 7.2       | 7.2       | 10        | 10         | 3          | 3          | 4           | 4           |
|                      | Regenerative Blower (kW, 50/60Hz)           |      | 0.75/0.9  | 0.75/0.9  | 1.5/1.8   | 1.5/1.8    | 0.18/0.225 | 0.18/0.225 | 0.18/0.225  | 0.4/0.48    |
|                      | Dehumidifying Air quantity (m³/hr, 50/60Hz) |      | 400/450   | 400/450   | 700/780   | 700/780    | 80/80      | 80/80      | 120/120     | 200/222     |
| Conveying System     | Conveying Blower (kW)                       |      | 1.5       | 1.8       | 3.75      |            | 1.5        | 1.5        | 1.5         | 1.5         |
|                      | Dia. of Material Pipe (Inch)                |      | 1.5       |           | 2         |            | 1.5        | 1.5        | 1.5         | 1.5         |
|                      | SVH-L Hopper                                | L    | 12        |           | 24        |            | 6          | 6          | 6           | 6           |
|                      |                                             | gal  | 3.2       |           | 6.4       |            | 1.58       | 1.58       | 1.58        | 1.58        |
|                      | SHR-U Hopper                                | L    | 12        |           | 24        |            | 3          | 6          | 6           | 6           |
|                      |                                             | gal  | 3.2       |           | 6.4       |            | 0.79       | 1.58       | 1.58        | 1.58        |
| Dimension            | H                                           | mm   | 2380      | 2610      | 2640      | 3070       | 1655       | 1866       | 1800        | 2113        |
|                      |                                             | inch | 93.7      | 102.8     | 104       | 121        | 65.2       | 73.5       | 73.5        | 83.2        |
|                      | W                                           | mm   | 1745      |           | 2140      |            | 1422       | 1886       | 2084        | 2124        |
|                      |                                             | inch | 68.7      |           | 84.3      |            | 56         | 74.3       | 82          | 83.6        |
|                      | D                                           | mm   | 1255      |           | 1380      |            | 853        | 915        | 915         | 930         |
|                      |                                             | inch | 49.4      |           | 54.3      |            | 33.6       | 36         | 36          | 36.6        |
| Weight               |                                             | kg   | 640       | 690       | 850       | 900        | 320        | 400        | 500         | 565         |
|                      |                                             | lb   | 1411      | 1521      | 1874      | 1984       | 704        | 882        | 1102.7      | 1246        |

Notes: 1) Plastic materials can be fully dried by drying air with dew-point temperature  $\leq -20^{\circ}\text{C}$ .

2) "\*" stands for hopper receiver SHR-CP-U.

3) Power: 3 $\Phi$ , 230/400/460/575VAC, 50/60Hz.

We reserve the right to change specifications without prior notice.

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