



Honeycomb Dehumidifier

SD-40H

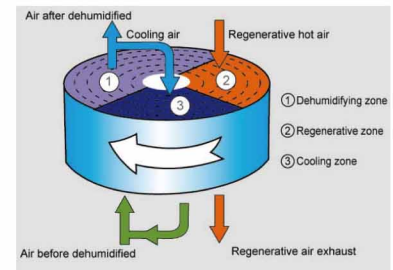
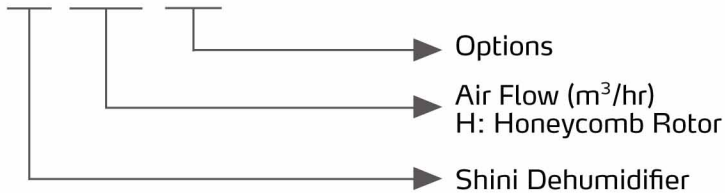


Refer carefully to the manual before operation.

SD-H Series

■ Coding Principle

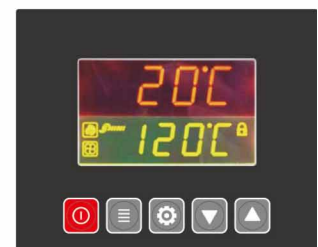
SD-xxxH-xxx



Honeycomb Rotor Working Principle

■ Features

- Adopts P.I.D. temperature controller to accurately control regenerative temperature.
- The dehumidifying system of the SD-H series features coolers to ensure a low return air temperature and low dew-point.
- Inbuilt return air filter avoids of honeycomb contamination and ensures long service life.
- Adopt molecular sieve structure honeycomb, which provides low dew-point dry air and is superior to double-barrel dehumidifier that will contaminate raw material due to damaged molecular sieve.



Touch Control Panel

■ Application

SD-H honeycomb dehumidifier is mainly used to provide low dew point dry air, which can collocate with hopper dryer to process highly hygroscopic engineering plastics. This series of machines can reach an average dew point temperature of -40°C (The dew-point varies with ambient air and temperature changes) with right setup and maximum drying air volume can reach $4,000\text{m}^3/\text{hr}$. If some dry materials are volatile, they must use EOF filter.

■ Working Principle

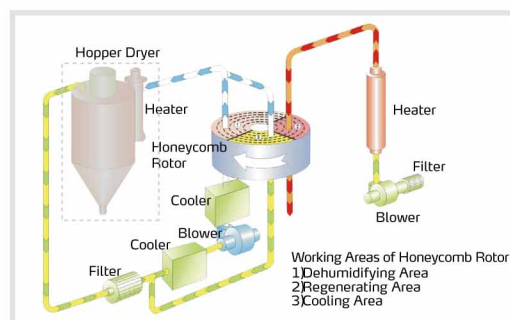


3D animation
(Tencent)



3D animation
(Youtube)

System Flow Chart

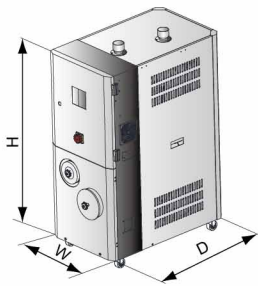


■ Options

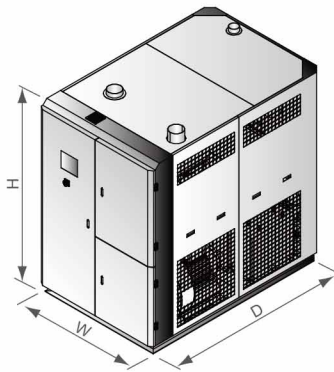
- Controllable drying heater is optional, add "C" at the end of the model code. (Only Applicable for SD-1000H~4000H, it has to work with the DH-U-PH)
- Inbuilt drying heater is optional, add "PHC" at the end of the model code. (Only applicable for SD-40H~700H)
- Intelligent airflow regulating function is optional, add "SM4", "SM8" at the end of the model code, in which the number behind SM depends on the quantity of collocated Modular Dryer. For example, if the quantity of Dryer is less than 4, select SM4 and so on. A touch panel is indispensable if this function is selected. This optional function should work with MHD-U Modular Hopper Dryer, please refer to the dehumidifying and drying modularization.

- For models with energy-saving drying management, add "ES" at model end, standard equipped with HMI touch control ,which can reduce 41% of total power consumption at most. Volume used per hour can be set between 40~100% of drying capacity to reduce 35%~0 of totally power consumption; Equipped with heat regenerating recycler which recycles the heat of exhausted air via plate heat exchanger and can reduce 3%~6% of total power consumption. Meanwhile, dew-point value can be set to automatically control the temperature required by regeneration, if optional with dew-point monitor, saving 0~10% power consumption according to dew-point ranging from -40°C to 10 °C.
- Optional air cooler instead of conventional water cooler method, it is suitable for a cool and dry ambient, Add "A" at the end of the model code.
- 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.

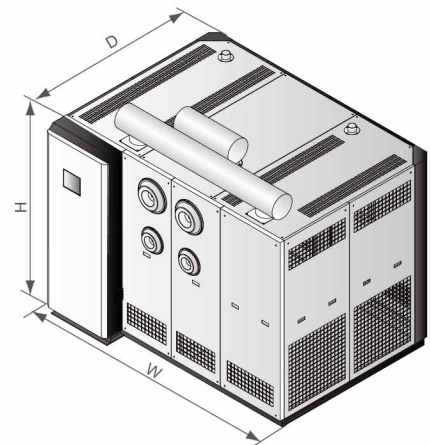
Outline Drawings



SD-40H~700H



SD-1000H~2000H



SD-3000H~4000H

Specifications

| Model | SD- | 40H | 80H | 120H | 200H | 400H | 700H | 1000H | 1500H | 2000H | 3000H | 4000H | |
|--------------------------------------|---------|-----------|-----------|-----------|---------|----------|---------|-----------|-----------|---------------|-----------|-------------|-------|
| Rege. Heater (kW) | | 3 | 3 | 4 | 4 | 7.2 | 10 | 15 | 30 | 28 | 32 | 56 | |
| Rege. Blower (kW, 50/60Hz) | | 0.12/0.12 | 0.18/0.23 | 0.18/0.23 | 0.4/0.5 | 0.75/0.9 | 1.5/0.8 | 3.75/4.7 | 7.5/8.6 | 7.5/8.6 | 9/11 | 5.5×2/6.3×2 | |
| Process Heater* (kW) | | 4 | 4 | 6 | 12 | 18 | 24 | 32 | 58 | 80 | 96 | 128 | |
| Process Blower (kW, 50/60Hz) | | 0.18/0.2 | 0.75/0.9 | 0.75/0.9 | 1.5/1.8 | 3.75/4.5 | 7.5/8.6 | 12.5/15.4 | 11/11 | 12.5×2/14.5×2 | 13×3/15×3 | 13×4/15×4 | |
| Drying Air Quantity (m³/hr, 50/60Hz) | | 40/47 | 80/95 | 120/130 | 200/220 | 400/450 | 700/780 | 1000/1150 | 1500/1750 | 2000/2300 | 3000/3400 | 4000/4500 | |
| Pipe Dia. (inch) | | 2 | 2 | 2 | 2.5 | 3 | 4 | 5 | 8 | 8 | 8 | 12 | |
| Cooling Water Flow Rate | L/min | 5 | 10 | 15 | 30 | 50 | 80 | 120 | 180 | 240 | 360 | 480 | |
| | gal/min | 1.32 | 2.6 | 4 | 8 | 13.2 | 21 | 31.7 | 47.6 | 63.4 | 95 | 126.8 | |
| Dimension | H | mm | 1260 | 1360 | 1360 | 1560 | 1745 | 1935 | 2145 | 2060 | 2060 | 2240 | 2060 |
| | | inch | 49.6 | 53.5 | 53.5 | 61.4 | 68.7 | 76.2 | 84.4 | 81.1 | 81.1 | 88.2 | 81.1 |
| | W | mm | 510 | 530 | 530 | 660 | 700 | 900 | 1300 | 1410 | 1410 | 2035 | 2750 |
| | | inch | 20 | 20.9 | 20.9 | 26 | 27.6 | 35.4 | 51.2 | 55.5 | 55.5 | 80.1 | 108.3 |
| D | mm | 860 | 820 | 820 | 1050 | 1255 | 1380 | 1550 | 2150 | 2150 | 2160 | 2250 | |
| | inch | 33.9 | 32.3 | 32.3 | 41.3 | 49.4 | 54.3 | 61 | 84.6 | 84.6 | 85 | 88.6 | |
| Weight | kg | 145 | 170 | 170 | 265 | 330 | 480 | 700 | 1010 | 1300 | 1600 | 2200 | |
| | lb | 320 | 375 | 375 | 584 | 728 | 1058 | 1543 | 2227 | 2866 | 3527 | 4850 | |

Notes: 1) Plastic materials can be fully dried by drying air with dew-point temperature $\leq -20^{\circ}\text{C}$. We reserve the right to change specifications without prior notice.
 2) "*" Stands for optional drying heater, and add "PH" at the end of the model code.
 3) Power: 3 Φ , 230/400/460/575VAC, 50/60Hz.

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