

## Centralized Dehumidified Drying Systems

Dehumidified and drying systems are used in factories which produce a lot plastic products and also require a very low dew-point. The highest PET material handling throughput is 800kg/hr, this system mainly includes a honeycomb dehumidifier with 3000m<sup>3</sup> maximum drying air capacity and a insulated drying hopper with 8000 Maximum loading capacity (effective loading weight is 6400 kg when loads PET material). After being disposed from honeycomb dehumidifier, the moisture content in material can be less than 0.004%.

### Features :

- Equip with temp. overheat protector so to avoid over-drying.
- Motor overload protector.
- Optimised design and convenient for repair and maintenance.
- Adopt precise P.I.D. electrical temperature control to give a evenly drying effect.
- Stainless steel hopper can avoid material being polluted in the dehumidifying and drying process.
- Main power switch with machanical chain lock function.
- Indicators show faults real-timely.
- Manual dicharging valve and also have pneumatic valve as an option.
- Dew-point monitor is available for choose to monitor dehumidifying effect.
- Choose PLC control to work with LCD touch screen interface.
- Double condensor structure to ensure lower return air temp. and low dew point.
- When processing PET-G, place a condensor at dry air outlet.



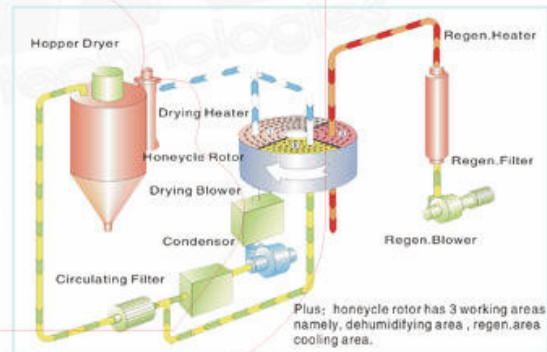
Centralized Dehumidified Drying System



Clip Picture From Touch Screen

## Dehumidifying facilitates

This dehumidifier has honeycomb design and takes little space, great moisture absorption ability, low dew-point, long durable life with PLD temperature control system to accurately control the temperature, also, you can purchase programmable controller to match with LCD as the central control station of the whole system. Humanized operation and control optimize the personnel control. Besides, dew-point monitor can be purchased to monitor the dry air which comes from the whole system, so to ensure everlasting providing of qualified dry material. The dew-point of the processed dry air can reach to  $-50^{\circ}\text{C}$ .



## Honeycomb Rotor

The main part of the honeycomb rotor is composed of ceramic honeycomb which is made from ceramic fibre and organic addition. In addition, use molecular sieve and silica gel as basic material to make its surface hard and attach on the inside of honeycomb with great strength, there are numerous holes on the surface of ceramic fibre made rotor evenly be located to enlarge the contact surface with humid air so can effectively improve humidifying ability. Ceramic sieve solves the easy drop off and easy turn to powder problem by molecular sieve. Besides, it can provide long time stably dehumidifying and has merit such as reusing after cleaning and not easy to wear off.

## Drying Hopper

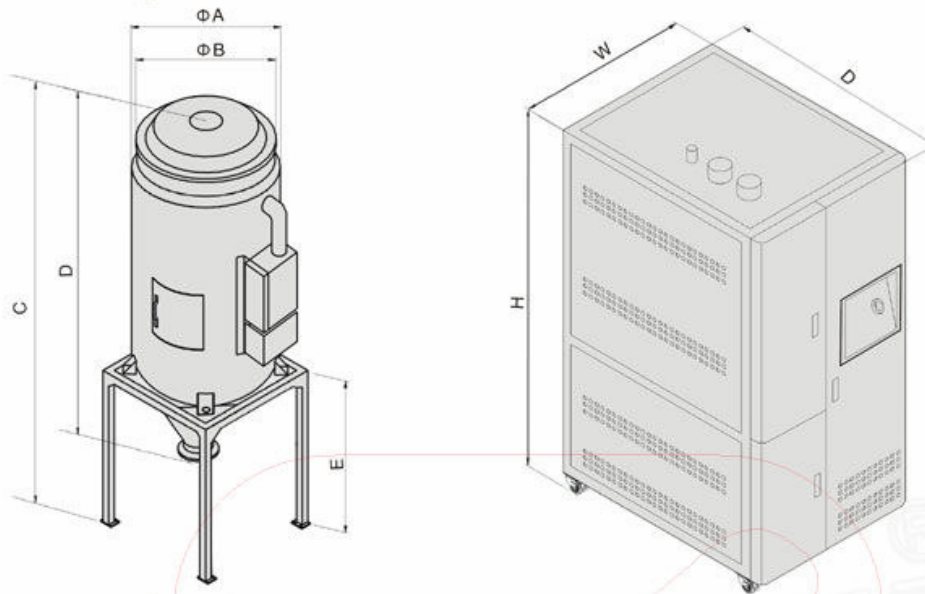
Large insulated drying hopper is of a down-blowing design, the heated dry air in the hopper pass upward through trumpet shape air pipe to evenly blow out, material in trumpet shape air pipe runs upward and convect with hot air evenly to realize a good drying effect. The hopper lid has a unique cyclone air discharging design to make a even hot air flow; the front of hopper has inspection door, to make the cleaning easy. There are 3 temperature control and protective devices on the dry air heating and control loop. Effectively prevent material from blocked or overdone by overheating. Inside hopper and material contact part are made in stainless steel, insulated hopper's out layer is made in aluminum with pressed texture, of which the maximum diameter is 1,600mm, thickness of the layer is about 100mm, total hopper height is about 5800 mm, moveable floor stand and cyclone dust filter as options.



## Cyclone Dust Collector (Including Floor Stand)

Moveable floor stand is for easy operation. Air returning device –cyclone dust filter which is made of stainless steel, can effectively avoid the transmission material from being polluted, and keep the air in the workshop fresh and clean. Ensure good product quality and also effectively low down energy consumption to save energy ,especially applicable to dust-rich PET systems.

## Outline Drawing



## Drying Hopper Specifications

Model	Loading capacity (L)	Heater power (kw)	Dimensions (mm)				
			A	B	C	D	E
DH-1500U	1500	32	1542	1250	3740	2950	1620
DH-2000U	2000	32	1542	1250	4320	3350	1620
DH-2500U	2500	58	1710	1400	4400	3785	1750
DH-3000U	3000	58	1710	1400	4750	4170	1750
DH-3500U	3500	58	1710	1400	5150	4470	1750
DH-4000U	4000	80	2020	1600	4970	4170	1920
DH-4500U	4500	80	2020	1600	5270	4470	1920
DH-5000U	5000	80	2020	1600	5620	4820	1920
DH-5500U	5500	80	2020	1600	5950	5150	1920
DH-6000U	6000	96	2220	1800	5590	4790	2100
DH-6500U	6500	96	2220	1800	5850	5050	2100
DH-7000U	7000	128	2220	1800	6100	5350	2100
DH-8000U	8000	128	2220	1800	6580	5780	2100

## Dehumidifier Specifications

Model	Drying Air capacity (m³/hr)	Drying Blower (kw)	Regen. Blower (kw, 50/60Hz)	Regen. Heater (kw)	Blower Pipe Dia. (inch)	Dimensions (H x W x D) (mm)
SD-700H	700	5.5 / 6.3	1.75 / 1.9	10	4"	1890 x 900 x 1380
SD-1000H	1000	9 / 11	2.2 / 2.6	15	5"	2100 x 1300 x 1550
SD-1500H	1500	9 x 2 / 11 x 2	3.4 / 3.7	20	6"	2100 x 1300 x 1910
SD-2000H	2000	13 x 2 / 15 x 2	3.4 / 3.7	20	8"	2300 x 1400 x 1910
SD-3000H	3000	13 x 3 / 15 x 3	7.5 / 8.6	30	8"	2500 x 1600 x 2160

Note: 1) Power supply: 3Φ, 230/400/460/575V, 50/60Hz.

We reserve the right to change specifications without prior notice.

## Shini Plastics Technologies, Inc.

Corporate Strategic Center:  
Jinshagang Industrial Zone, Dalang,  
Dongguan, Guangdong, P.R.China.  
Telephone: +86 (0)769 8331 3588  
Facsimile: +86 (0)769 8331 3589  
Email: shini @ shini.com  
www.shini.com