



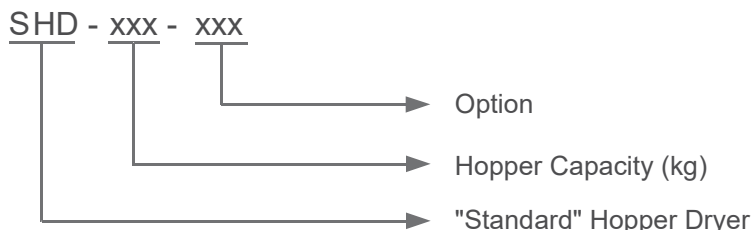
# Drying & Dehumidifying

# Standard Hopper Dryer



SHD-50

## Coding Principle



## Features

- Adopt hot air diffuser to keep plastics dry and temperature stable, thus improve drying efficiency.
- Hot air inlet curved design can prevent dust piling up at bottom of the pipe heaters so as to avoid burning.
- Component inside the hopper and the inwall of it are made of stainless to protect materials from contamination .
- Hopper separated from its base, ensuring convenient cleaning.
- All series are equipped with exposed power switch.
- For SHD-25~150, heater pipes are connected by lead sheets and other models are equipped with temperature protection to prevent heater pipe from damaging by blower faults.
- Overheat tripping can automatically cut off power when drying temperature exceeds set deviation value.
- Adopts heat-insulated blower to prolong blower lifespan.
- All series of models standard equipped with 7-day timing and intermittent operation function.
- All series of models adopt microcomputer control and RS485 communication port.
- Max. drying temperature is 160°C.



SHD-800

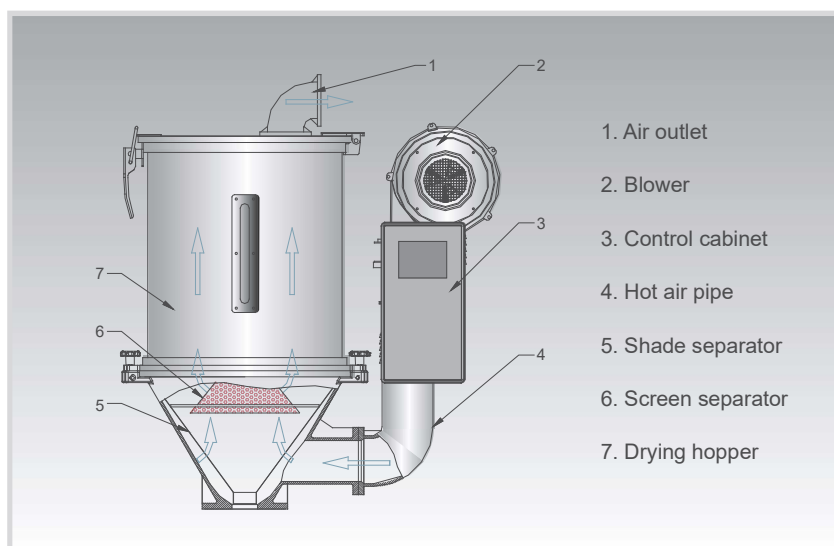


Hopper Inside

## Working Principle

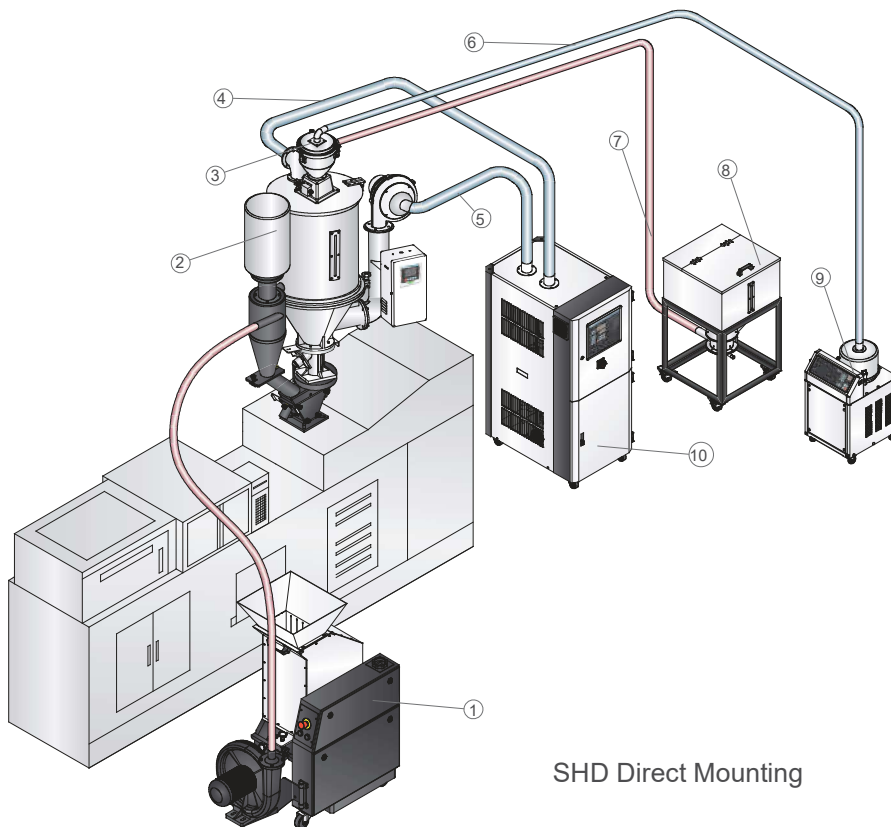
In the drying process, hot air with constant temperature is blown by a blower into a two-layer insulated hopper to dry the materials. Moisture will be separated out and taken away by hot air, thus to gain a satisfied drying effect.

Air blown out of blower became high temperature drying air after being heated. Through screen protector and hole screen, hot air can be equably dispersed in the material of storage tank (see picture). Hot air recycler is optional so the air enter drying blower after being filtered to form a closed loop circle and save electricity.



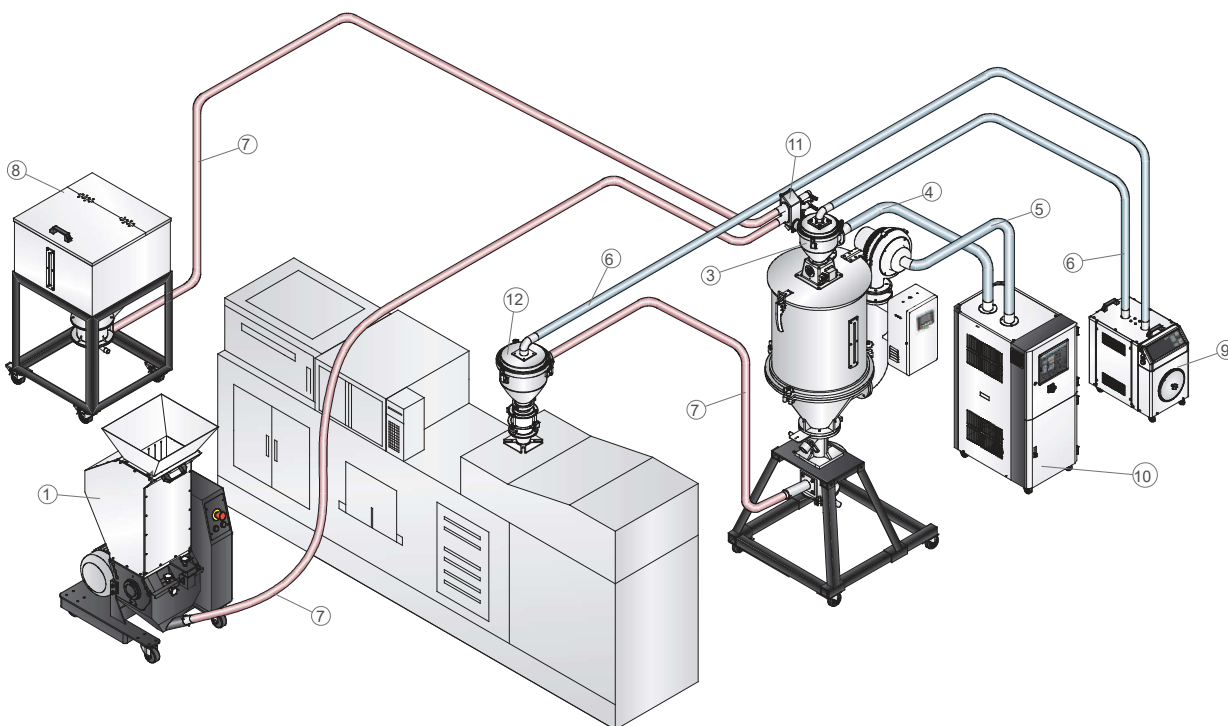
# SHD Series

## Application



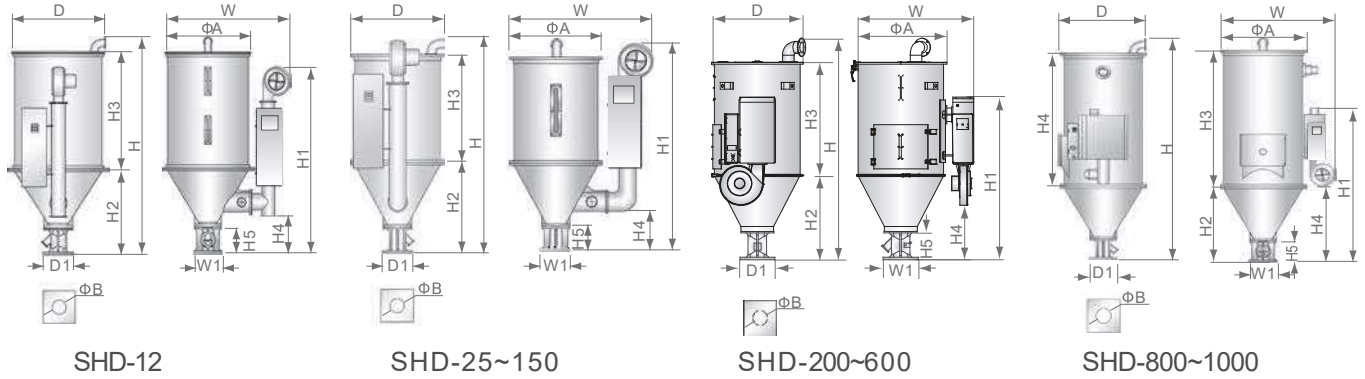
SHD Direct Mounting

1. Low-speed granulator
2. 30-sec instant recycle
3. Vacuum hopper
4. Return air
5. Dehumidifying air
6. Vacuum pipe
7. Material pipe
8. Material tank
9. Auto loader
10. Honeycomb dehumidifier
11. Proportional valve
12. Photosensor hopper



SHD Floor Stand Mounting

## Outline Drawings



## Specifications

Model	SHD-	12	25	50	75	100	150	200	300	400	500	600	800	1000
Heater (kW)		2.2/3*	3/3.3*	3.9/4.2*	4.2/4.8*	6/6.6*	6.6/7.2*	12/9.6*	9.6	18	19.2	21	24	32
Blower (kW)		0.05	0.12	0.12	0.12	0.12	0.12	0.18	0.18	0.55	0.55	0.55	1.1	1.1
Loading Capacity	kg	12	25	50	75	100	150	200	300	400	500	600	800	1000
	lb	26.5	55.1	110.2	165.3	220.5	330.7	441	661.4	881.8	1102.3	1322.8	1763.7	2204.6
H	mm	790	1015	1145	1240	1340	1620	1602	1985	2202	2382	2586	2760	3195
	Inch	31.1	40	45	48.8	52.8	63.8	63.0	78.1	86.7	93.8	101.8	108.7	125.8
H1	mm	690	925	1045	1150	1340	1605	1291	1291	1617	1617	1617	2300	2530
	Inch	27	36.4	41.1	45.3	52.8	63.2	50.8	50.8	63.7	63.7	63.7	90.6	99.6
H2	mm	317	410	380	475	470	470	550	550	849	849	849	1013	1013
	Inch	12.5	16.1	15	18.7	18.5	18.5	21.7	21.7	33.4	33.4	33.4	39.9	39.9
H3	mm	370	460	520	620	725	970	815	1200	1115	1295	1499	540	1970
	Inch	14.6	18.1	20.5	24.4	28.5	38.2	32.0	47.2	43.9	60.0	59.0	21.3	77.6
H4	mm	106	194	206	208	233	233	261	261	541	541	541	1550	1845
	Inch	4.2	7.6	8.1	8.2	9.2	9.2	10.3	10.3	21.3	21.3	21.3	61	72.6
H5	mm	115	150	150	150	158	158	158	158	283	283	283	283	283
	Inch	4.5	5.9	5.9	5.9	6.2	6.2	6.2	6.2	11.1	11.1	11.1	11.1	11.1
W	mm	660	725	840	900	955	955	1077	1077	1207	1207	1207	1420	1420
	Inch	26	28.5	33	35.4	37.6	37.6	42.4	42.4	47.5	47.5	47.5	55.9	55.9
D	mm	360	405	490	550	605	605	767	767	935	935	935	600	600
	Inch	14.1	15.9	19.3	21.7	23.8	23.8	30.2	30.3	36.8	36.8	36.8	23.6	23.6
D1	mm	130	158	158	158	238	238	238	238	345	345	345	345	345
	Inch	5.1	6.2	6.2	6.2	9.4	9.4	9.4	9.4	13.6	13.6	13.6	13.6	13.6
W1	mm	130	148	148	148	238	238	238	238	345	345	345	345	345
	Inch	5.1	5.8	5.8	5.8	9.4	9.4	9.4	9.4	13.6	13.6	13.6	13.6	13.6
ΦA	mm	325	385	470	530	595	595	750	750	910	910	910	960	960
	Inch	12.8	15.2	18.5	20.9	23.4	23.4	29.5	29.5	35.8	35.8	35.8	37.8	37.8
ΦB	mm	55	55	55	55	90	90	90	90	105	105	105	105	105
	Inch	2.2	2.2	2.2	2.2	3.5	3.5	3.5	3.5	4.1	4.1	4.1	4.1	4.1
Net Weight	kg	35	40	45	55	70	75	100	120	165	170	240	280	300
	lb	77	88	99	121	154	165	220	265	364	375	529	617	661

Notes: 1) Above loading capacity is based on pellet material of 0.65kg/L(5.5lb/gal) in bulk density and 3~5mm(0.1~0.2inch) in diameter.

2) \*\*stands for high-temperature model, and the max. temperature is 180°C/356°F.

3) Maximum drying temperature of SHD-EH is 150°C/302°F

4) Power: 3Φ, 230/400/460/575VAC, 50/60Hz.

We reserve the right to change specifications without prior notice.

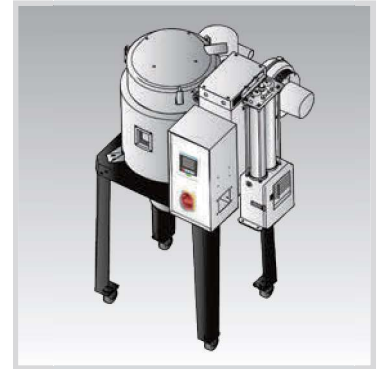
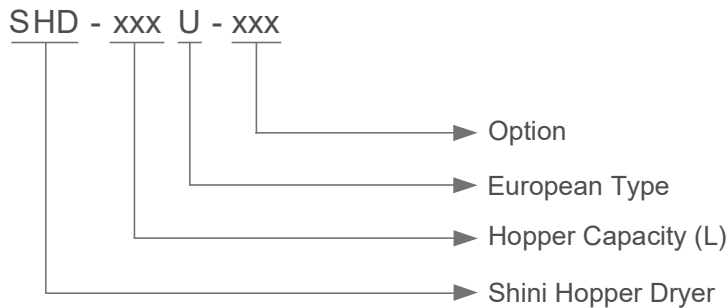
# Hopper Dryer



SHD-300U

# SHD-U Series

## Coding Principle



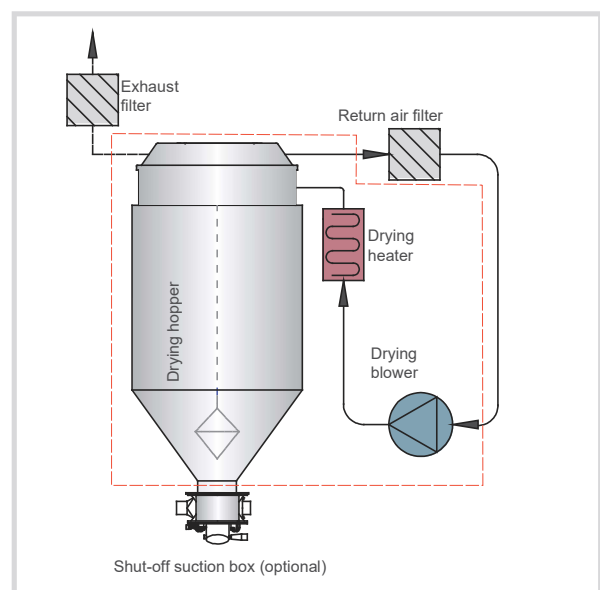
SHD-80U-HD  
& Floor Stand (optional)

## Features

- Adopt P.I.D temperature control and LCD display, with RS485 communication function.
- Overheat protection to ensure reliable operation.
- 7-day automatic start/stop timer to improve energy saving.
- Unique design of down-blow air pipe can spread hot air evenly, keeping plastics dry and temperature stable to raise drying efficiency.
- SHD-80U and models above have material clearance door to make cleaning more convenient and effective.
- SHD-450U and models below are equipped with stainless steel lining aluminium base. SHD-600U~750U is equipped with aluminium magnetic base. SHD-900U and model above are equipped with manual butterfly valve.
- For SHD-900U models and above, floor stand is standard equipment.

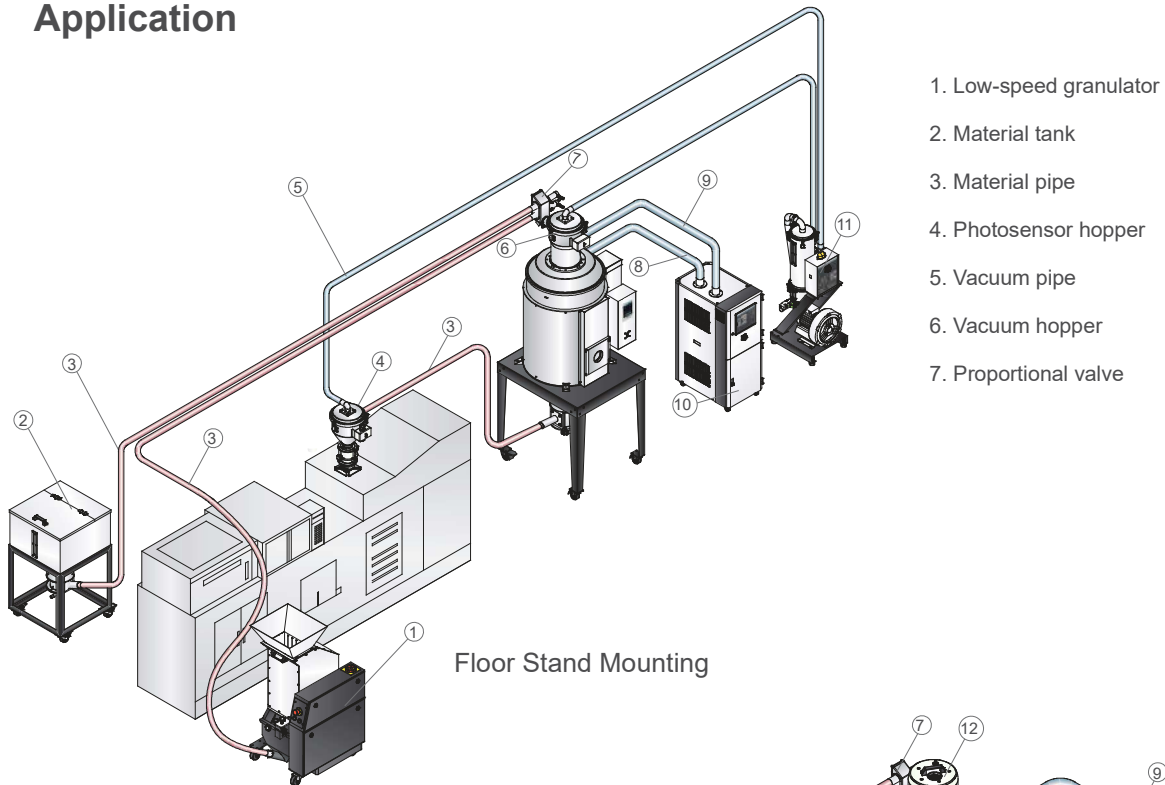
## Working Principle

Air blown out of drying blower becomes high temperature drying air after being heated. Through particular down-blowing air pipe, hot air can be equably dispersed in the material storage tank. Hot air recycler can be equipped to filter and recycle the air from the air outlet and form a closed loop circle.



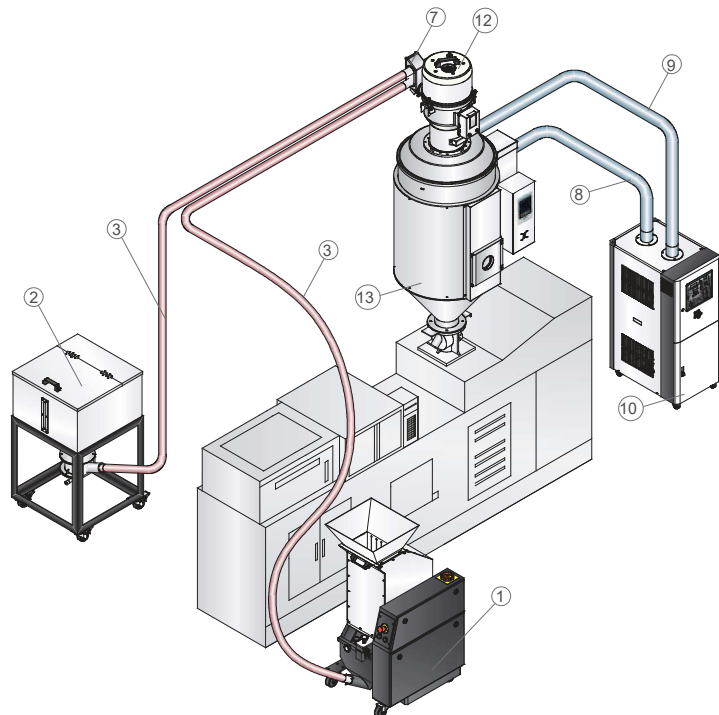
# SHD-U Series

## Application



Floor Stand Mounting

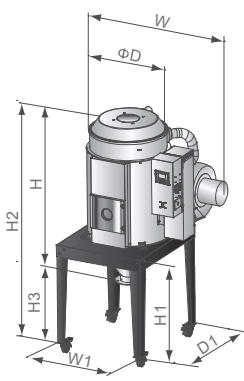
8. Dehumidifying air
9. Return air
10. Honeycomb dehumidifier
11. Separate auto loader
12. Auto loader
13. Hopper dryer



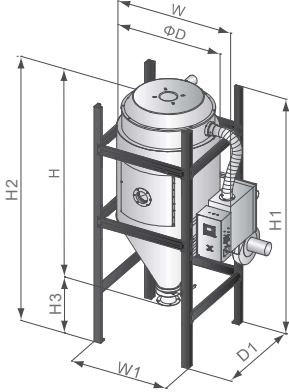
Direct Mounting



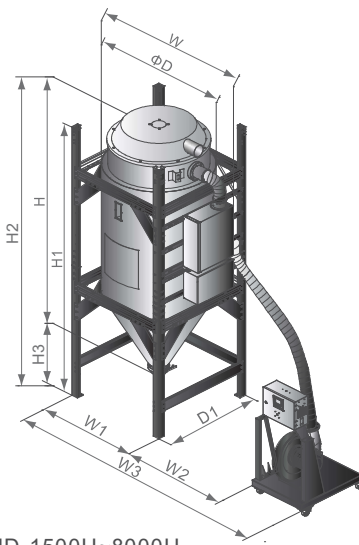
## Outline Drawings



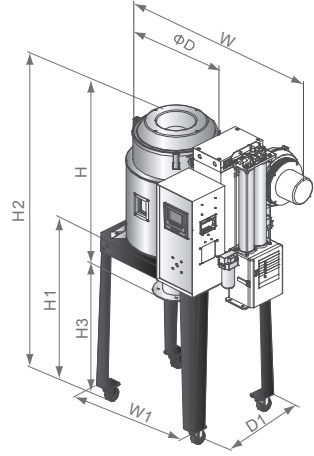
SHD-20U~750U



SHD-900U~1200U



SHD-1500U~8000U



SHD-U-HD

## Specifications

Model	SHD-	20U	40U (-HD)	80U (+HD)	120U (+HD)	160U	230U	300U	450U	600U	750U	900U	1200U	1500U	2000U	2500U	3000U	3500U	4000U	5000U	6000U	7000U	8000U	
Heater Power (kW)		2.2	3	3.9	3.9	6	6	12	12	18	18	18	24	32	32	58	58	64	64	80	96	112	128	
Blower (kW)		0.05	0.12	0.12	0.12	0.12	0.12	0.18	0.18	0.55	0.55	0.55	1.1	3	3	5.5	5.5	7.5	7.5	11	15	18.5	22	
Hopper Capacity	L	20	40	80	120	160	230	300	450	600	750	900	1200	1500	2000	2500	3000	3500	4000	5000	6000	7000	8000	
	gal	5.3	10.6	21	31.7	42.3	60.8	79.3	118.9	158.5	198	237.8	317	396	528	660	793	925	1057	1321	1585	1849	2113	
Dimension	H	mm	680	770	940	1190	1200	1470	1430	1840	1830	2080	2330	2765	3095	3685	3735	4135	4535	4180	4775	4520	5460	6030
		Inch	26.8	30.3	37	46.9	47.2	57.9	56.3	72.4	72	81.9	91.7	109	122	145	147	163	179	165	188	178	215	237
	W	mm	575	770	860	860	875	875	1005	1005	1250	1250	1410	1410	1640	1542	1798	1798	1798	2010	2010	2250	2250	2250
		Inch	22.6	30.3	33.9	33.9	34.4	34.4	39.6	39.6	49.2	49.2	55.5	55.5	64.6	60.7	70.8	70.8	70.8	79	79	88.6	88.6	88.6
	D	mm	325	394	472	472	575	575	695	695	915	915	1050	1050	1250	1250	1400	1400	1400	1600	1600	1800	1800	1800
		Inch	12.8	15.5	18.6	18.6	22.6	22.6	27.4	27.4	36	36	41.3	41.3	49.2	49.2	55	55	55	63	63	71	71	71
Floor Stand	H1	mm	790	790	840	840	920	920	970	970	1130	1130	2760	3190	3470	3870	4000	4400	4800	4550	5150	4870	5805	5620
		Inch	31	31	33	33	36.2	36.2	38	38	44.5	44.5	109	126	137	152	157	173	189	179	203	192	228	221
	W1	mm	450	580	730	730	652	652	790	790	1000	1000	1130	1145	1340	1340	1482	1482	1482	1680	1680	1930	1930	1930
		Inch	17.7	22.8	28.7	28.7	25.7	25.7	31	31	39.4	39.4	44.5	45	52.8	52.8	58.3	58.3	58.3	66	66	76	76	76
	W2	mm	-	-	-	-	-	-	-	-	-	-	-	-	400	400	400	400	400	400	400	400	400	400
		Inch	-	-	-	-	-	-	-	-	-	-	-	-	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.7
	W3	mm	-	-	-	-	-	-	-	-	-	-	-	-	2000	2000	2260	2260	2260	2460	2530	2780	2830	2830
		Inch	-	-	-	-	-	-	-	-	-	-	-	-	78.7	78.7	89	89	89	96.9	99.6	109.4	111.4	111.4
	D1	mm	550	450	560	560	795	795	930	930	1200	1200	1130	1145	1340	1340	1482	1482	1482	1680	1680	1930	1930	1930
		Inch	21.7	17.7	22	22	31.3	31.3	36.6	36.6	47.2	47.2	44.4	45	52.8	52.8	58.3	58.3	58.3	66	66	76	76	76
H2	mm	1260	1300	1480	1740	1825	2105	2085	2435	2470	2780	2765	3190	3470	3870	4000	4400	4800	4635	5235	4923	5840	6425	
	Inch	49.6	51	58.3	68.5	71.9	82.9	82	96	97.2	109	108.8	125.6	136.6	152.4	157.5	173	189	182.5	206	193.8	230	253	
Air Inlet Pipe (inch)		2		2.5		3					4			5		6				8		10		
Air Outlet Pipe (inch)		1.5		2		2.5					4			5		6				8		10		
Net Weight	kg	40	70	85	100	90	100	130	160	200	220	410	560	685	770	800	900	1010	1160	1390	1530	1735	1820	
	lb	88	154	187	220	198	220	287	353	441	485	904	1235	1510	1698	1764	1984	2227	2557	3064	3373	3825	4012	

Notes: 1) Power: 3Φ, 230/400/460/575VAC, 50/60Hz.

We reserve the right to change specifications without prior notice.

# Options Dryers



**Air Filter**

Effectively filter 99% of dust-contain air discharged from dryer to avoid air pollution.

Model	Applied to
ADC-1	SHD-12
ADC-2	SHD-25~150
ADC-3	SHD-200~1000

**Blower Inlet Filter**



Model	Applied to
AIF-12	SHD-12
AIF-25	SHD-25
AIF-50	SHD-50/75
AIF-100	SHD-100/150
AIF-200	SHD-200~300
AIF-600	SHD-400~600
AIF-800	SHD-800~1000

Notes: refill air input of the blower is adjustable.

**Hopper Magnet**

Absorb metal scraps in the material to avoid the damage of molding screw.



Model	Aluminum Holder ×2 (mm/inch)
MR-5	(148×80×2.3) mm (5.8×3.1×0.1) inch
MR-7	(190×80×2.3) mm (7.5×3.1×0.1) inch
MR-9	(240×80×2.3) mm (9.4×3.1×0.1) inch

**Magnetic Base**



Made of aluminum with built-in hopper magnet, can effectively separate metal scraps out to avoid material contamination. (MB-400 is standard configuration)

Model	Applied to	Magnetic Frame	Aluminum Holder×2 (mm/inch)
MB-12	SHD-12 SHD-20U	MR-3	(88.5×78×2.3) mm (3.5×3.0×0.09) inch
MB-20U	SHD-20U		
MB-50	SHD-25~75 SHD-40U~120U		
MB-40U	SHD-40U~120U		
MB-100	SHD-100~300 SHD-160U~450U		
MB-160U	SHD-160U~450U		
MB-400	SHD-400 and models above		
MB-600U	SHD-600U~750U		
			(119×105×2.3)mm (4.7×4.1×0.09) inch
			(147×130×2.3)mm (5.8×5.1×0.09) inch

**Hot Air Recycler**



Work with hopper dryer to make the hot air form a semi-closed circulated loop and has features as follows:

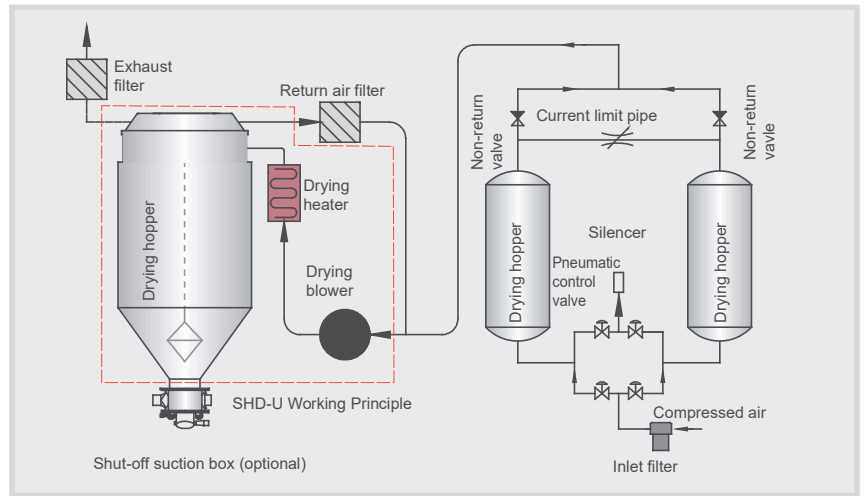
- 1) Hot air recycling and circulating avoids indoor temperature rising up.
- 2) Keep air in factory clean and ensure good product quality.
- 3) Heating by fast hot air circulation can lower energy consumption by 40%.

Model		HAR-12	HAR-25	HAR-50	HAR-100	HAR-200	HAR-600	HAR-800
Filtering Barrel Dia.	mm	157		175	219		245	
	Inch	6.2		6.9	8.6		9.6	
Inlet Air Pipe Dia. (Inch)		2	2.5	3		4		
Flange of Air Outlet (Inch)								
Applied to		SHD-12	SHD-25	SHD-50 /75	SHD-100 /150	SHD-200~300	SHD-400~600	SHD-800~1000

Safety Ladder



For SHD-1500 and above models are available to option with safety ladder. Add "ML" at the end of the model code.



SHD-U-HD Working Principle

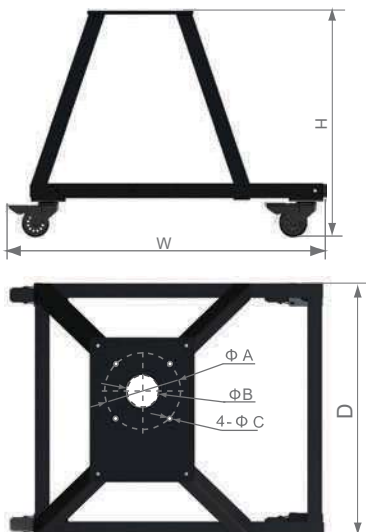
- Optionally equipped with heatless regenerative air dryer, which could offer low dewpoint dry air without heating and speed up the drying of material, Add "HD" at the end of the mode code.
- For models with hopper polished inside, add "P" at the end of the mode code.

N-Type Floor Stand



With which machines can be easily moved out of workplace which is suitable for the factories with height limited workshops, also it can make operations more convenient, applicable to SHD series.

Model	FSN-50	FSN-100	FSN-200	FSN-400	FSN-800	
Applied to	SHD-12~75	SHD-100/150	SHD-200/300	SHD-400~600	SHD-800/1000	
Dimension H×W×D	mm	600×700×640	615×800×710	680×1000×840	700×1200×1010	700×1600×1180
	Inch	23.6×27.6×25	24.2×31.5×28	26.8×39.4×33	27.6×47.2×39.8	27.6×63×46.5
A / B / C	mm	140/54/ 9	210/90/11	260/116 /13		
	Inch	5.5/2.1/ 0.4	8.3/3.5/0.43	10.2/4.6 /0.5		



Floor Stand

Support dryer and hopper loader, easy for installation and transportation, applicable to SHD-U series.



Applicable to SHD-20U~750U

Model	Applied to	Dimension					
		L		W		H	
		mm	inch	mm	inch	mm	inch
FSU-20	SHD-20U	550	21.7	450	17.7	790	31.1
FSU-40	SHD-40U	580	22.8	450	17.7	790	31.1
FSU-80	SHD-80U/120U	722	28.4	552	21.7	840	33
FSU-160	SHD-160U/230U	795	31.3	652	25.7	920	36.2
FSU-300	SHD-300U/450U	930	36.6	790	31.1	970	38.2
FSU-600	SHD-600U/750U	1200	47.2	1000	39.4	1130	44.5

# Options Dryers

## Blower Inlet Filter

Effectively filters 80% of the dust contained in the air to dryer to avoid pollution.



Model	Filter Barrel Dia.		Air Inlet Pipe Dia. (inch)	Air Outlet Pipe Dia. (inch)	Applied to	Fixed Plate	Blower Flange (with Air Quantity Adjustor)
	mm	Inch					
AIF-20U	127	5	1.5	2	SHD-20U	SHD-20U	for 0.12kW Blower
AIF-40U	127	5	1.5	2	SHD-40U	SHD-40U	for 0.12kW Blower
AIF-80U	225	8.9	2	3	SHD-80U/120U	SHD-80U/120U	for 0.12kW Blower
AIF-160U	225	8.9	2.5	3	SHD-160U/230U	SHD-160U/230U	for 0.12kW Blower
AIF-300U	225	8.9	2.5	4	SHD-300U/450U	SHD-300U/450U	for 0.18kW Blower
AIF-600U	225	8.9	3	4	SHD-600U/750U	SHD-600U/750U	for 0.55kW Blower
AIF-900U	225	8.9	4	4	SHD-900U	SHD-900U/1200U	for 0.55kW Blower
AIF-1200U	225	8.9	4	4	SHD-1200U	SHD-900U/1200U	for 1.1kW Blower
AIF-1500U	280	11	5	5	SHD-1500U/2000U	SHD-1500U/2000U	for 3kW Blower
AIF-2500U	340	13.4	6	6	SHD-2500U/3500U	SHD-2500U/3500U	for 5.5/7.5kW Blower
AIF-4000U	340	13.4	8	8	SHD-4000U/5000U	SHD-4000U/5000U	for 7.5/11kW Blower
AIF-6000U	420	16.5	8	8	SHD-6000U/7000U	SHD-6000U/7000U	for 15/18.5kW Blower
AIF-8000U	420	16.5	10	10	SHD-8000U	SHD-8000U	for 22kW Blower

## Hot Air Recycler

Work with hopper dryer to make hot air form a semi closed circulated loop, it has features as follows:

Hot air recycling and circulating to avoid indoor temp. rising up; Keep air in factory clean and ensure product quality; Save energy consumption up to 40% due to heat brought from hot air recycling; Applicable to SHD-1200U & below models ; Air supply is adjustable.



Model	Filter Barrel Dia.		Air Inlet Pipe Dia. (inch)	Air Outlet Pipe Dia. (inch)	Applied to	Fixed Plate	Blower Flange (with Air Quantity Adjustor)
	mm	Inch					
HAR-20U	127	5	1.5	2	SHD-20U	SHD-20U	for 0.12kW Blower
HAR-40U	127	5	1.5	2	SHD-40U	SHD-40U	for 0.12kW Blower
HAR-80U	225	8.9	2	3	SHD-80U / 120U	SHD-80U / 120U	for 0.12kW Blower
HAR-160U	225	8.9	2.5	3	SHD-160U / 230U	SHD-160U / 230U	for 0.12kW Blower
HAR-300U	225	8.9	2.5	4	SHD-300U / 450U	SHD-300U / 450U	for 0.18kW Blower
HAR-600U	225	8.9	3	4	SHD-600U / 750U	SHD-600U / 750U	for 0.55kW Blower
HAR-900U	225	8.9	4	4	SHD-900U	SHD-900U / 1200U	for 0.55kW Blower
HAR-1200U	225	8.9	4	4	SHD-1200U	SHD-900U / 1200U	for 1.1kW Blower
HAR-1500U	280	11	5	5	SHD-1500U/2000U	SHD-1500U/2000U	for 3kW Blower
HAR-2500U	340	13.4	6	6	SHD-2500U/3500U	SHD-2500U/3500U	for 5.5/7.5kW Blower
HAR-4000U	340	13.4	8	8	SHD-4000U/5000U	SHD-4000U/5000U	for 7.5/11kW Blower
HAR-6000U	420	16.5	8	8	SHD-6000U/7000U	SHD-6000U/7000U	for 15/18.5kW Blower
HAR-8000U	420	16.5	10	10	SHD-8000U	SHD-8000U	for 22kW Blower

**Exhaust Air Filter**

Effectively filters 90% of the dust contained in the air from dryer to avoid pollution.



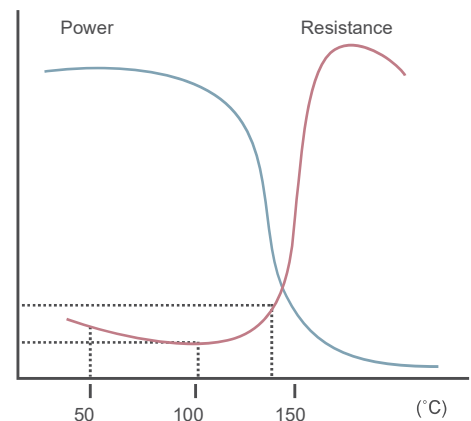
Model	Filter Barrel Dia.		Air Inlet Pipe Dia. (inch)	Air Outlet Pipe Dia. (inch)	Applied to	Fixed Plate
	mm	Inch				
ADC-20U	127	5	1.5	2	SHD-20U	SHD-20U
ADC-40U	127	5	1.5	2	SHD-40U	SHD-40U
ADC-80U	225	8.9	2	3	SHD-80U/120U	SHD-80U/120U
ADC-160U	225	8.9	2.5	3	SHD-160U/230U	SHD-160U/230U
ADC-300U	225	8.9	2.5	4	SHD-300U/450U	SHD-300U/450U
ADC-600U	225	8.9	3	4	SHD-600U/750U	SHD-600U/750U
ADC-900U	225	8.9	4	4	SHD-900U/1200U	SHD-900U/1200U
ADC-1500U	280	11	5	5	SHD-1500U/2000U	SHD-1500U/2000U
ADC-2500U	340	13.4	6	6	SHD-2500U/3500U	SHD-2500U/3500U
ADC-4000U	340	13.4	8	8	SHD-4000U/5000U	SHD-4000U/5000U
ADC-6000U	420	16.5	8	8	SHD-6000U/7000U	SHD-6000U/7000U
ADC-8000U	420	16.5	10	10	SHD-8000U	SHD-8000U

**Energy-saving Heater**

The energy-saving heater uses a special made resistance to heat up. When the heating temperature reaches to a critical value, the resistance value will go up rapidly, sometimes even increase by several orders of magnitude. Consequently, the current going through the heater will rapidly decrease, which actually makes the power reduce to make its temperature not go up any more and keep it in a certain temperature. add "EH" at the end of the model code.



SHD-EH



- Adopt double-layer heat insulated hopper, add "I" at the end of the model code.
- Adopt European safety circuit, add "CE" at the end of the model code.

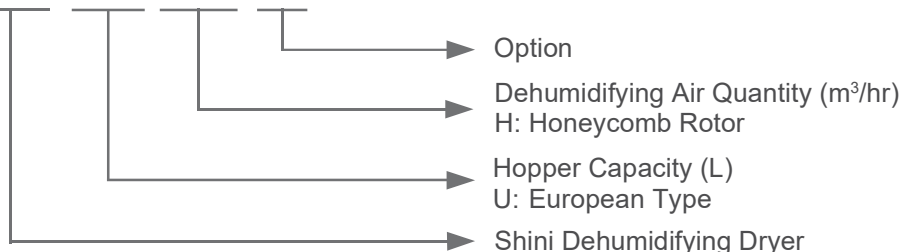
# Dehumidifying Dryer



SDD-80U/40H

## Coding Principle

SDD - xxxU/xxxH - xxx



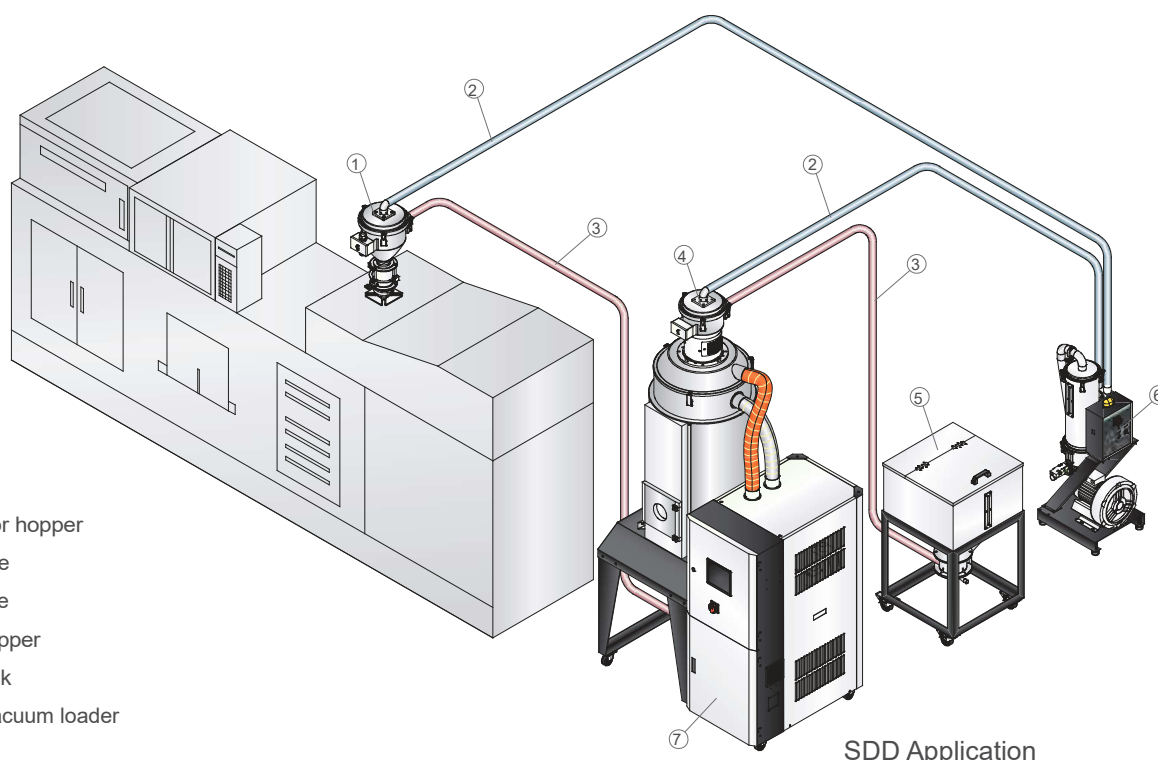
## Features

- 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.
- Dehumidifying and drying function are integrated to ensure high efficiency.
- Insulated drying hopper features dry air down-blowing and cyclone exhaust design. This improves drying efficiency and reduces heat loss, saving energy.
- The dehumidifying section of the SDD series adopt cooler to ensure a low return air temperature and low dew-point.
- Microprocessor is the standard equipment, with a temperature controlling accuracy of  $\pm 1^{\circ}\text{C}$ .
- Equipped with weekly timer, machine can automatically operate.



Control Panel

## Application



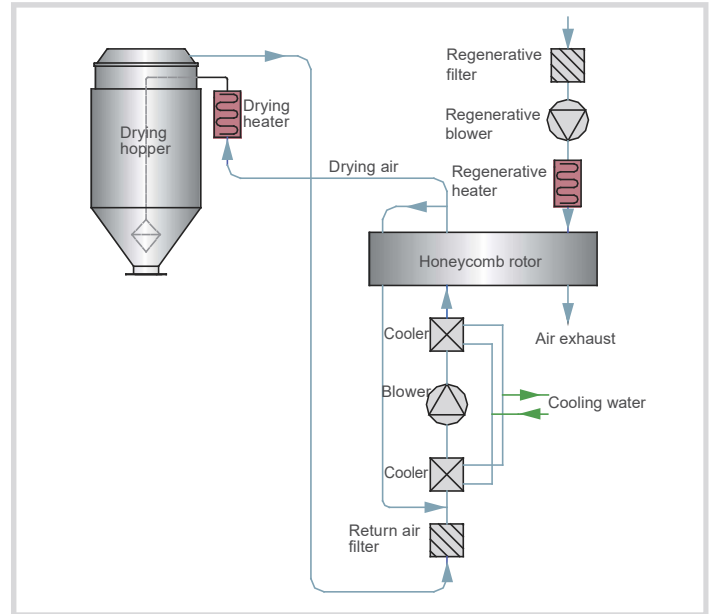
1. Photosensor hopper
2. Vacuum pipe
3. Material pipe
4. Vacuum hopper
5. Material tank
6. Separate vacuum loader
7. SDD

SDD Application

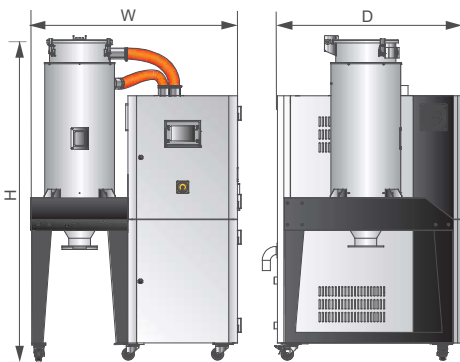
# SDD Series

## Working Principle

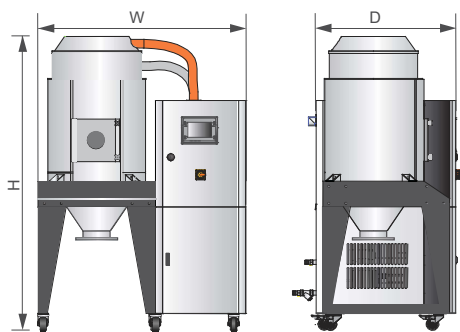
Damp and hot air from dry material barrel is blown into rotor after cooled. Moisture from the air is absorbed by rotor and is then adsorbed by regeneration heating air. Two strands of airflow function on the rotor. And with the rotation, moisture from the air is absorbed and expelled after absorbed regeneration 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.



## Outline Drawings



SDD-40U/40H~230U/120H



SDD-300U/200H~1200U/700H

## Specifications

Model	40U/ 40H	80U/ 40H	120U/ 80H	160U/ 80H	160U/ 120H	230U/ 120H	300U/ 200H	450U/ 200H	600U/ 400H	750U/ 400H	900U/ 700H	1200U/ 700H		
Regen. Heater (kW)	3		4		4		7.2		10					
Regen. Blower (kW, 50/60Hz)	0.12		0.4		0.4		0.75		1.5					
Drying Heater (kW)	4		6		12		18		24					
Drying Blower (kW, 50/60Hz)	0.12		0.75		1.5		3.75		7.5					
Dry Air Volume (m <sup>3</sup> /hr)	40		80		120		200		400		700			
Insulated Hopper	L	40	80	120	160	230	300	450	600	750	900	1200		
	gal	10.6	21	31.7	42.3	60.8	79.3	119	158.5	198	238	317		
Dimension	H	mm	1509	1796	1817	1740	2070	2052	2040	2440	2380	2610	2640	3070
		inch	59.4	70.7	71.5	68.5	81.5	80.8	80.3	96	93.7	102.8	104	121
	W	mm	978	1060	1061	1220	1061	1210	1450	1745	2140			
		inch	38.5	41.7	41.8	48	41.8	47.6	57	68.7	84.3			
D	mm	931	1030	893			1050	1255	1380					
	inch	36.7	40.6	35.2			41.3	49.4	54.3					
Weight	kg	165	190	250	255	265	295	420	550	620	650	830	870	
	lb	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  $\leq -20^{\circ}\text{C}$ .  
2) Power: 3 $\Phi$ , 230/400/460/575VAC, 50/60Hz.



# Options Dehumidifier

## Touch-control HMI



Models with touch-control HMI (adopt PLC HMI) is optional, add "LC" at the end of the model code.

## Dew-point Monitor (portable)



Models with optional portable dew-point monitor is convenient to test dew-point temperature of different machines.

Function	Specification
Display	Digital and Real-time Curve Display supports English/Chinese/Japanese/Korean version.
Range	-50.....+50°C td
	Pressure -0.1.....1.5MPa td
Accuracy	Temperature -30.....+50°C
	Dew point ±2°C td@-50°C td
	Pressure ±0.005MPa
Other Units	Temperature ±0.3°C
	Condition temp.: 23°C ± 3°C Humidity: <90% no condensation
Data Record	g/m <sup>3</sup> , mg/m <sup>3</sup> , ppmv, g/kg
	Memory space 4G, data can be exported by memory card
	Number of files ≤512 files
	Medium SD card

## Oil Filter

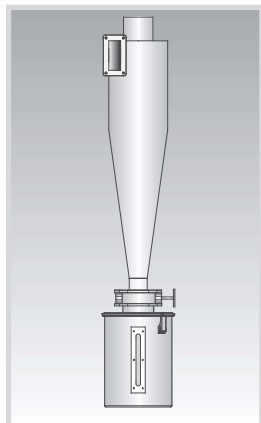


Oil filter is optional to filter the oil substance in return air for honeycomb protection.

Model	Applied to
EOF-30	SD-40H~120H
EOF-150	SD-150H / 200H
EOF-300	SD-300H / 400H
EOF-500	SD-700H
EOF-1000	SD-1000H
EOF-1500	SD-1500H
EOF-2000	SD-2000H
EOF-3000	SD-3000H
EOF-4000	SD-4000H

# Options Dehumidifier

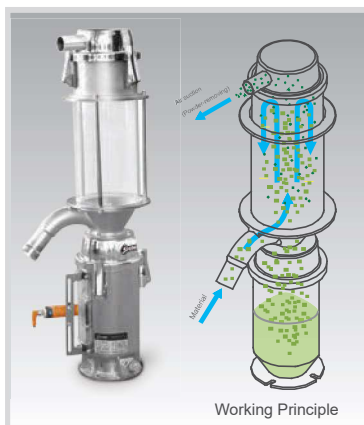
## Cyclone Dust Collector



Cyclone dust collector is optional to collect the dust in return air.

Model	Applied to
ACF-3"	SD-300H / 400H
ACF-4"	SD-700H
ACF-5"	SD-1000H
ACF-6"	SD-1500H
ACF-8"	SD-2000H / 3000H
ACF-12"	SD-4000H

## Optical Powder-removing Hopper



Optical SCD-OP series together with powder-removing hopper which can help avoid stain in the production; material contact surfaces are all mirror polished and collocates conveying system with closed loop to avoid contamination and moisture regain; system has standard configuration high efficiency particulate absorbing filter, which can filter tiny ion of  $0.3\mu\text{m}$  with filter ratio of 99.995%. (Only applicable to SCD-20U/30H~SCD-120U/80H)

High Efficiency Particulate Absorbing Filter HEPA( $0.3\mu\text{m}$ )



Optical Material Tank ( $3\mu\text{m}$ )



For optical model, two devices above are optional to ensure no material contamination.

- For SD-H, controllable drying heater is optional, add "C" at the end of the model code. (Only Applicable for SD-1000H~4000H)
- For SD-H, inbuilt drying heater is optional, add "PHC" at the end of the model code. (Only applicable for SD-40H~700H)
- For SD-H, 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 SDD, suction box and auto loader, which are convenient for material conveying, are optional.
- 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; Standard 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, saving 0~10% power consumption according to dew-point ranging from  $-40^{\circ}\text{C}$  to  $10^{\circ}\text{C}$ .
- 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. Applicable to SDD and SCD.
- 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.

# Cabinet Dryer

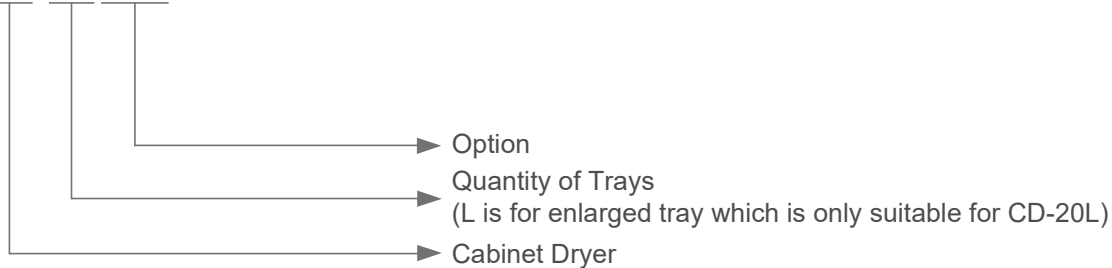


CD-9

# CD Series

## ■ Coding Principle

CD- x x - x x



## ■ Features

- Accurate P.I.D. temperature control to achieve even drying effect.
- Air-proofed insulated door can maintain temperature constantly inside to reduce energy consumption.
- Stainless steel tray and liner bring no contamination to materials.
- Unique design of adjustable air inlet and exhaust.
- 24 hours timer, easy to operate.
- Overheat protector can prevent excessive drying.
- Motor overload relay.
- Visible alarm to indicate troubles immediately
- Power would be automatically cut off when drying temperature exceeds set deviation value to protect thermal fuse.



Temperature Controller

## ■ Application

CD series of cabinet dryers are mostly used for simultaneous drying of different kinds of polymers in small quantities or for drying materials for trial molding. They can also be applied in electronic engineering, electroplating, pharmacy, paint baking, printing industries, etc. for preheating or drying related products.



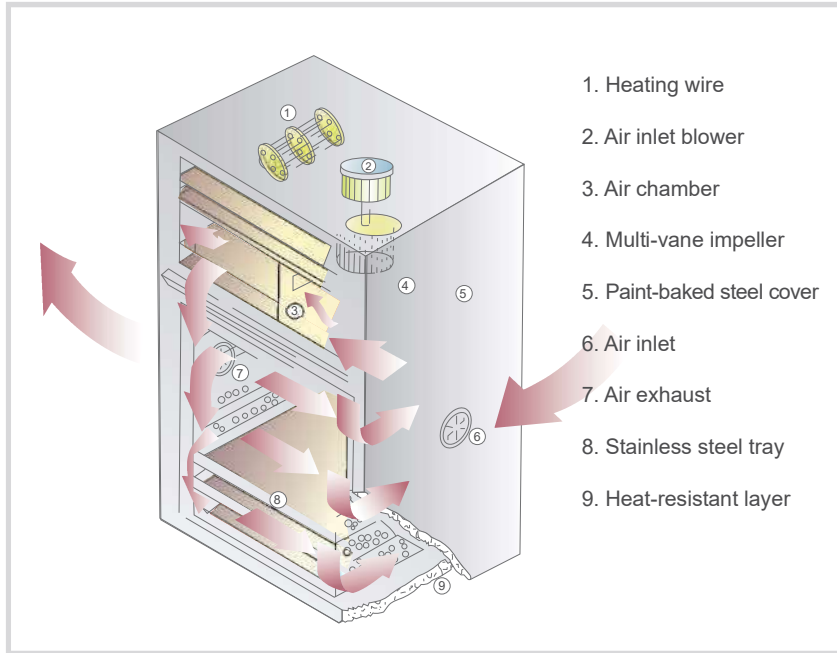
CD-20L

## ■ Options

- Air exhausting device should be opted for when handling with the volatile material. Add "EAD" at the end of the mode code.
- Flanges of air inlet and outlet are optional. Add "FL" at the end of the mode code.

## Working Principle

For cabinet dryers, materials to be dried are placed on the stainless steel made moveable material trays. During operation, process air will flow to heating wire and be heated up to required temperature, then flow through a manifold with evenly scattered holes. Moisture air is sent out through air exhaust port. It is designed to achieve an even drying effect.



1. Heating wire
2. Air inlet blower
3. Air chamber
4. Multi-vane impeller
5. Paint-baked steel cover
6. Air inlet
7. Air exhaust
8. Stainless steel tray
9. Heat-resistant layer

## Outline Drawing



## Specifications

Model		CD-5	CD-9	CD-20	CD-20L	CD-5-HT	CD-9-HT	CD-20-HT	CD-20L-HT	
Heater (kW)		4	4.5	9	18	4	4.5	9	18	
Blower(50/60Hz,kW)		0.37/0.55	0.37/0.55	1.5	1.5	0.37/0.55	0.55	1.5	1.5	
Highest Temp.	°C	200	200	200	200	250	250	250	250	
	°F	392	392	392	392	482	482	482	482	
Tray Quantity		5	9	20	20	5	9	20	20	
Total Capacity	kg	50	90	200	450	50	90	200	450	
	lb	110	198	441	992	110	198	441	992	
Outer Dimension	H	mm	1200	1440	1700	1865	1380	1640	1887	2052
		Inch	47.2	56.7	67	73.4	54.3	64.6	74.3	80.8
	W	mm	800	800	1210	1800	860	920	1310	1900
		Inch	31.5	31.5	47.6	70.9	33.9	36.2	51.6	74.8
D	mm	610	610	860	1060	731	731	1032	1232	
	Inch	24	24	33.9	41.7	28.8	28.8	40.6	48.5	
Inner Dimension	H1	mm	660	900	1000	1200	660	900	1000	1200
		Inch	26	35.4	39.4	47.2	26	35.4	39.4	47.2
	W1	mm	600	600	990	1600	600	600	990	1600
		Inch	23.6	23.6	39	63	23.6	23.6	39	63
	D1	mm	550	550	800	1000	550	550	800	1000
		Inch	21.7	21.7	31.5	39.4	21.7	21.7	31.5	39.4
Net Weight	kg	150	180	415	550	200	252	587	778	
	lb	331	397	915	1213	441	556	1294	1715	

Notes: 1) "HT" stands for heat insulation model, the surface temperature of which

will not be more than 80°C/176°F when setup temperature is 250°C/482°F.

2) When drying temperature is below 150°C/302°F, "HT" models can keep internal temperature accuracy of ±5°C/±9°F, when it is above 150°C/302°F, internal temperature accuracy is ±12°C/21.6°F.

3) Above loading capacity is based on pellet material of 0.65kg/L(5.4lb/gal) in bulk density and 3~5mm (0.12~0.2inch) in diameter.

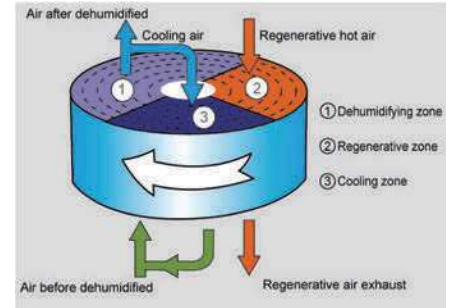
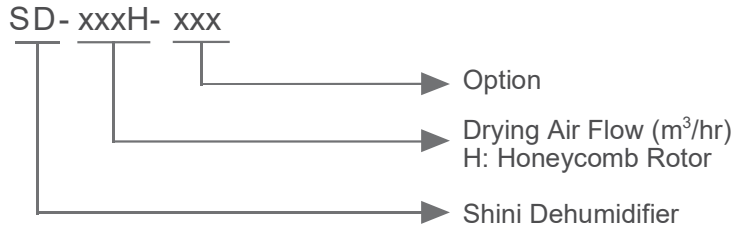
4) Power: 3Φ,230/400/460/575VAC, 50/60Hz.

# Honeycomb Dehumidifier



SD-40H-D

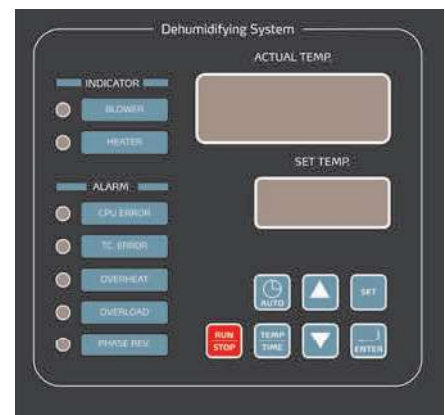
## Coding Principle



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 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.
- Equipped with weekly timer, machine can automatically operate.



Control Panel

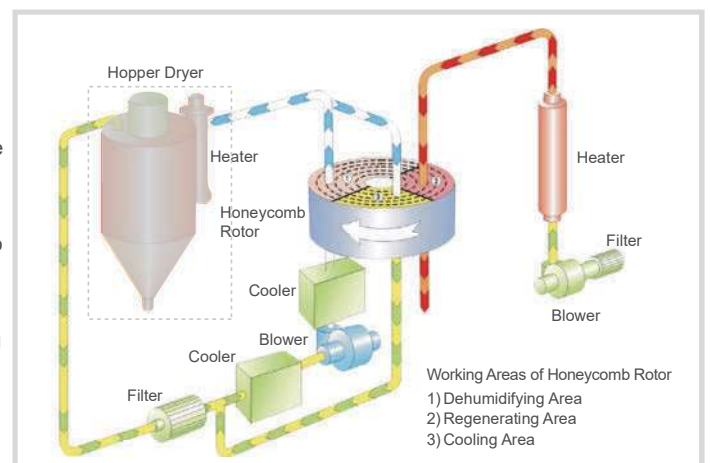
## Application

SD-H series honeycomb dehumidifiers are mainly used to dry hygroscopic engineering plastics. A honeycomb-rotor is used to offer effective drying, which under ideal conditions, can supply dehumidified dry air with dew-point lower than -40°C/-40°F, the largest of which can provide dry air up to a quantity of 4,000 m<sup>3</sup>/hr.

### What is honeycomb rotor?

The main part of honeycomb rotor is made by ceramic fiber and organic additives, sintered under high temperature with molecular sieve or silica gel as basic material to bond together with inside of honeycomb to form the honeycomb-like structure. Unlike common desiccant or rotary molecular sieve, then, when aging, will produce dust, followed by process air to drying hopper, to pollute plastic material. Honeycomb rotor offers unlimited long service life and can be cleaned and not like usual molecular sieve which is easy to get saturated or requiring regular replacement. The moisture of return air is quickly absorbed by molecular sieves when passing through numerous holes within honeycomb rotor. So when coming out of rotor, can form low dew-point dry air. Regenerating and dehumidifying have similar principle and run simultaneously. The only difference is that the two process winds are in opposite direction.

### System Flow Chart



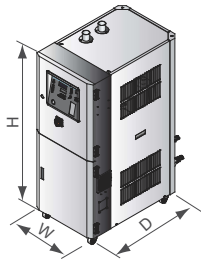
# SD-H Series

## Drying Capacity

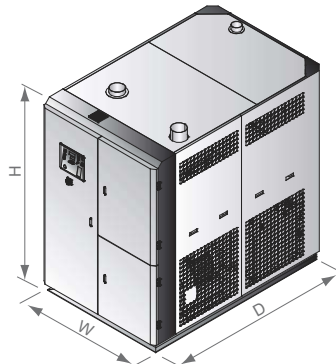
Material	Drying Temp. (°C)	Drying Time (hr)	Specific Heat (kcal/kg·°C)	Bulk Density (kg/L)	Moisture Content before Drying (%)	Moisture Content after Drying (%)	Drying capacity (kg/hr)										
							SD-40H	80H	120H	200H	400H	700H	1000H	1500H	2000H	3000H	4000H
ABS	80	2-3	0.34	0.6	0.3	0.02	16	27	35	105	210	355	425	710	1065	1500	1600
CA	75	2-3	0.5	0.5	1	0.02	12	22	30	90	180	295	355	590	885	1200	1330
CAB	75	2-3	0.5	0.5	0.8	0.02	12	22	30	90	180	295	355	590	885	1200	1330
CP	75	2-3	0.6	0.6	1	0.02	16	27	35	106	210	355	425	710	1060	1500	1600
LCP	150	4	0.6	0.6	0.04	0.02	11	20	27	80	160	265	320	530	800	1150	1200
POM	100	2	0.35	0.6	0.2	0.02	24	40	53	160	320	530	640	1060	1600	1800	2400
PMMA	80	3	0.35	0.65	0.5	0.02	17	29	38	115	230	383	460	767	1150	1530	1730
IONOMER	90	3-4	0.55	0.5	0.1	0.04	10	17	22	66	133	220	265	442	663	750	1000
PA6/6.6/6.10	75	4-6	0.4	0.65	1	0.05	9	14	19	58	115	192	230	383	575	960	1040
PA11	75	4-5	0.58	0.65	1	0.05	10	17	23	69	138	230	275	460	690	780	1150
PA12	75	4-5	0.28	0.65	1	0.05	10	17	23	69	138	230	275	460	690	780	1150
PC	120	2-3	0.28	0.7	0.3	0.01	19	31	41	124	250	413	495	826	1238	1400	1860
PU	90	2-3	0.45	0.65	0.3	0.02	17	29	38	115	230	383	460	767	1150	1530	2080
PBT	130	3-4	0.3-0.5	0.7	0.2	0.02	13	23	31	93	186	310	372	620	930	1100	1600
PE	90	1	0.55	0.6	0.01	<0.01	47	80	106	318	637	1062	1275	2125	3185	3600	4800
PEI	150	3-4	0.6	0.6	0.25	0.02	11	20	27	80	160	265	320	530	800	1030	1370
PET	160	4-6	0.3-0.5	0.85	0.2	0.05	11	19	25	75	150	250	300	500	750	1150	1360
PETG	70	3-4	0.6	0.6	0.5	0.02	11	20	27	80	160	265	320	530	800	1030	1370
PEN	170	5	0.85	0.85	0.1	0.05	13	23	30	90	180	300	360	600	900	1150	1360
PES	150	4	0.7	0.7	0.8	0.02	13	23	30	90	180	300	360	600	900	1050	1400
PMMA	80	3	0.65	0.65	0.5	0.02	17	29	38	115	230	385	460	765	1150	1530	1730
PPO	110	1-2	0.4	0.5	0.1	0.04	19	33	44	133	265	440	530	885	1330	1730	2660
PPS	150	3-4	0.6	0.6	0.1	0.02	11	20	27	80	160	265	320	530	800	1030	1370
PI	120	2	0.27	0.6	0.4	0.02	24	40	53	160	320	530	640	1060	1600	1800	2400
PP	90	1	0.46	0.5	0.1	0.02	39	66	88	265	530	885	1060	1770	2655	3500	4000
PS(GP)	80	1	0.28	0.5	0.1	0.02	39	66	88	265	531	885	1062	1770	2655	3500	4000
PSU	120	3-4	0.31	0.65	0.3	0.02	12	22	29	85	173	290	345	575	865	1300	1485
PVC	70	1-2	0.2	0.5	0.1	0.02	19	33	44	135	265	442	530	885	1330	1730	2660
SAN(AS)	80	1-2	0.32	0.5	0.1	0.05	19	33	44	135	265	442	530	885	1330	1730	2660
TPE	110	3	0.7	0.7	0.1	0.02	18	30	40	125	250	413	495	826	1238	1650	1860



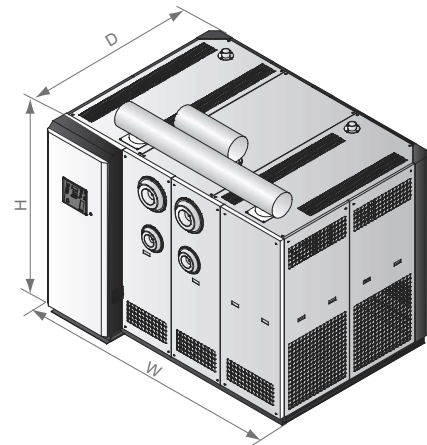
## Outline Drawings



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	3	4	7.2	10	15	28	28	32	56	
Rege. Blower (kW, 50/60Hz)		0.4/0.4	0.4/0.4	0.4/0.4	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	6	6	12	18	24	32	58	80	96	128	
Process Blower (kW, 50/60Hz)		0.12/0.12	0.75/0.9	0.75/0.9	1.5/1.8	3.75/4.5	7.5/8.6	13/16	9×2/11×2	13×2/15×2	13×3/15×3	13×4/15×4	
Drying Air Quantity (m <sup>3</sup> /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	6	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  $\leq -20^{\circ}\text{C}$ .

2) \*\*\* Stands for drying heater is optional equipment for working with "European type" hoppers.

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

We reserve the right to change specifications without prior notice.

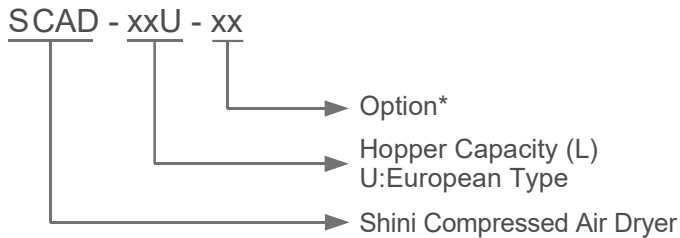
# Compressed Air Dryer



SCAD-6U

# SCAD-U Series

## Coding Principle



Notes: \*

T=Timer P=For Polished Hopper Inside



SCAD-12U

## Features

- P.I.D. temperature controller can reach the accuracy of  $\pm 1^{\circ}\text{C}$ , the weekly timer is available with SCAD-12U~40U.
- Adopts compressed air to dry plastic materials with good and stable drying effect, and is not influenced by ambient temperature and humidity.
- Hopper of SCAD-1~6U adopts double-layer high-temp. resistant tube whose inside is made of glass tube and outside is made of PC tube.
- Storage hopper of SCAD-12~40U is made of stainless steel to ensure no material contamination.
- Function of compressed air pressure detection makes a safe and reliable operation.
- Voltage-output type temperature controller collocating with SSR control loop can effectively prolong the lifespan of device.
- Equipped with overheat protection to avoid excessively high drying temperature.
- Equipped with air outlet filter, which is used to filter dried air exhausted to outside.
- Warning light can monitor machine operation.



Control Panel

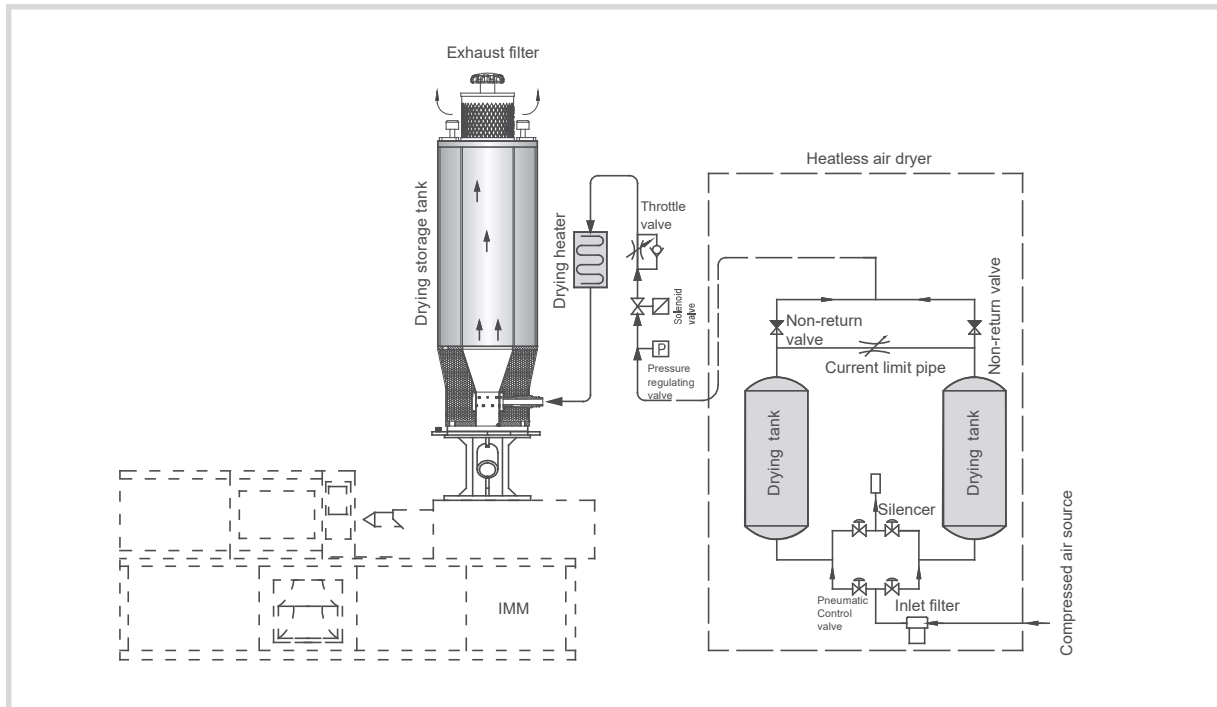
## Options

- Optionally equipped with heatless regenerative air dryer, the dew-point temperature can reach  $-40^{\circ}\text{C}$  below. It mainly used to dry hygroscopic engineering plastics, and its power consumption is 35% lower than honeycomb dehumidifier.
- SCAD-1~6U can be optionally collocated with venturi loader VL-50 to achieve automatic material feeding.
- 24-hour auto start/stop timer is optional for SCAD-1~6U.

# SCAD-U Series

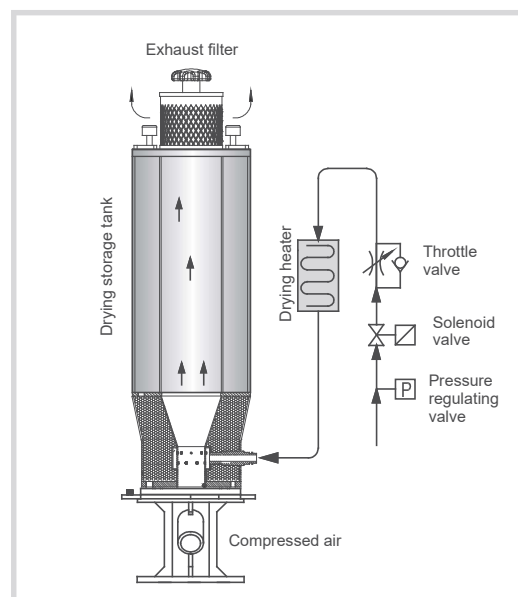
## Application

Applicable for small batch drying of commonly-used engineering plastics such as ABS and PS, also suitable for pre-heating treatment before plastics molding.



## Working Principle

The working principle is that compressed air flows into heating case after through pressure regulating valve and solenoid valve, and finally exhaust into air. At the same time, the dew-point is reduced. The heated compressed air is blown into the heat-preservation hopper to dry materials, and it exhaust into air through filter to remove water in raw materials.



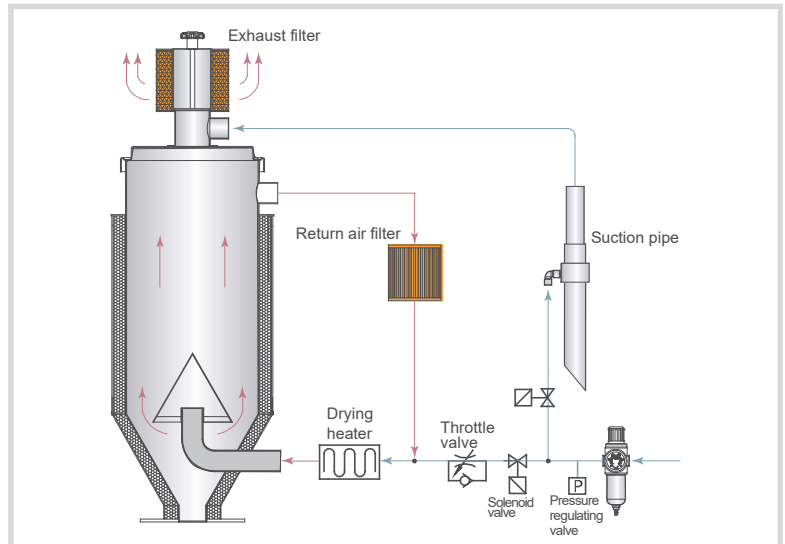
Working Principle of SCAD-6U and Models Below

**Drying**

Under normal operation, high pressure air is blown into heating cabinet via solenoid valve and air diffusing equipment, then into drying hopper to dry up material. Air is discharged through return air filter for recycle.

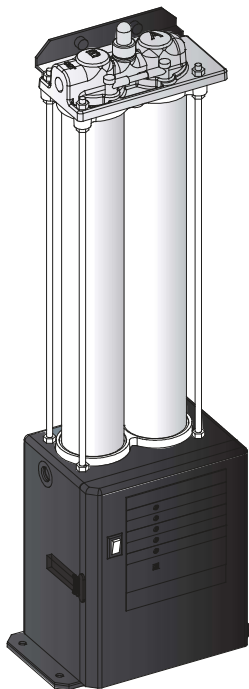
**Loading**

Hi-pressure air was controlled by solenoid valve and blown into suction pipe, then accelerating flow of air generates negative pressure to drive material feeding, which draws material into drying hopper. Air is discharged out through filter.



Working Principle of SCAD-12U and Models Above

■ **Options**



Heatless Air Dryer HAD

**Function**

The dew-point of compressed air can reach  $-40^{\circ}\text{C}$  under standard atmosphere which meets the requirement of drying materials and molding of plastics.

**Installation**

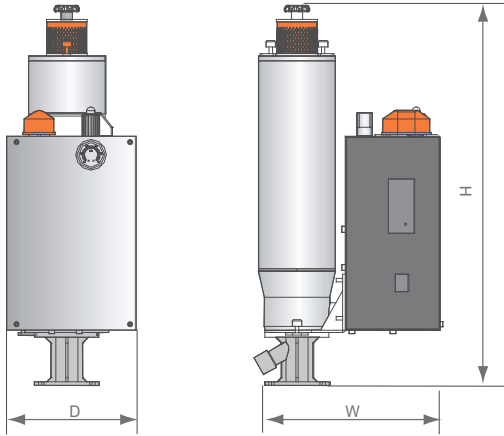
It can be fixed on the molding machine or column of the foot stand. The air outlet and air inlet of SCAD-U are connected with air pipelines.

**Notes**

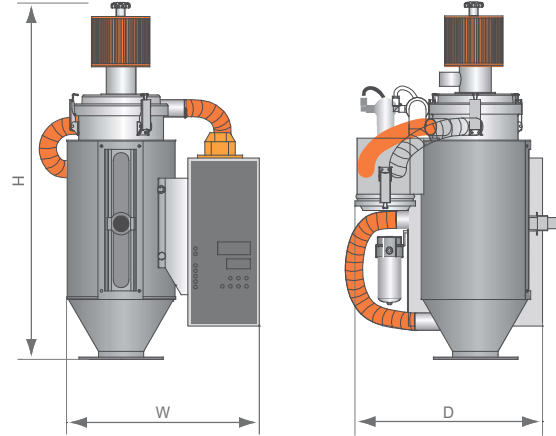
Please clean up the filter regularly for fear that water or oil enters the drying hopper which damages the molecular sieve and influences the dehumidifying performance.

# SCAD-U Series

## Outline Drawings



SCAD-6U and Models Below



SCAD-12U and Models Above

## Specifications

Model	Drying Temp.max (°C)	Drying Hopper Capacity (L)	Heater Power (W)	Pressure Air		Dimensions (mm) (H × W × D)	Weight (kg)
				Pressure (kgf/cm <sup>2</sup> )	Air Consumption (m <sup>3</sup> /hr)		
SCAD-1U	160	1	300	6~10	2.4	650 × 310 × 220	10
SCAD-3U		3			3.0	680 × 320 × 220	13
SCAD-6U		6			3.75	870 × 350 × 220	15
SCAD-12U		12	600		4.25	780 × 430 × 455	25
SCAD-20U		20	600		7	882 × 467 × 460	30
SCAD-40U		40	1,200		14	1273 × 498 × 488	45

Notes: 1) Compressed Air: Oil content ≤3mg/m<sup>3</sup>.  
2) Power supply: 1Φ, 230VAC, 50Hz / 60Hz.

We reserve the right to change specifications without prior notice.

# "All-in-One" Compact Dryer

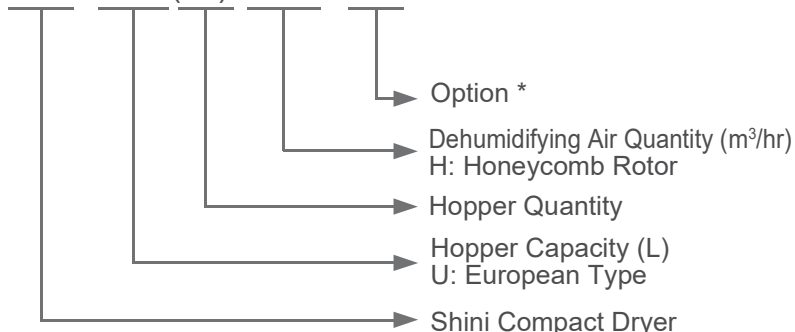


SCD-230U/120H

# SCD Series

## Coding Principle

SCD- xxxU(×2)/xxxH - xxx



SCD-600U/400H-LC-D

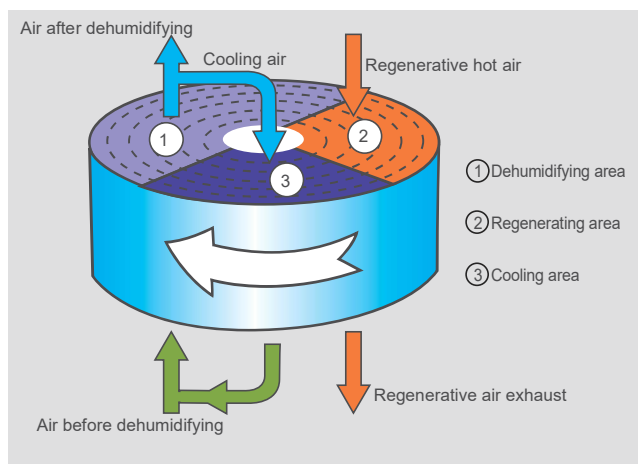
SCD-120U/80H-D-OP-M2

## Features

- Combine the function of dehumidifying, drying and two-stage conveying into a single unit.
- Adopt molecular sieve structure honeycomb, which provides low dew-point dry air and 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 surplus raw material in hopper tubes and avoid raw material from regaining moisture.
- Equipped with microprocessor to accurately control drying temperature.
- Heat preserved drying hopper barrel adopts down blowpipe design and collocates with cyclone air exhaust to avoid heat lost and improve drying efficiency.
- Equipped with two drying hoppers, the drying temperature of single hopper can be individually controlled. It mainly applied to double-shot molding machine, which can process dehumidifying and drying to two different drying materials.
- Equipped with weekly timer, machine can automatically operate.



SCD-80U×2/100H



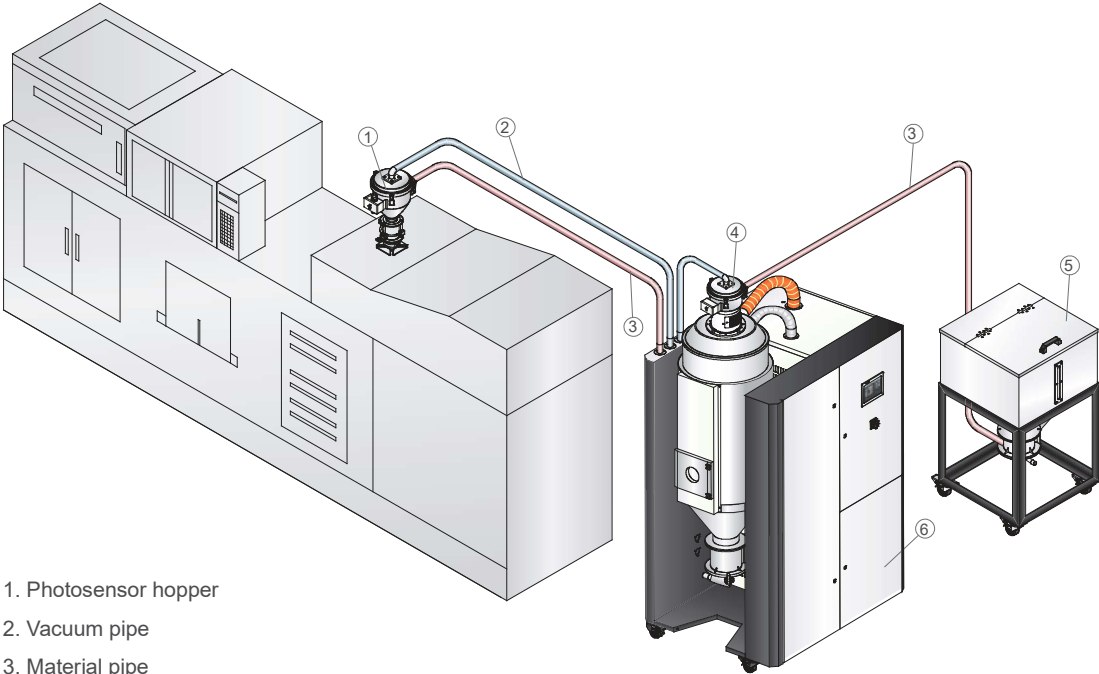
Honeycomb Rotor Working Principle



Control Panel

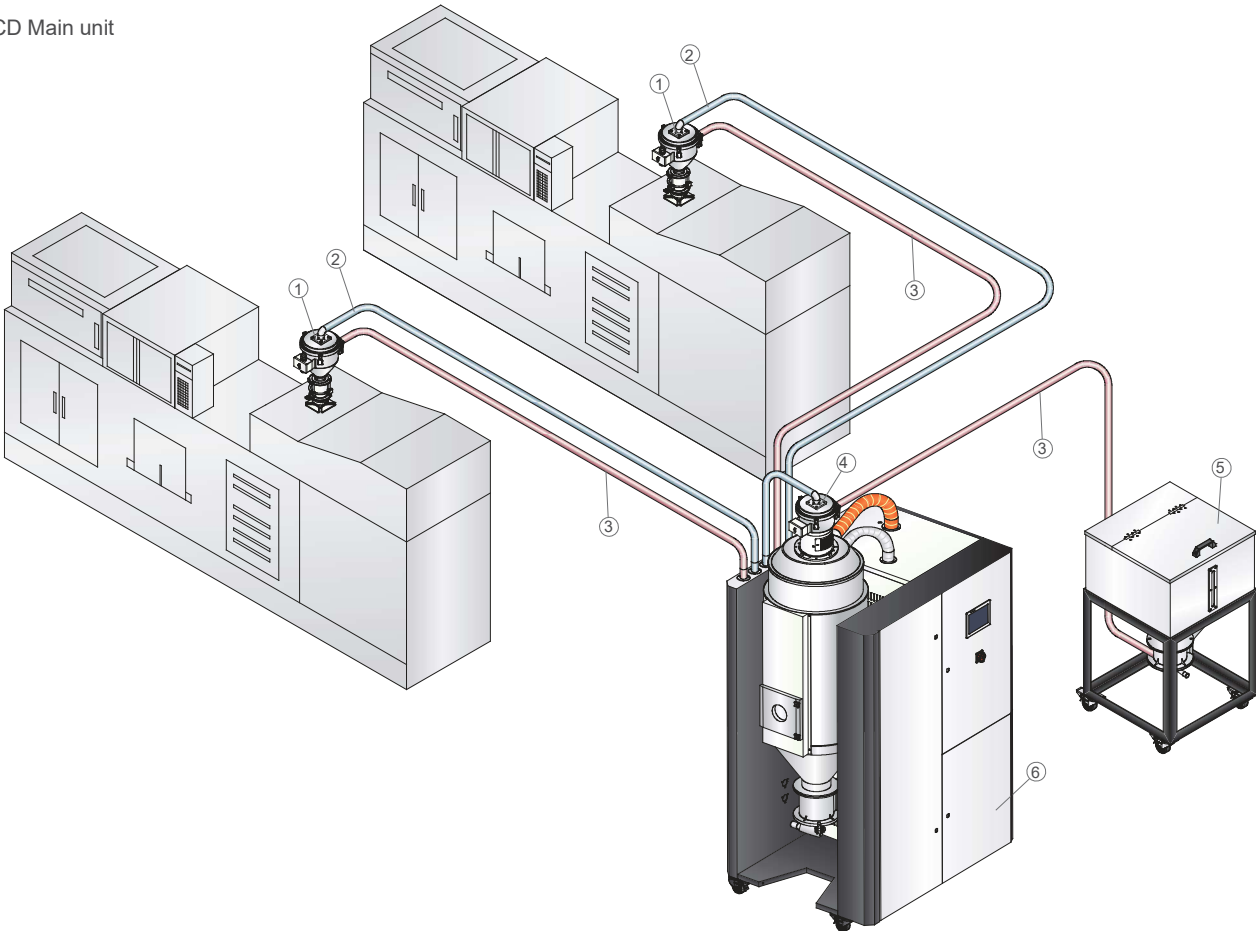


**Application**



- 1. Photosensor hopper
- 2. Vacuum pipe
- 3. Material pipe
- 4. Vacuum hopper
- 5. Material tank
- 6. SCD Main unit

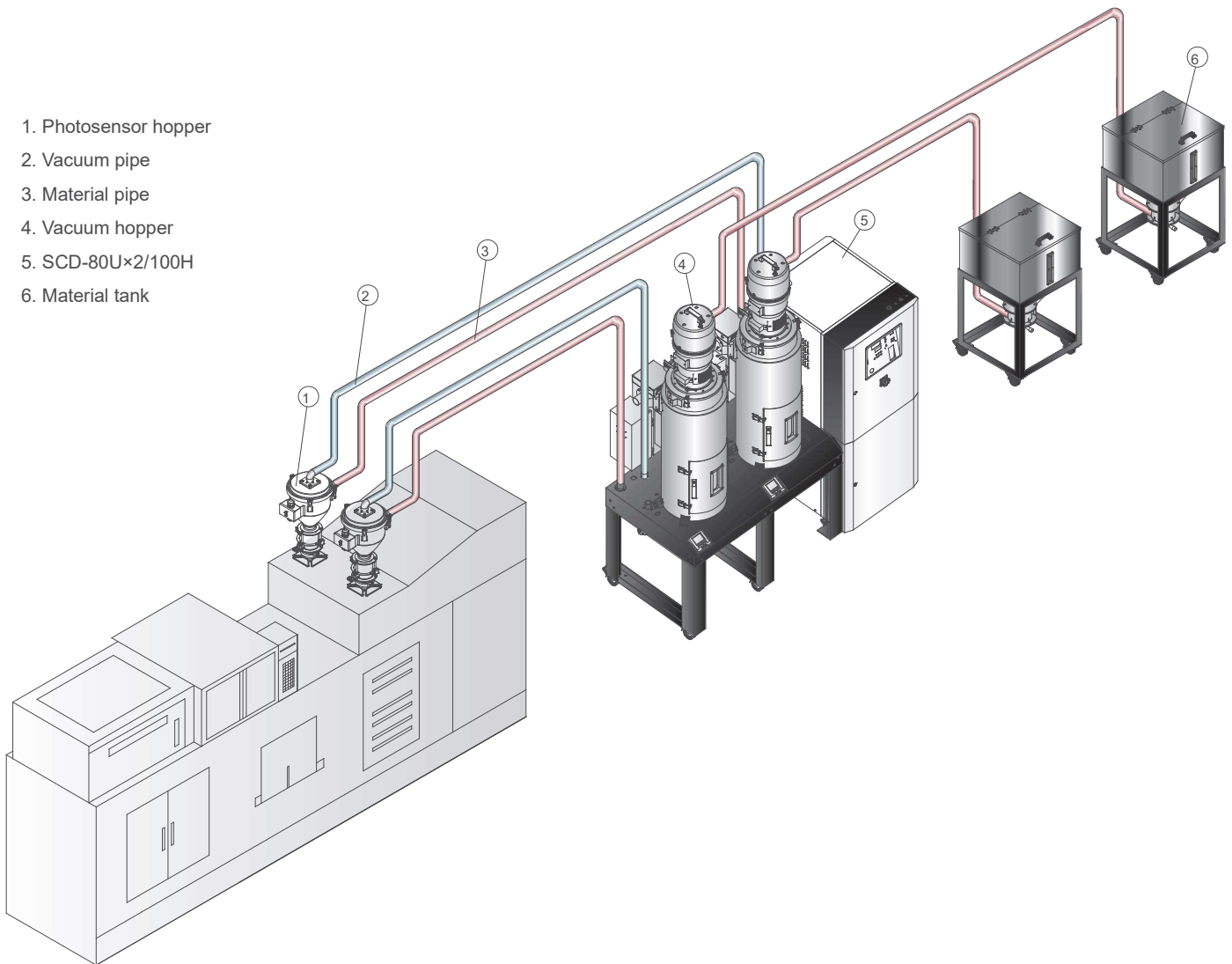
For Servicing One Machine: Two-stage Conveying System (Standard)



For Servicing Two Machines: Three-stage Conveying System (Optional)

# SCD Series

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

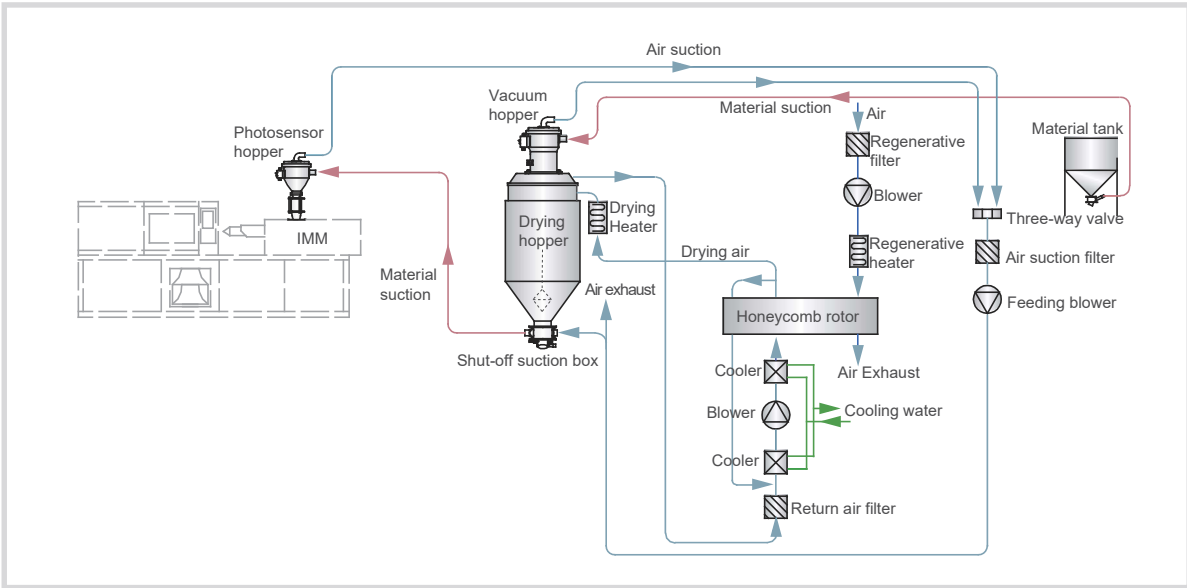


“One-to-Two” Compact Dryer

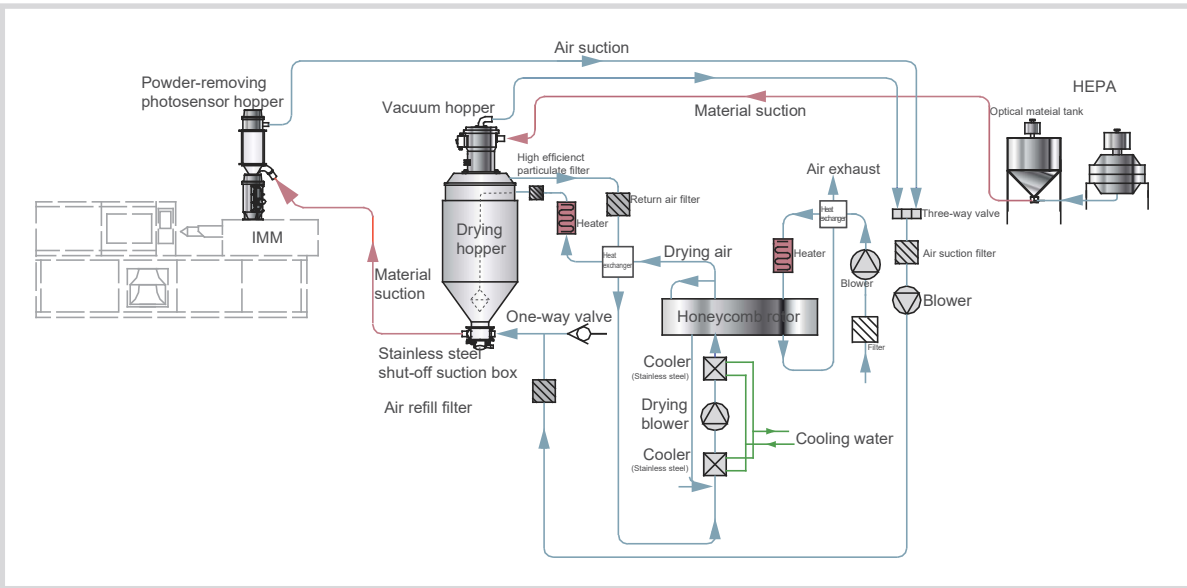
**Working Principle**

**Dehumidifying:** 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.

**Suction:** material is absorbed into barrel from storage barrel or other storage containers. When the magnetic reed switch detects no material, suction motor runs to produce vacuum inside vacuum hopper. Raw material in storage barrels is absorbed into suction hopper due to air pressure difference. When material suction completes, motor stops. Raw materials drop into drying hopper barrel due to gravity. The dried raw material after dried is taken out to the hopper with photosensor installed on molding machine or other hopper from drying hopper barrel.



SCD Working Principle

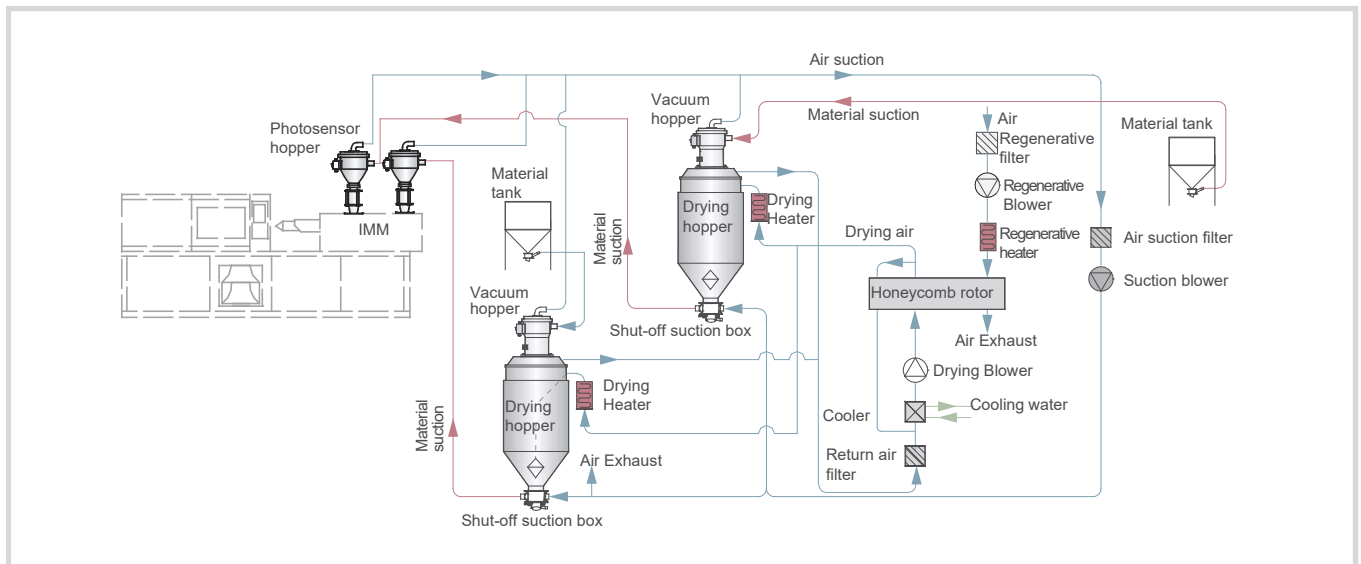


SCD-OP-ES Working Principle

# SCD Series

Dehumidifying: damp and hot air from two dry material barrels via the filter and condenser is blown into rotor. Moisture from the air is absorbed by rotor, then absorbed and expelled by regeneration heating air with rotor rotation. 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 drying air. The low dew-point drying air through heater then get into the two storage barrels separately to dehumidify material in the barrels. The damp and hot air expelled by storage barrel after drying, return to the filter and condenser again to process dehumidifying in the rotor. Thus, the closed circle is formed to dry material.

Suction: material is absorbed into two drying hoppers from different storage barrels or other storage containers. When the magnetic reed switch detects no material, suction motor runs to produce vacuum inside vacuum hopper. Raw material in storage barrels is absorbed into suction hopper due to air pressure difference. When material suction completes, motor stops. Raw materials drop into drying hopper barrel due to gravity. As the same, the dried raw material after dried is taken out to the hopper with photosensor installed on the double-shot molding machine.



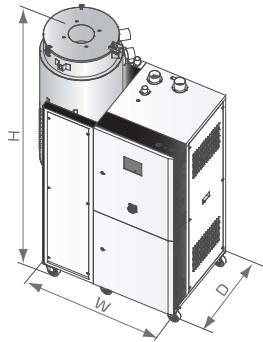
SCD-Ux2/H Working Principle

## ■ Specifications (Hermetic)

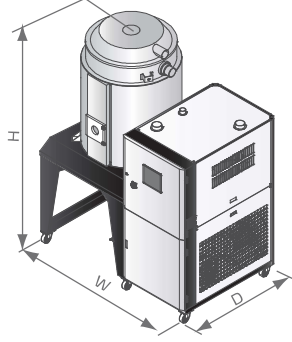
Model	SCD-	20U/30H -OP	40U/30H -OP	80U/50H -OP	120U/80H -OP	40U/ 40H	80U/ 40H	120U/ 80H	160U/ 80H	160U/ 120H	230U/ 120H	300U/ 200H	450U/ 200H	
Drying System	Drying Heater Power (kW)	3	3	4	6	4	4	4	4	6	6	12	12	
	Drying Blower Power (kW)	0.4	0.4	0.4	0.75	0.12	0.12	0.75	0.75	0.75	0.75	1.5	1.5	
	Hopper Capacity	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 Power (kW)	3	3	3	3	3	3	3	3	4	4	4	4	
	Regenerative Blower Power (kW)	0.4	0.4	0.4	0.4	0.12	0.12	0.4	0.4	0.4	0.4	0.4	0.4	
	Dehumidifying Air quantity (m <sup>3</sup> /hr)	30	30	50	80	40	40	80	80	120	120	200	200	
Feeding System	Feeding Blower Power (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	
	SHR-U-E	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	734	734	734	734	734	734	1020	1020
		inch	35.4	35.4	39.4	39.4	28.9	28.9	28.9	28.9	28.9	28.9	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	

# SCD Series

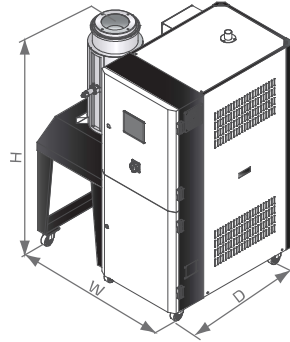
## Outline Drawings



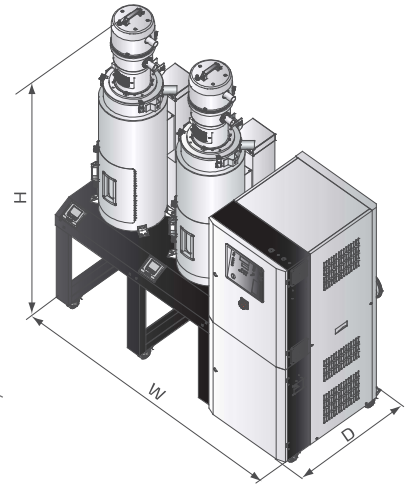
SCD Hermetic



SCD Semi-open



SCD-OP



SCD-U×2/H

## Specifications (Semi-open)

Model	SCD-	600U/400H	750U/400H	900U/700H	1200U/700H	80U×2/100H	160U×2/200H		
Drying System	Drying Heater Power (kW)	18	18	24	24	3.9×2	6×2		
	Drying Blower Power (kW, 50/60Hz)	3.75/4.5	3.75/4.5	7.5/8.6	7.5/8.6	0.4/0.46	1.5/1.72		
	Hopper Capacity	L	600	750	900	1200	80×2	160×2	
gal		158.5	198	237.8	317	21.1×2	42.2×2		
Dehumidifying System	Regenerative Heater Power (kW)	7.2	7.2	10	10	3	4		
	Regenerative Blower Power (kW, 50/60Hz)	0.75/0.9	0.75/0.9	1.5/1.8	1.5/1.8	0.4/0.48	0.4/0.48		
	Dehumidifying Air quantity (m <sup>3</sup> /hr, 50/60Hz)	400/450	400/450	700/780	700/780	100/111	200/222		
Feeding System	Feeding Blower Power (kW)		1.5		3.75	1.5	1.5		
	Dia. of Material Pipe (inch)		1.5		2	1.5	1.5		
	SHR-U-E Hopper	L		12		24	6	6	
		gal		3.2		6.4	1.58	1.58	
	SHR-U Hopper	L		12		24	6	6	
gal			3.2		6.4	1.58	1.58		
Dimension	H	mm	2380	2610	2640	3070	2300	2520	
		inch	93.7	102.8	104	121	90.6	99.2	
	W	mm		1745		2140	2000	2130	
		inch		68.7		84.3	78.7	83.9	
	D	mm		1255		1380	1050	900	
		inch		49.4		54.3	41.3	35.4	
Weight	kg		640		690	850	900	400	565
	lb		1411		1521	1874	1984	882	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.

# PET Crystallizer



SCR-450U

# SCR Series

## ■ Coding Principle



Notes:\*

CE=CE Conformity    ML=Optional with safety ladder

## ■ Features

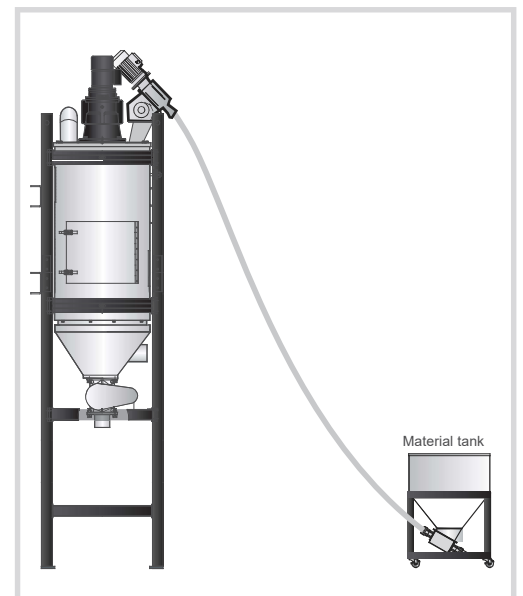
- Fixed speed of agitator makes materials not lump together during the crystallization.
- Simplify and improve drying efficiency.
- Materials can be dried under high temperature to improve drying efficiency.
- Cyclone dust collector is standard, which is applied to dust-rich place. Can effectively reduce the load on filter bag, and reduce the number of times of filter bag cleaning, thus extend the life span of the filter bag.
- With double overheat protector, it can reduce the possibility of either mechanical or man-made problems.
- Equipped with rotary valve with good sealing performance, which can output crystallized material accurately.
- Equipped with material level switch, which can detect material level accurately and make operation reliable.
- Equipped with negative pressure tester(excluding SCR-1600U) to immediately test the ventilation of the filter. Give an alarm when the negative pressure is higher than the setting value, clean the filter to avoid blockage.

## ■ Options

- Collocate with dehumidifier to fulfill dehumidification directly.
- Safety ladder is optional(only for SCR-900U and above models).
- Auto loader, Vacuum hopper receiver are optional for material conveying.
- Optional feed screw for stable and even conveying of un-crystallized material.
- External pipeline is optional with the stainless steel configuration.
- Storage Tank MST-R is optional.



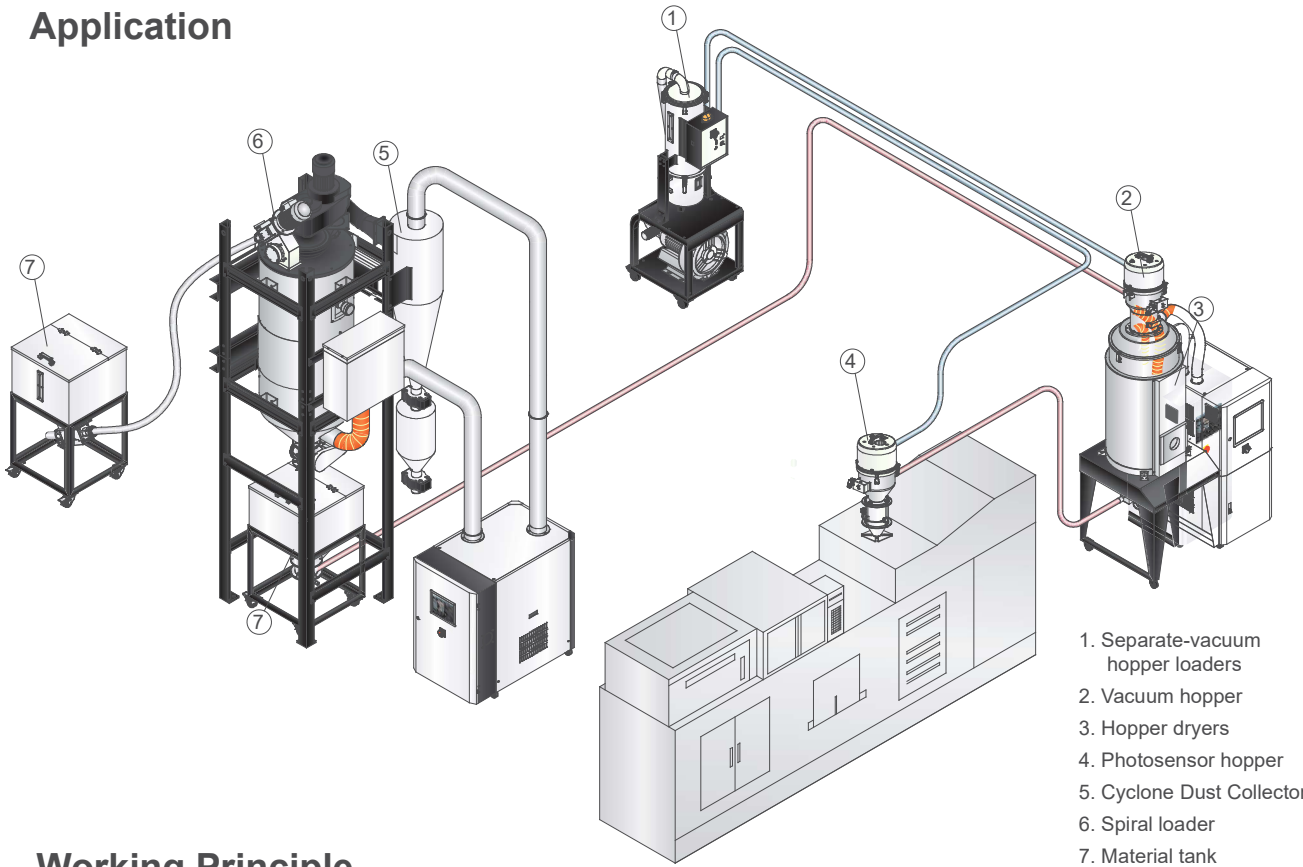
Inner Structure



Feed Screw (optional)

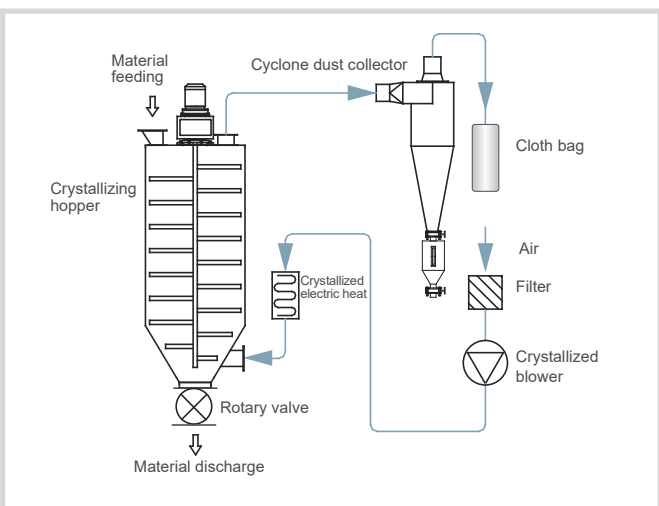


**Application**

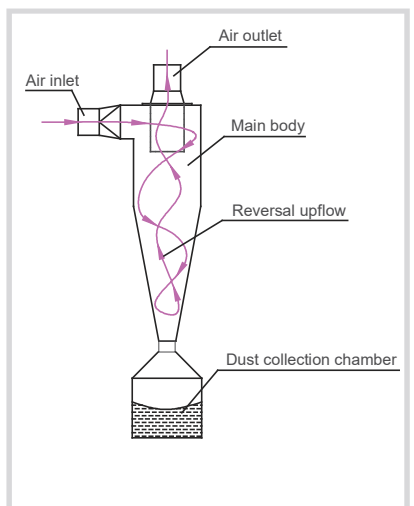


**Working Principle**

Once material filling starts, heat blower starts up and material heating begins. Control cabinet would stop sending signals to auto loader when material filling amount is higher than material level switch. Then material heating lasts for a while. When temperature sensing needle detects the value of reaching the set crystallized temperature, material would be conveyed out via feeding device; meanwhile, as material level in hopper lowers gradually, filling device starts to supply the uncrystallized material accordingly to realize the continuous crystallization process. When temperature sensing needle detects the temperature value of stopping material conveying, feeding device halts. If temperature rises again to reach the set crystallized temperature, feeding device will be activated to work so that the continuous crystallization process can be realized through this kind of circle.



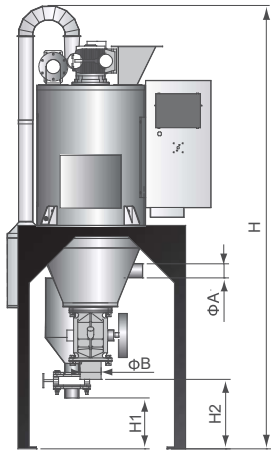
Working Principle



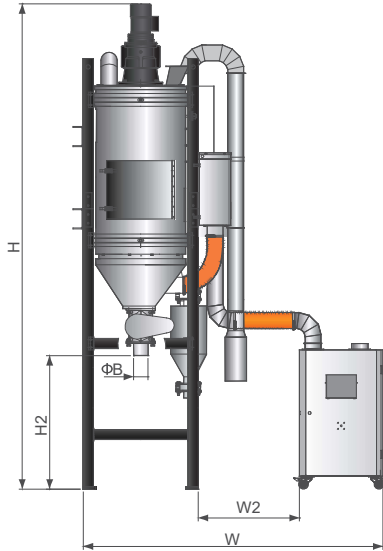
Working Principle of Cyclone Dust Collector

# SCR Series

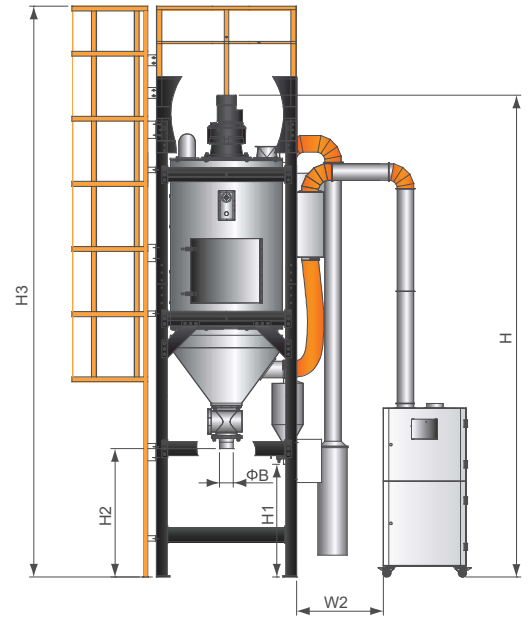
## Outline Drawings



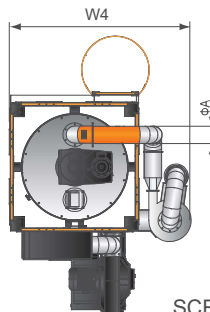
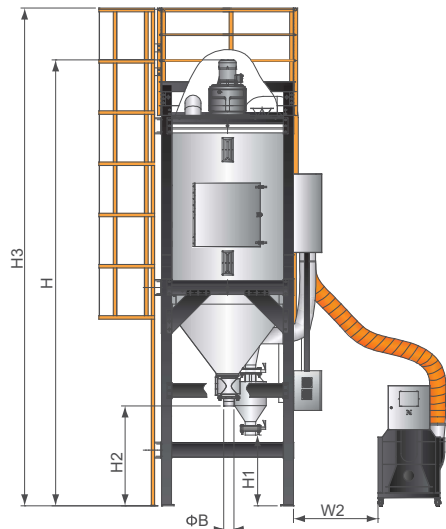
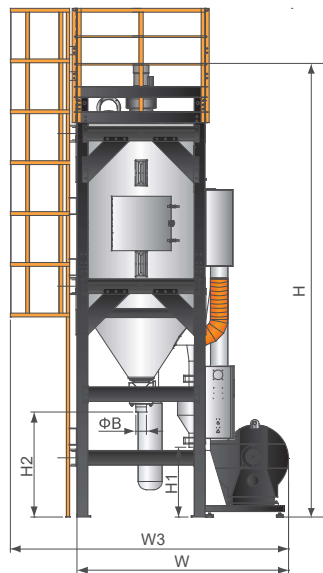
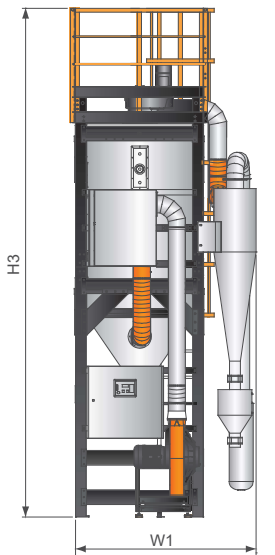
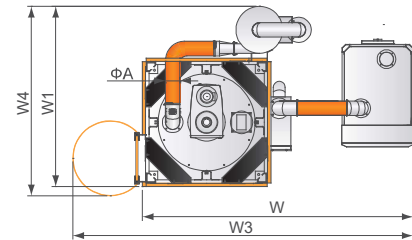
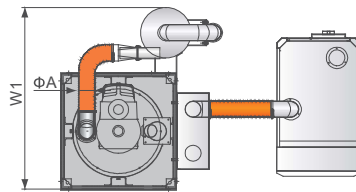
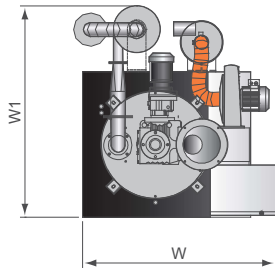
SCR-160U



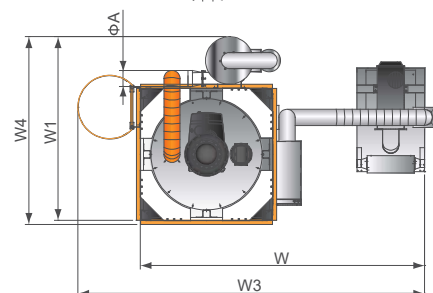
SCR-450U



SCR-900U (Maintenance ladder is optional)



SCR-1600U (Maintenance ladder is optional)



SCR-2500U (Maintenance ladder is optional)

## Specifications

Model		SCR-160U	SCR-450U	SCR-900U	SCR-1600U	SCR-2500U
Heater Power(kW)		12	24	48	96	128
Blower Power(kW, 50/60Hz)		0.55	2.2	3	7.5	15
Blending Motor Power (kW, 50 / 60Hz)		0.25	0.55	1.5	2.2	4
Max. Throughput	kg/hr	50	150	300	500	750
	lb/hr	110	331	661	1102	1653
Hopper Capacity	L	160	450	900	1600	2500
	Gal	42.3	118.9	237.8	422.7	660.4
H	mm	2380	3850	4550	5350	5710
	inch	93.7	151.6	179.1	210.6	224.8
H1	mm	280	720	1040	820	890
	inch	11	28.3	40.9	32.2	35
H2	mm	380	1060	1185	1240	1270
	inch	15	41.7	46.7	48.8	50
H3	mm	-	-	5260	6010	6260
	inch	-	-	207	236.6	246.5
W	mm	1040	2370	2890	2510	3700
	inch	40.9	93.3	113.8	98.8	145.7
W1	mm	1140	1440	1930	2160	2310
	inch	44.9	56.7	76	85	90.9
W2	mm	-	800	800	-	800
	inch	-	31.5	31.5	-	31.5
W3	mm	-	-	3640	3295	4400
	inch	-	-	143.3	129.7	173.2
W4	mm	-	-	2020	2200	2360
	inch	-	-	79.5	86.6	92.9
ΦA	mm	3	5	6	8	8
	inch	0.12	0.2	0.24	0.31	0.31
ΦB	mm	4	4	5	5	5
	inch	0.16	0.16	0.2	0.2	0.2
Weight	kg	235	500	865	2290	2790
	lb	518	1102	1907	5049	6151

Notes: 1) Above maximum processing capacity is based on uncrystallized PET material of 0.85kg/L in density and 3~5mm in diameter.  
2) Power: 3Φ, 230 / 400 / 460 / 575VAC, 50 / 60Hz.

We reserve the right to change specifications without prior notice.

## PET Property

PET material is well-used in textile fiber, food and chemical packaging. Tape stripes, industry thread, heat-resistant dishware. Air bubble and chapping will take place due to its high moisture content.

With this drying demand and the development on plastic industry, Shini provides a series of secured and reliable drying and dehumidifying technologies for PET molding and other PET product manufacturers.

Shini's PET system has great technology to meet various application needs.

- Bottle and blank making
- Thermal forming film and sheet making
- Strapping tape and industrial yarns making
- Tubing making
- Waste recovery making