

## "All-in-One" Compact Dryers

The SCD series "All-in-One" compact dryers combine drying, dehumidifying, and two-stage conveying functions in a single unit. They are suitable for drying hygroscopic engineering plastics, such as PA, PC, PBT, PET, etc. A honeycomb rotor is used in the dehumidifying section.

### Features :

- SCD series compact dryers are equipped with honeycomb rotor for dehumidifying. They have two kinds of design: fully-integral and semi-integral, depending on the size.
- Suitable for drying hygroscopic engineering plastics such as PA, PC, PBT, PET, etc. Either H4 or H5 honeycomb-rotor can be specified according to requirement.
- Integration of dehumidifying, drying, and two-stage conveying functions in a single unit. Three-stage conveying is also available as an option.
- Material processing is controlled via microprocessor as standard with touch screen PLC control as an option for centralised and automatic operation.
- Dew-point monitor can be fitted to monitor and display dry air dew-point.
- Insulated drying hopper features dry air down-blowing and cyclone exhaust design. This improves drying efficiency and reduces energy consumption whilst maintaining a steady drying effect.
- Compact in size for ease of movement and space saving.
- Closed-loop conveying system eliminates the possibility of moisture re-absorption during material conveying.
- Equipped with pneumatic shut-off valve to ensure no material remains in the material line after each loading cycle.
- The dehumidifying section of SCD series features two condensers to ensure a low return air temperature and low dew-point.



SCD-160U/120H5-LC-D



SCD-450U/300H5-LC-D

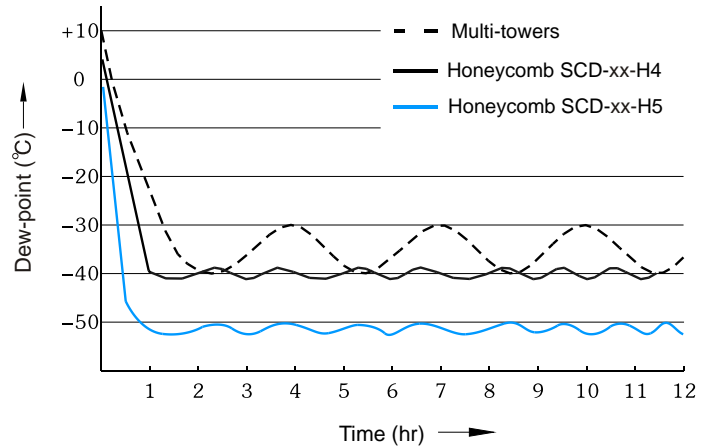
## Applications

This "All-in-One" Compact Dryer has integrated drying, dehumidifying, and two-stage conveying functions into a single unit. It is suitable for drying hygroscopic engineering plastics, such as PA, PC, PBT, PET, etc. A honeycomb rotor is used in the dehumidifying section, with a choice of two types of rotor:

- Models H4, under ideal condition, can supply dehumidified dry air with a dew-point of  $-40^{\circ}\text{C}$ .
- Models H5, under ideal condition, can supply dehumidified dry air with a dew-point of  $-50^{\circ}\text{C}$ .

## Dew-point Comparison

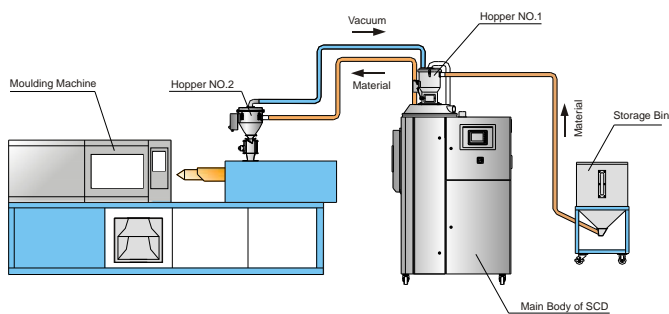
Dew-point ( $^{\circ}\text{C}$ )	Relative Humidity(%)	Moisture Content	
		PPM	%
+20	100	23,072	2.307
+10	52.50	12,117	1.212
0	26.10	6,027	0.603
-10	11.20	2,574	0.257
-20	4.40	1,025	0.103
-30	1.60	378	0.038
-40	0.60	128	0.013
-50	0.20	39	0.004



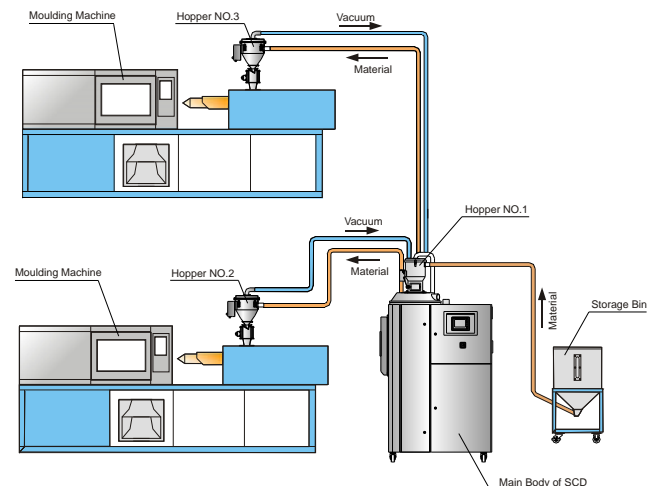
## Optional Features

- Under ideal condition, models H5 can supply dehumidified dry air with a dew-point of  $-50^{\circ}\text{C}$ .
- Three-stage conveying functions to serve two moulding machines.
- LCD touch screen PLC controller.
- Dew-point monitor to monitor and display the dry air dew-point.
- Mirror polished treatment on all material contact surfaces.
- High efficiency particulate(HEPA) air filter.

### For serving one machine: Two-stage conveying system (standard feature)



### For serving two machines: Three-stage conveying system (optional feature)



## Operator panel for standard control



Standard panel without dew-point monitor



Optional panel with dew-point monitor

## Illustrations for optional touch screen



Drying process screen



Conveying process screen

## Specifications (fully-integral design)

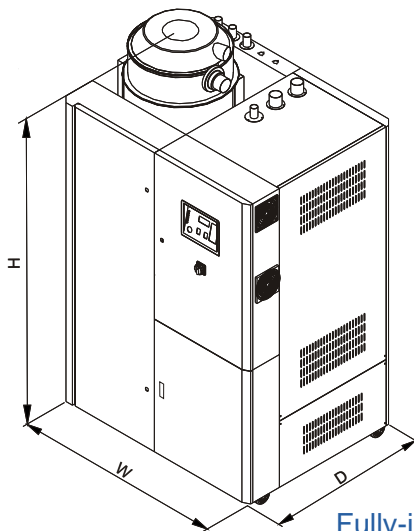
Model	SCD- 20U/30H	40U/30H	40U/50H	80U/50H	120U/80H	160U/80H	160U/120H	230U/120H	230U/150H	300U/150H	300U/200H	450U/200H
<b>Drying System</b>												
Drying Hopper Capacity (L)	20	40	40	80	120	160	160	230	230	300	300	450
Process Heater Power (kW)	3	3	3.9	3.9	6	6	6	6	7.2	7.2	12	12
Process Blower Power (kW) (50/60Hz)	0.2 / 0.4	0.2 / 0.4	0.4 / 0.48	0.4 / 0.48	0.75 / 0.9	0.75 / 0.9	1.5 / 1.8	1.5 / 1.8	1.5 / 1.8	1.5 / 1.8	1.5 / 1.8	1.5 / 1.8
<b>Dehumidifying System</b>												
Dry Air Capacity (m <sup>3</sup> /hr) (50/60Hz)	30 / 36	30 / 36	50 / 60	50 / 60	80 / 96	80 / 96	120 / 130	120 / 130	150 / 160	150 / 160	200 / 210	200 / 210
Regenerating Heater Power (kW)	3	3	3	3	3.5	3.5	3.5	3.5	4	4	5.4	5.4
Regenerating Blower Power (kW) (50/60Hz)	0.2 / 0.4	0.2 / 0.4	0.2 / 0.4	0.2 / 0.4	0.2 / 0.4	0.2 / 0.4	0.2 / 0.4	0.2 / 0.4	0.4 / 0.48	0.4 / 0.48	0.4 / 0.48	0.4 / 0.48
<b>Conveying System</b>												
Conveying Blower Power (kW) (50/60Hz)	0.75 / 0.9	0.75 / 0.9	0.75 / 0.9	0.75 / 0.9	0.75 / 0.9	0.75 / 0.9	0.75 / 0.9	0.75 / 0.9	1.5 / 1.9	1.5 / 1.9	1.5 / 1.9	1.5 / 1.9
Dia. of Conveying Hose (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 Hopper (L)	3	3	3	6	6	6	6	12	12	12	12	12
SHR-U Hopper (L)	3	3	3	6	6	6	6	12	12	12	12	12
<b>Dimensions</b>												
H (mm)	1490	1550	1550	1800	1990	1860	1860	2070	2220	2160	2160	2570
W (mm)	1000	1040	1040	1105	1105	1190	1190	1190	1425	1460	1460	1460
D (mm)	875	875	875	875	875	875	875	875	1015	1020	1020	1020
Weight (kg)	280	345	345	330	376	380	395	415	435	555	575	585

# Specifications (semi-integral design)

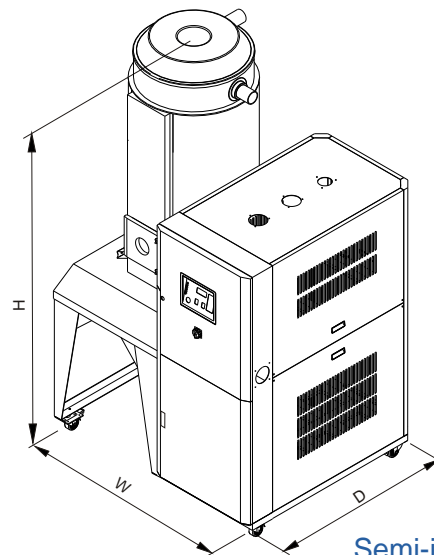
Model	SCD-	450U/300H	600U/300H	600U/400H	750U/400H	750U/500H	900U/500H	900U/700H	1200U/700H
<b>Drying system</b>									
Drying hopper capacity (L)		450	600	600	750	750	900	900	1200
Process heater power (kw)		15	15	18	18	21	21	24	24
Process blower power (kw) (50/60Hz)		2.4 / 2.9	2.4 / 2.9	3.4 / 3.7	3.4 / 3.7	5.5* / 6.3*	5.5* / 6.3*	5.5 / 6.3	5.5 / 6.3
<b>Dehumidifying system</b>									
Dry air capacity (M <sup>3</sup> /hr) (50/60Hz)		300 / 340	300 / 340	420 / 450	420 / 450	520 / 550	520 / 550	690 / 720	690 / 720
Regenerating heater power (kw)		7.2	7.2	7.2	7.2	10	10	10	10
Regenerating blower power (kw) (50/60Hz)		0.75 / 1.1	0.75 / 1.1	0.75 / 1.1	0.75 / 1.1	1.5 / 1.9	1.5 / 1.9	1.5 / 1.9	1.5 / 1.9
<b>Conveying system</b>									
Conveying blower power (kw) (50/60Hz)		1.5 / 1.9	1.5 / 1.9	1.5 / 1.9	1.5 / 1.9	1.5 / 1.9	2.2 / 2.6	2.2 / 2.6	2.2 / 2.6
Dia. of conveying hose (inch)		1.5	1.5	1.5	1.5	1.5	2	2	2
SHR-U-E Hopper (L)		12	12	12	12	12	24	24	24
SHR-U Hopper (L)		12	12	12	12	12	24	24	24
<b>Dimensions</b>									
H (mm)		2480	2380	2380	2610	2760	2640	2640	3070
W (mm)		1490	1745	1745	1745	2140	2140	2140	2140
D (mm)		1255	1255	1255	1255	1380	1380	1380	1380
Weight (kg)		560	600	640	690	710	820	850	900

Remark: 1) "\*" stands for by-pass valve fixed at blower outlet.  
 2) Power supply: 3  $\Phi$ , 230/400/460/575V, 50/60Hz.

We reserve the right to change specifications without prior notice.



Fully-integral design



Semi-integral design

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