

"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-D

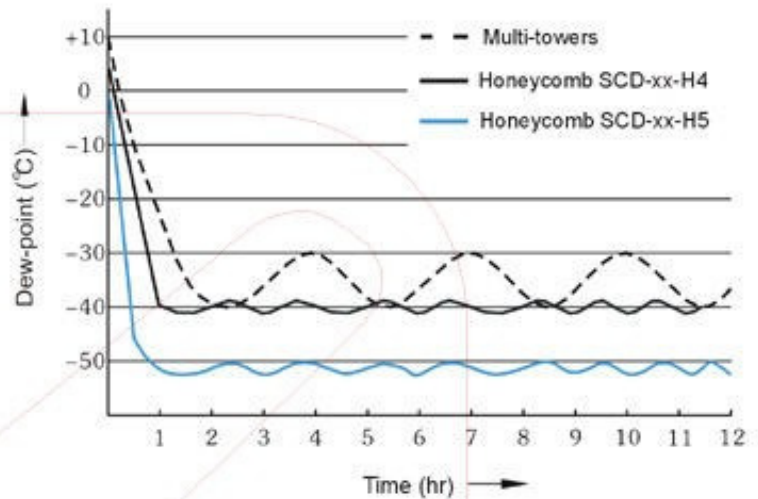
Applications

This "All-in-One" Compact Dryer has integrated drying, dehumidifying, and two-stage conveying functions in 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 conditions, can supply dehumidified dry air with a dew-point of -40°C .
- Models H5, under ideal conditions, can supply dehumidified dry air with a dew-point of -50°C .

Dew-point Comparison

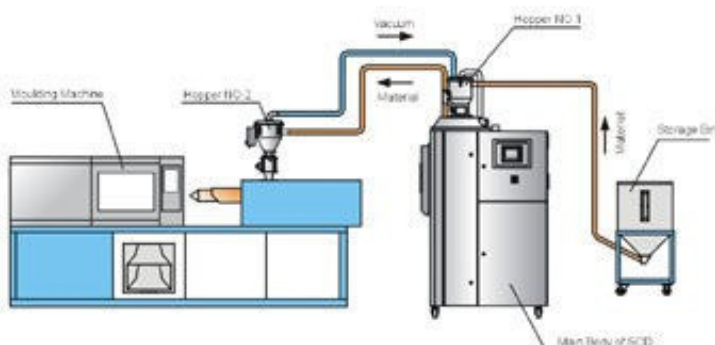
Dew-point ($^{\circ}\text{C}$)	Relative Humidity(%)	Moisture Content	
		PPM	%
+20	100	23,072	2.307
+10	52.50	12,117	1.212
0	26.10	6,027	0.603
-10	11.20	2,574	0.257
-20	4.40	1,025	0.103
-30	1.60	378	0.038
-40	0.60	128	0.013
-50	0.20	39	0.004



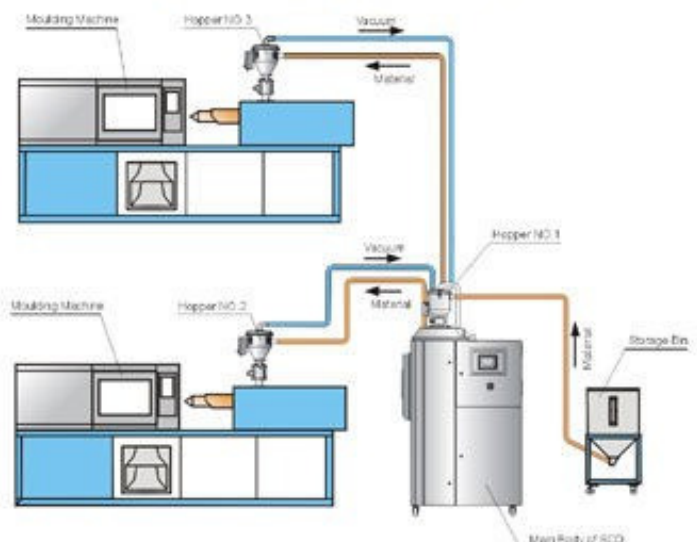
Optional Features

- Under ideal conditions, models H5 can supply dehumidified dry air with a dew-point of -50°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

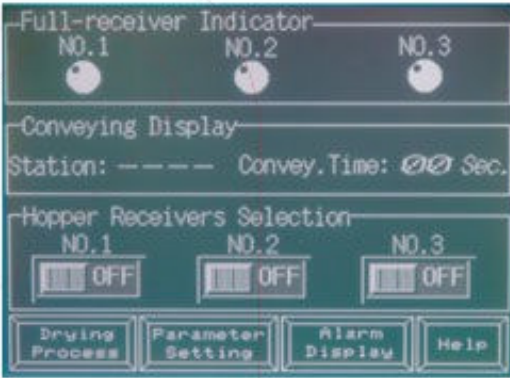


Optional panel with dew-point monitor

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
Drying system													
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
Dehumidifying system													
Dry air capacity (m³/hr) (50/60Hz)		32 / 40	32 / 40	55 / 65	55 / 65	85 / 90	85 / 90	125 / 135	125 / 135	152 / 165	152 / 165	205 / 220	205 / 220
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
Conveying system													
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	12	12	12	12	12	12	12
SHR-U Hopper (L)		6	6	6	6	6	12	12	12	12	12	12	12
Dimensions													
H (mm)		1550	1550	1550	1550	1900	1900	1900	1900	2300	2300	2300	2300
W (mm)		950	950	950	950	1050	1050	1050	1050	1680	1680	1680	1680
D (mm)		875	875	875	875	875	875	875	875	1300	1300	1300	1300
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
Drying system									
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)		2.2 / 2.6	2.2 / 2.6	3.4 / 3.7	3.4 / 3.7	5.5* / 6.3*	5.5* / 6.3*	5.5 / 6.3	5.5 / 6.3
Dehumidifying system									
Dry air capacity (M³/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
Conveying system									
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
Dimensions									
H (mm)		2470	2380	2380	2660	2660	2590	2590	3050
W (mm)		1490	1750	1750	1750	1950	2130	2130	2130
D (mm)		1260	1260	1260	1260	1380	1380	1380	1380
Weight (kg)		580	600	640	690	710	820	850	900

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

We reserve the right to change specifications without prior notice.

