



Honeycomb Dehumidifier

SD-40H



Refer carefully to the manual before operation.

SD-H Series

■ Coding Principle

SD-xxxH-xxx

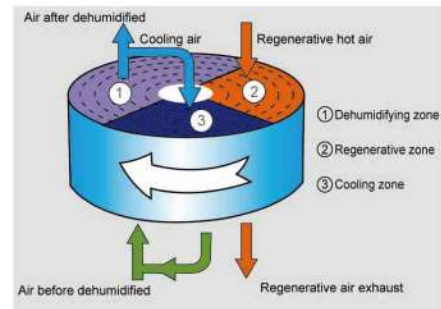
Options

Air Flow (m^3/hr)
H: Honeycomb Rotor

Shini Dehumidifier

■ 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.



Honeycomb Rotor
Working Principle



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 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

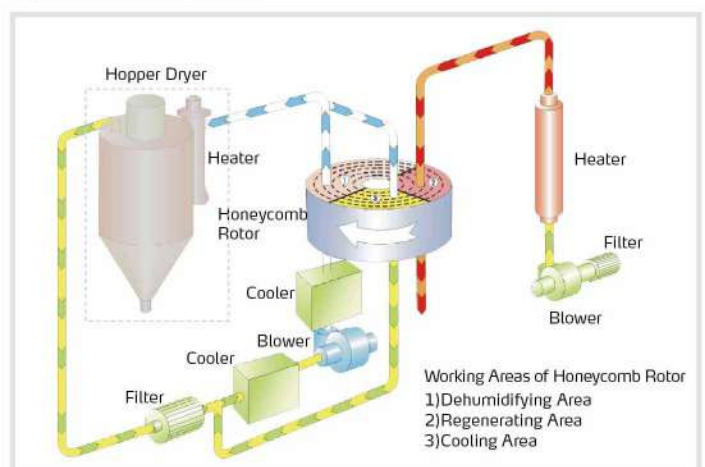


3D animation
(Tencent)



3D animation
(Youtube)

System Flow Chart



■ Options

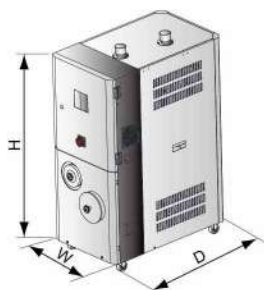
- For SD-H, controllable drying heater is optional, add "C" at the end of the model code. (Only Applicable for SD-1000H~4000H)
- For SD-H, inbuilt drying heater is optional, add "PHC" at the end of the model code. (Only applicable for SD-40H~700H)
- For SD-H, intelligent airflow regulating function is 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 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, 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. It is applicable for (SD-40H~120H).
- Upgraded to PLC & touch panel, add "LC" at the end of the model code.

SD-H Series

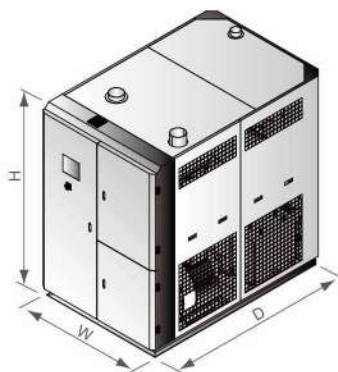
■ Drying Capacity

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

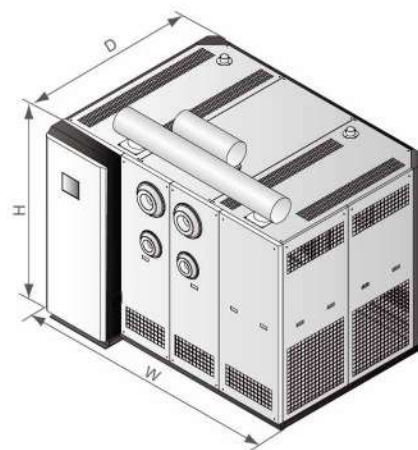
■ Outline Drawings



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)		0.12/0.12	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)		0.18/0.2	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 ³ /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
		inch	49.6	53.5	53.5	61.4	68.7	76.2	84.4	81.1	81.1	88.2
	W	mm	510	530	530	660	700	900	1300	1410	1410	2035
		inch	20	20.9	20.9	26	27.6	35.4	51.2	55.5	55.5	80.1
	D	mm	860	820	820	1050	1255	1380	1550	2150	2150	2160
		inch	33.9	32.3	32.3	41.3	49.4	54.3	61	84.6	84.6	85
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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