CHD-U Series



100% Corrosion-Free Stainless Steel

Hot Air Dryer

Unique down-blowing design ensures hot air is evenly distributed.

Comet's CHD-U series corrosion free stainless steel hot air hopper dryers can be directly mounted onto a molding machine for quick, space-saving drying or mounted to a floor stand with a take-off box. This dryer series is ideally suited to use with honeycomb matrix dehumidifiers to remove surface moisture from non-hygroscopic resins.

Model capacities range from 25 to 1,850 lbs. There are multiple optional accessories to meet different production demands, such as hot air recycler, magnetic base, and maintenance ladder, etc.

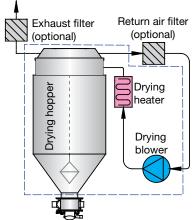
Standard Features

- PID temperature control with LCD display and RS485 communication features accurate temperature control, digital display, and auto start/stop functions.
- Unique, down-blowing design ensures hot air is evenly distributed to maintain a steady temperature in the hopper and increase drying efficiency.
- Double layer insulated structure ensures a uniform temperature with less heat loss.
- All material contact surfaces are made of stainless steel.
- Over-heat protection ensures reliable operation.
- 7-day automatic timer and sight glass window.
- Models CHD-80U and above have a material cleanout door ensuring quick cleanup time and easy maintenance.
- Models CHD-450U and below are equipped with an aluminium base.
- Models CHD-600U~750U are equipped with an aluminum magnetic base.
- Models CHD-900U and above are equipped with a manual butterfly valve and floor stand.



Working Principle

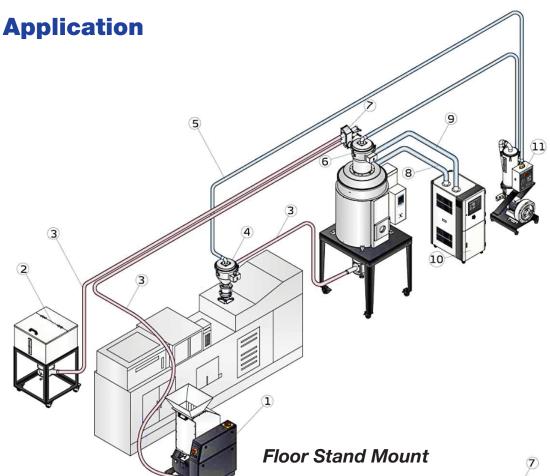
During the drying process, ambient air is drawn through a filter into a heater/blower unit then heated. The heater/blower is mounted on a two-layered insulated drying hopper. Hot air is circulated down through



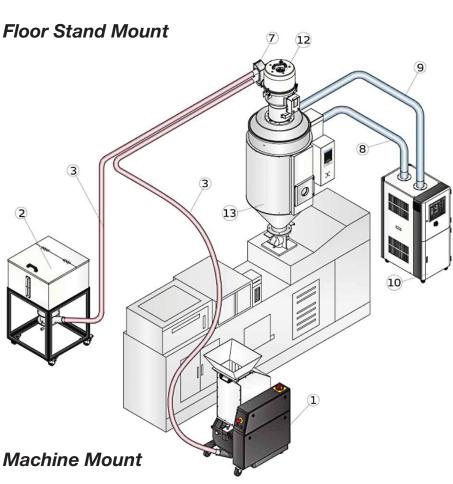
Shut-off suction box (optional)

the material in the hopper, carrying surface moisture up and out the top of the hopper. The CHD-U can be mounted directly onto the feed-throat of a molding machine eliminating the possibility of moisture re-absorption contaminating the resin. An optional, closed-loop hot air recycler can filter and recycle the air from the air outlet.

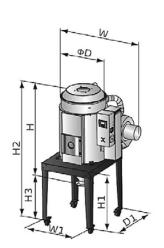
CHD-U Series

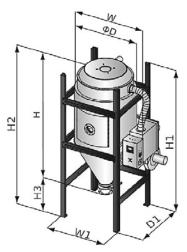


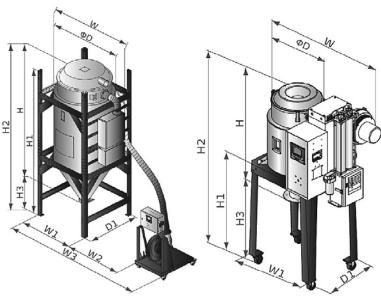
- 1. Low Speed Granulator
- 2. Material Receptacle
- 3. Material Pipe
- 4. Photosensor Hopper Receiver
- 5. Vacuum Pipe
- 6. Vacuum Hopper Receiver
- 7. Proportioning Valve
- 8. Dehumidifying Air
- 9. Return Air
- 10. Honeycomb Dehumidifier
- 11. Main Vacuum Unit
- 12. Auto Loader
- 13. Hopper Dryer



Outline Drawings







CHD-20U ~ 750U

CHD-900U ~ 1200U

CHD-1500U ~ 8000U

CHD-U-HD

Specifications

Model	Heater Power (kW)	Blower (kW)	Loading Capacity (L)	Dimensions H x W x D (inch)	Floor Stand H1 x W1 x W2 x W3 x D1 (inch)	Height H2 (inch)	Height H3 (inch)	Air Inlet Pipe Dia. (inch)	Air Outlet Pipe Dia. (inch)	Weight (lbs)
CHD-20U	2.2	0.05	20	27 x 30 x 16	31 x 18 x - x - 22	50	22	2	1.5	88
CHD-40U (-HD)	3	0.12	40	30 x 30 x 16	31 x 23 x – x – x 18	51	21			154
CHD-80U (-HD)	3.9	0.12	80	37 x 34 x 19	33 x 29 x - x - x 22	58		2.5	2	187
CHD-120U (-HD)	3.9	0.12	120	47 x 34 x 19	33 x 29 x - x - x 22	69	22			220
CHD-230U (-HD)	6	0.12	230	58 x 34 x 23	36 x 26 x – x – x 31	85	22	3	2.5	253
CHD-160U	6	0.12	160	47 x 34 x 23	36 x 26 x - x - x 31	72	22			198
CHD-300U	12	0.18	300	56 x 40 x 27	38 x 31 x - x - x 37	82	22			287
CHD-450U	12	0.18	450	72 x 40 x 27	38 x 31 x - x - x 37	96	22			353
CHD-600U	18	0.55	600	72 x 50 x 36	45 x 40 x – x – x 47	97	24	4	4	441
CHD-750U	18	0.55	750	82 x 49 x 36	45 x 39 x – x – x 47	109	24			485
CHD-900U	18	0.55	900	92 x 56 x 41	109 x 45 x – x – x 45	109	17			904
CHD-1200U	24	1.1	1200	109 x 56 x 41	118 x 45 x – x – x 45	126	17			1,235
CHD-1500U	32	3.7	1500	122 x 65 x 49	137 x 53 x 16 x 79 x 53	137	14	- 5	5	1,510
CHD-2000U	32	3.7	2000	145 x 61 x 49	137 x 53 x 16 x 79 x 53	152	14			1,698
CHD-2500U	58	5.5	2500	147 x 71 x 55	157 x 58 x 16 x 89 x 58	158	12	6	6	1,764
CHD-3000U	58	5.5	3000	163 x 71 x 55	173 x 58 x 16 x 89 x 58	173	12			1,984
CHD-3500U	64	7.5	3500	179 x 71 x 55	189 x 58 x 16 x 89 x 58	189	12			2,227
CHD-4000U	64	7.5	4000	165 x 79 x 63	179 x 66 x 16 x 97 x 66	183	16	- 8	8	2,557
CHD-5000U	80	11	5000	188 x 79 x 63	203 x 66 x 16 x 100 x 66	206	15			3,064
CHD-6000U	96	15	6000	178 x 87 x 71	192 x 76 x 16 x 109 x 76	194	14			3,373
CHD-7000U	112	18.5	7000	215 x 89 x 71	228 x 76 x 16 x 111 x 76	230	15			3,825
CHD-8000U	128	22	8000	237 x 89 x 71	221 x 76 x 16 x 111 x 76	253	15	10	10	4,012

Note: (-HD) = Optional heatless regenerative air dryer (see Optional Accessories)

We reserve the right to change specifications without prior notice.

¹⁾ Blower included in net weight (floor stand not included)

²⁾ Power supply: 3φ , 230 / 400 / 460 / 575VAC, 50 / 60Hz

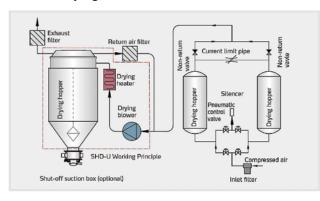
CHD-U Series



Optional Accessories

Heatless Regenerative Air Dryer (-HD)

Models CHD-U-HD can be equipped with a heatless regenerative air dryer providing lower dewpoint air at room temperature and speed up material drying.



Access Safety Ladder

Available for models CHD-1500U and above.



Captures metal scraps in the material to prevent damage to the plasticizing screw.





Blower Inlet Filters

Filters the air at the blower inlet to improve production quality.



Hot Air Recyclers

The built-inside filter maintains clean air to ensure production quality while saving up to 40% energy costs.



Exhaust Air Filters

Can filter 100% of the dust contained in the air from the dryer to avoid pollution.



Magnetic Base

Works with the dryer to capture metal scrap preventing contamination and protects the screw.



Floor Stands

Easily transport the main body of the drying hopper out of the molding room.



Floor Stand (CHD-20U~750U)



Floor Stand (CHD-900U~8000U)

All models can be polished on the inside.



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