

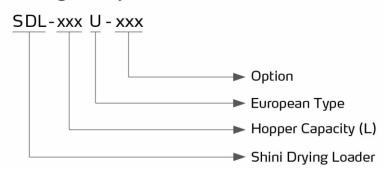
### **Drying Loader**

SDL-300U



## SDL-U Series

#### Coding Principle





**Drying Control** 

#### Features

- SDL -U integrates two-stage conveying and drying into one unit.
- Microcomputer and P.I.D. control system can accurately control the drying temperature.
- Occupied less with easy movement that can shift the machines randomly;
- Material contacted surfaces are made of stainless steel to ensure that materials are free from contamination.
- Full-function alarm system that can immediately respond to failure problems.
- Standard hot air recycler saves energy without hot air and dust discharge to protect the environment.
- Standard cut-off valve suction box formed hermitic cycle loop, to avoid material moisture regain due to ambient air, and ensure that there is no residue in the pipe.
- Double-layer heat insulation hopper ensures uniform temperature and less heat loss.
- One-week timer function
- Highest drying temperature that can reach 160℃.
- Touchable HMI that for easy operation and study.



Loading Control



SDL-230U-HD

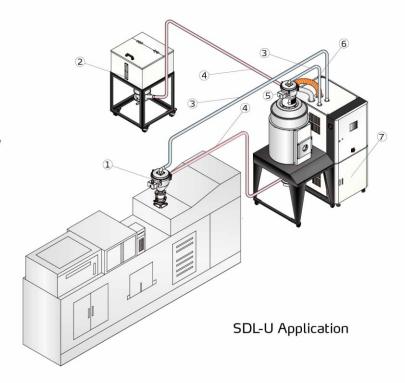
#### ■ Application

SDL-U integrates two-stage conveying and drying functions into one unit, which can realize efficient drying of non-hygroscopic materials such as PP and PS. The two-stage conveying achieves fully automatic transportation of materials from material storage tank to drying hopper, drying hopper to IMM, saving man power and avoid contamination. The model of SDL-U-HD with HAD are optional to achieve the drying effect better than common dryer. One-week timer achieves machine timing function, especially suitable for pre-drying applications, which can be used to pre dry materials before starting the machine as to improve production efficiency.



#### Application

- 1. Photosensor hopper
- 2. Material tank
- 3. Air suction pipe
- 4. Material suction pipe
- 5. Vacuum hopper
- 6. Return air
- 7. SDL-U



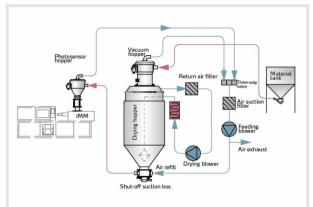
#### Working Principle

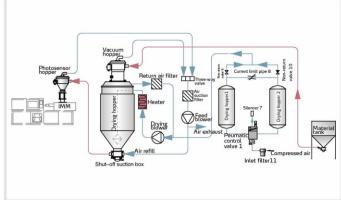
Drying: based on the principle of water high temperature gasification, moisture of material would be blown away by high pressure air from blower after being high temperature gasified. A part of air with moisture discharges through air outlet filter, most part of air is recyclable after being filtered through return air pipe.

Conveying: suction force of high pressure blower makes a vacuum inside hopper also produces differential pressure between hopper and outer space. With the common force of differential pressure and continuous suction, materials and air mixture will be sucked into hopper. Due to the filter block of hopper, materials will be accumulated in hopper and the air is expelled from air outlet.

Double-stage conveying is mainly accomplished by shifting three way valve of suction machine to control suction return circuit.

Heatless regeneration: The compressed air after passing through inlet filter 11 enters into dry barrel 1 (or dried barrels 2) through pneumatic control valve 1. Then it make absorption dry with desiccant bed layer, and later exist from non-return valve 9 (or 10), finally exhaust from the outlet to dry and purify air. A part of dry air (about 15%) enters dry barrel 2 (or dried barrel 1) through current limitation pipe 8 to blow and regenerate desiccants with saturated water, then air passes through pneumatic control valves 1 to exist out of muffler 7. Drying barrel 1, 2 work alternately to regenerate.

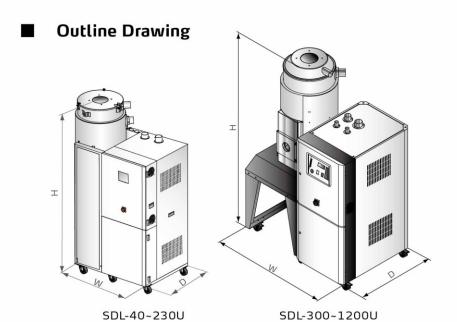




SDL-U Working Principle

SDL-U-HD Working Principle

# SDL-U Series



#### Hopper





SHR-U

SVL

#### Specifications

Model		SDL-	40U (-HD)	80U (-HD)	120U (-HD)	160U (-HD)	230U (-HD)	300U (-HD)	450U (-HD)	600U (-HD)	750U (-HD)	900U (-HD)	1200U (-HD)
Drying Blower (kW, 50/60Hz)		0.12/0.14	0.12/0.14	0.12/0.14	0.12/0.20	0.12/0.20	0.18/0.28	0.18/0.28	0.55/0.63	0.55/0.63	0.55/0.63	1.1/1.25	
Feed Blower (kW, 50/60Hz)			1.5/1.8	1.5/1.8	1.5/1.8	1.5/1.8	1.5/1.8	1.5/1.8	1.5/1.8	1.5/1.8	1.5/1.8	3.75/4.7	3.75/4.7
Heater (kW)			3	3.9	3.9	6	6	12	12	18	18	18	24
Air Inlet Pipe (inch)			2	2	2.5	3	3	3	3	4	4	4	4
Air Return Pipe (inch)			2	2	2.5	2.5	2.5	2.5	2.5	3	3	4	4
Feed Pipe (inch)			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2	2
Capacity		L	40	80	120	160	230	300	450	600	750	900	1200
		gal	10.6	21	31.7	42.3	60.8	79.3	118.9	158.5	198	237.8	317
SHR-U-E Hopper		L	3	6	6	6	12	12	12	12	12	24	24
		gal	0.79	1.59	1.59	1.59	3.17	3.17	3.17	3.17	3.17	6.34	6.34
SHR-U		L	3	6	6	6	12	12	12	12	12	24	24
Hopper		gal	0.79	1.59	1.59	1.59	3.17	3.17	3.17	3.17	3.17	6.34	6.34
Dimension	W	mm	734	734	734	734	734	1400	1400	1960	1960	1960	1960
		Inch	28.9	28.9	28.9	28.9	28.9	55.1	55.1	77.1	77.1	77.1	77.1
	D	mm	1051	1066	1125	1125	1223	1000	1000	1450	1450	1450	1450
		Inch	41.4	42	44.3	44.3	48.1	39.4	39.4	57.1	57.1	57.1	57.1
	н	mm	1672	1751	1957	2102	2102	2020	2420	2450	2720	2610	3030
		Inch	65.8	68.9	77	82.8	82.8	79.5	95.3	96.5	107	102.8	119.3
Weight —		kg	120	130	195	215	240	310	350	435	500	550	600
		Ib	265	287	430	474	529	683	772	959	1,102	1,213	1323

Notes: 1) 4~6 bar compressed air supply.

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

We reserve the right to change specifications without prior notice.