

## Drying Loader

SDL-300U

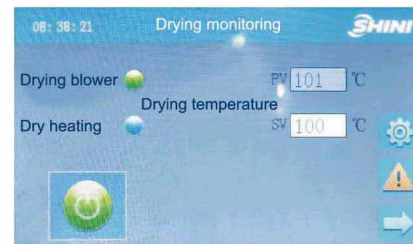
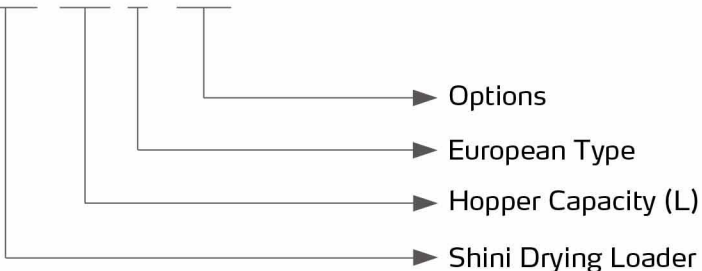


Refer carefully to the manual before operation.

# SDL-U Series

## ■ Coding Principle

SDL - xxx U - xxx



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.
- Portable design with standard footprint.
- 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 error.
- Standard hot air recycler reduces energy consumption without hot air and dust being discharged for cooler and cleaner working space.
- 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 material residue in the pipe.
- Double-layer heat insulation hopper ensures uniform temperature and less heat loss.
- 7 days timer function
- Highest drying temperature of 160°C.
- Touchable HMI that for easy operation and study.



Loading Control



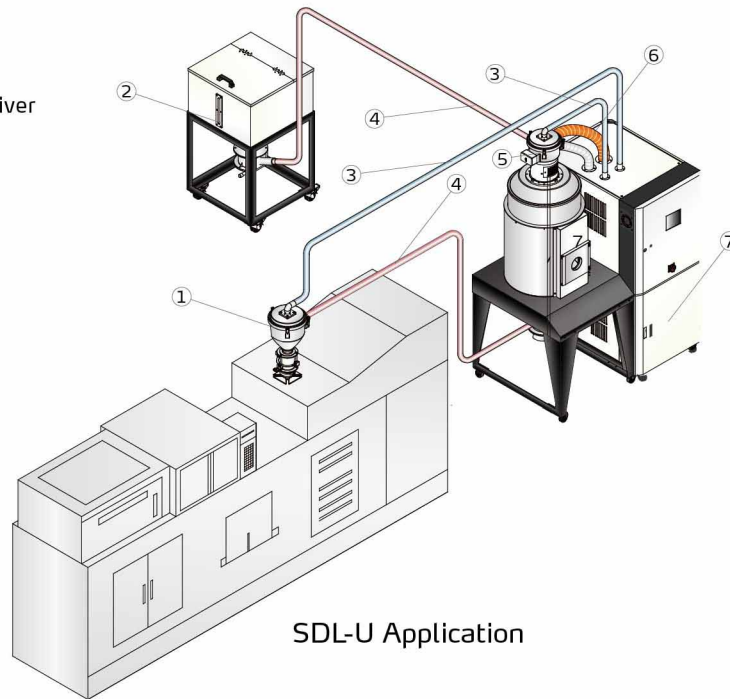
SDL-230U-HD

## ■ Application

SDL-U drying loader integrates two-stage conveying and drying into single unit, which can efficiently dry most of standard hygroscopic plastics, such as PS, PP, and other plastics. The two-stage conveying can realize fully automatic conveying materials from storage tank to drying hopper, and from drying hopper to the IMM, which saves human power and avoids contamination. SDL-U-HD drying loader is composed of the SDL-U and optional HAD twin tower compress air dryer to achieve better drying effect than ordinary dryers. The 7-days on/ off timer can reserve working hours in advance that is especially suitable for pre-drying occasions, which is applicable to pre-dry materials before IMM start as to increase productivity.

## Application

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

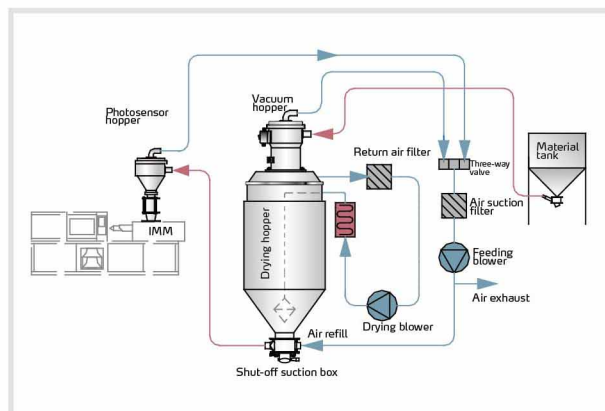


## Working Principle

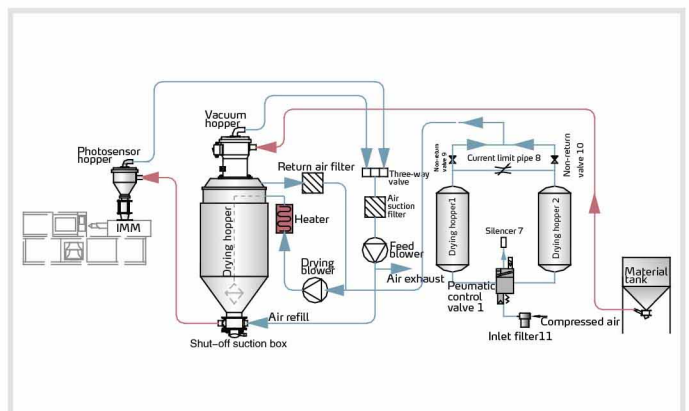
**Drying:** based on the principle of water high temperature gasification, moisture of material would be blown away by high pressure air from blower after being high temperature gasified. A part of air with moisture discharges through air outlet filter, most part of air is recyclable after being filtered 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 barrel1, 2 work alternately to regenerate.



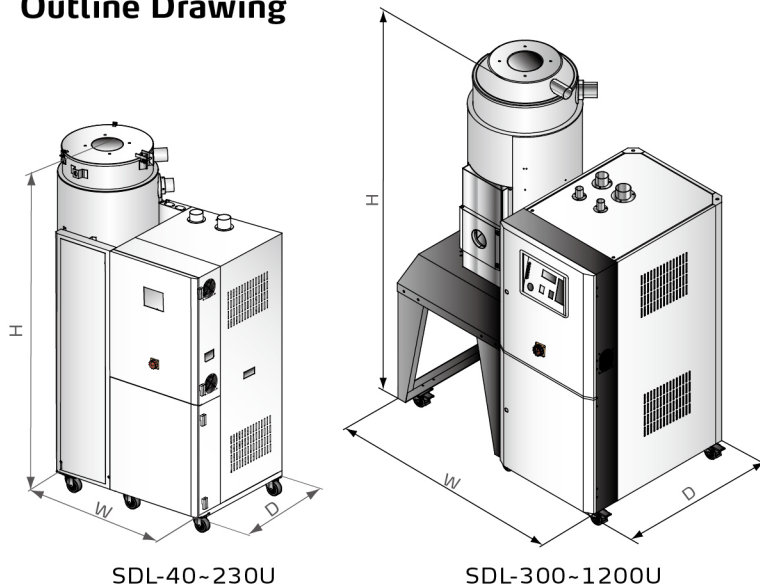
SDL-U Working Principle



SDL-U-HD Working Principle

# SDL-U Series

## Outline Drawing



## 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	
Drying Hopper 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	
SVL 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 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	
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	28.9	55.1	55.1	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
H	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	
	lb	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.