

Drying Loader

SDL-80U

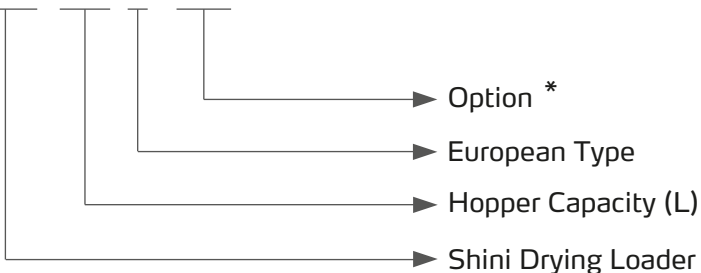


Refer carefully to this manual before operation.

SDL-U Series

Coding Principle

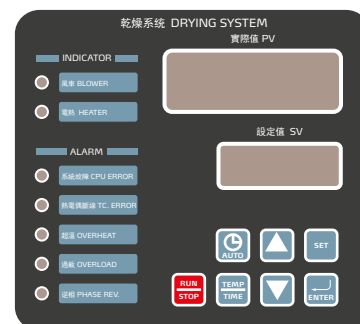
SDL - xxx U - xxx



Notes: *

P=For Polished Hopper Inside
HD=Heatless Dehumidifying

CE=CE Conformity



Drying Control

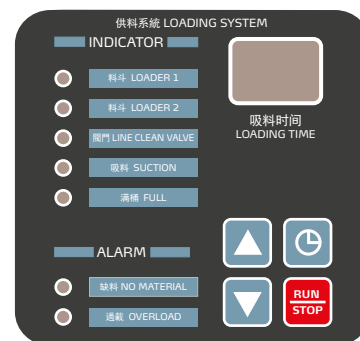
Features

Standard configuration

- SDL-U integrates auto-loading and drying into one unit, while SDL-U-HD integrates dehumidifying, drying and auto-loading into one unit.
- Adopts microprocessor and P.I.D. control system to accurately control drying temperature.
- Occupy a small place, making movement easily and replacing units conveniently. .
- Hoppers are made of stainless steel to avoid contamination.
- Full functional alarming system can immediately show faults.
- Closed-loop conveying device eliminates the possibility of moisture re-absorption during dried material conveying.
- Hot air recycling device is standard equipped, featuring energy saving, no exhaust of hot air and dust, and environmental protection.
- Standard shut-off suction box ensures no residual material after each loading process.
- European type heat insulated hopper ensures no heat loss and no material pollution.
- 7-day start/stop timer is standard equipment, which can be customized.

Accessory option

- HD heatless regenerative device is optional, can supply dry air with relative low dew-point to speed up material handling process.



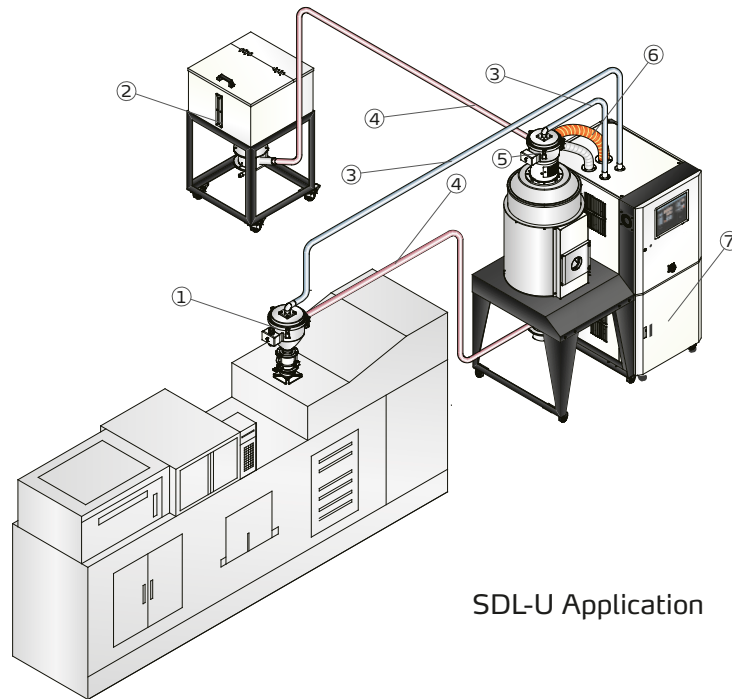
Loading Control



SDL-80U-HD

Application

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



SDL-U Application

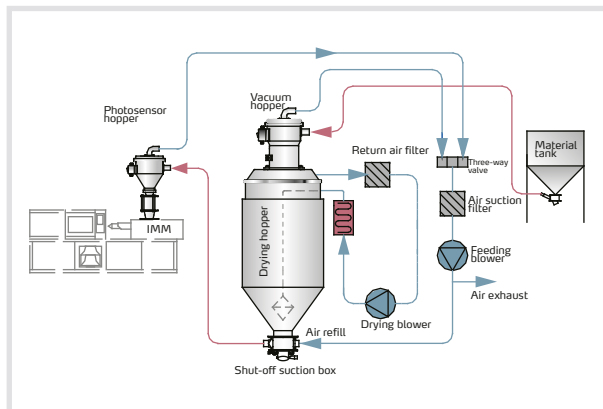
Working Principle

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.

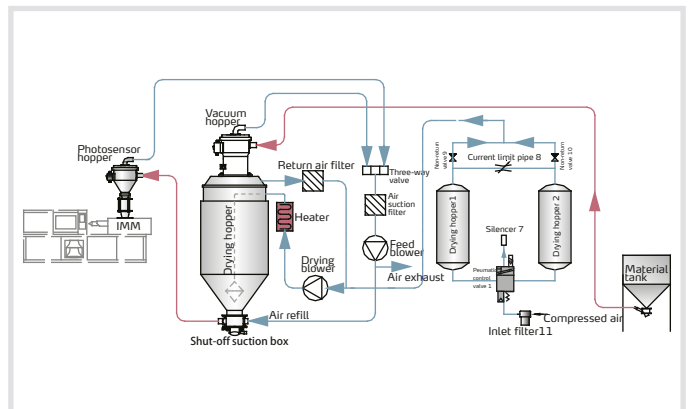
Conveying: suction force of high pressure blower makes a vacuum inside hopper also produces differential pressure between hopper and outer space. With the common force of differential pressure and continuous suction, materials and air mixture will be sucked into hopper. Due to the filter block of hopper,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



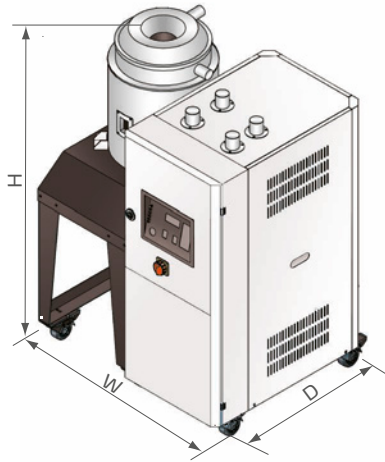
SDL-U Working Principle



SDL-U-HD Working Principle

SDL-U Series

Outline Drawing



To work with



SHR-U full stainless steel hopper receiver with mechanical flap and magnetic reed switch is used to install on the drying hopper for conveying raw material without any contamination.



SHR-U-E full stainless steel hopper receiver with glass-tube and adjustable level sensors is used to convey dried material directly to the feed port of the molding machine.

Specifications

| Model | SDL- | 20U (-HD) | 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) | | 0.05/0.058 | 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 | 1.5/1.8 | 2.4/3.0 | 2.4/3.0 |
| Heater (kW) | | 2.2 | 3 | 3.9 | 3.9 | 6 | 6 | 12 | 12 | 18 | 18 | 18 | 24 |
| Air Inlet Pipe (inch) | | 2 | 2 | 2.5 | 2.5 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| Air Return Pipe (inch) | | 1.5 | 1.5 | 2 | 2 | 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 | 1.5 | 2 | 2 |
| Drying Hopper Capacity (L) | | 20 | 40 | 80 | 120 | 160 | 230 | 300 | 450 | 600 | 750 | 900 | 1200 |
| SHR-U-E Hopper (L) | | 3 | 3 | 6 | 6 | 6 | 12 | 12 | 12 | 12 | 12 | 24 | 24 |
| SHR-U Hopper (L) | | 3 | 3 | 6 | 6 | 6 | 12 | 12 | 12 | 12 | 12 | 24 | 24 |
| Dimension (mm) | W | 1035 | 1035 | 1035 | 1035 | 1400 | 1400 | 1400 | 1400 | 1960 | 1960 | 1960 | 1960 |
| | D(D1) | 800/950 | 800/950 | 800/950 | 800/950 | 1000/1180 | 1000/1180 | 1000/1180 | 1000/1180 | 1450/1450 | 1450/1450 | 1450/1450 | 1450/1450 |
| | H | 1200 | 1300 | 1550 | 1800 | 1880 | 2160 | 2020 | 2420 | 2450 | 2720 | 2610 | 3030 |
| Weight (kg) | | 110 | 120 | 130 | 195 | 215 | 240 | 310 | 350 | 435 | 500 | 550 | 600 |

Notes: 1) For Heatless Dehumidifying Compact Dryers, add "HD" at model behind.

2) For hopper inside polished one, add "P" at model behind.

3) 4~6 bar compressed air supply.

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

We reserve the right to change specifications without prior notice.