

SAL-U Series

Self-contained Hopper Loader

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1. General Description



Read this manual carefully before operation to prevent personal injuries or damage of the machine.

SAL-U series self-contained hopper loader is suitable for conveying virgin material. It adopts stainless steel hopper to avoid material contamination. It looks nice, since its surface has been polished. In addition, it has a sound-proof blower cover to reduce noise produced in the process of operation. What's more, the remote operation has been realized by using a detachable controller, which is more convenient for clients to operate.

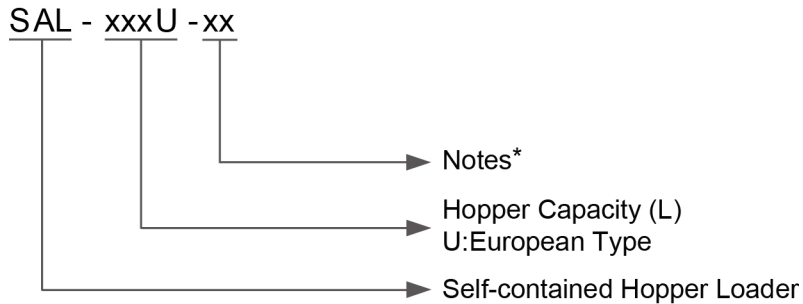


Model: SAL-1U



Model: SAL-6U

1.1 Coding Principle



Notes:*

A = Add Air Accumulator
CE = CE Conformity

P = For Polished Hopper Inside

1.2 Feature

- SAL-1U~SAL-12U (-E) adopts carbon brush, which brings fast rotating speed, large air quantity and compact appearance. It's easy for transportation and installation.
- Wire-control controller is convenient to use with automatic cleaning function.
- Equipped with motor soft start function and carbon brush consumption prompt (except for three-phase motor).
- Wire connection point for SPV-U.
- Hopper and base mount positions are adjustable.
- Differential pressure switch is employed and screener blockage alarm is available (Applicable to SAL-1U~12U(E)).
- SAL-U has a reed switch, while SAL-U-E adopts photosensor switch with high sensitivity and stable quality.
- All models equipped with hinged hopper lid that are connected by hinge for easy mesh cleaning.
- SAL-3U and above models have bases with diameters of Φ 275 mm, which can work with SHD-20U and models above as well as SHD-75 and models above.
- SAL-1U has an outer dia. Φ 200mm/ Φ 7.9 inch base, transitional flange must be mounted when this series works with SHD-20U/40U.
- All SAL-U series machines have cloth mesh filter and auto-spraying dust cleaner as standard equipments. For SAL-6U and above models, it is

available to select air accumulator to enhance purging and reduce manually clean time.

All maintenance work should be carried out by a person with technical training or corresponding professional experience. The manual contains instructions for both operating and maintenance. Chapter 6 contains maintenance instructions for service engineers. Other chapters contain instructions for the daily operator.

Any modifications of the machine must be approved by SHINI in order to avoid personal injury and damage to machine. We shall not be liable for any damage caused by unauthorized change of the machine.

Our company provides after-sales service. Should you have any problem during using the machine, please contact the company or the local vendor.

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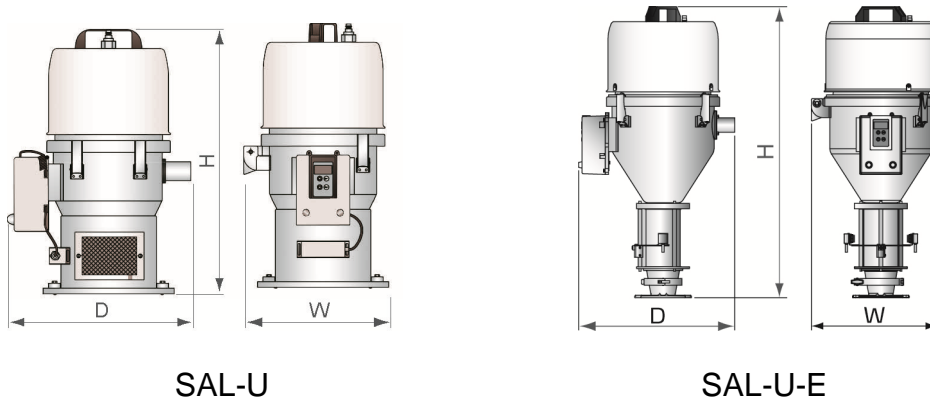
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Please refer to shini.com/en/worldwide.html for local vendor near you.

1.3 Technical Specifications



Picture 1-1: Dimensions

Table 1-1: Specifications

Model	SAL-1U	SAL-3U	SAL-6U	SAL-12U	SAL-1U-E	SAL-3U-E	SAL-6U-E	SAL-12U-E
Ver.	B	B	B	B	B	B	B	B
Blower Type	Carbon brush							
Blower Power (kW) (50/60Hz)	0.46 / 0.55	1.15 / 1.32			0.46 / 0.55	1.15 / 1.32		
Conveying Pipe Internal Dia. (inch)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Conveying Capacity (kg/hr)	30	200	300	400	30	200	300	400
Hopper Volume (L)	1	3	6	12	1.5	3	6	12
Power Supply (v)	1Φ, 115 / 230VAC, 50 / 60Hz							
Auto-Cleaning Function	Standard							
Air Accumulator	None		Optional		None		Optional	
Dimensions								
H (mm)	525	555	645	745	630	740	800	935
W (mm)	270	305	340	340	260	305	340	340
D (mm)	325	305	410	410	325	370	410	410
Weight (kg)	10	11	12	14	10	13	16	18

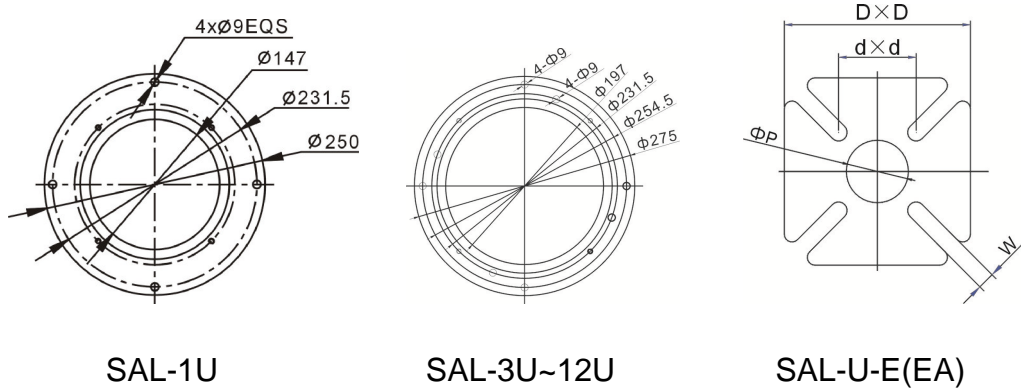
Note: 1) For hopper inside polished ones, add "P" at model behind.

2) Conveying capacity: Plastic material of bulk density 0.65kg/L, dia. 3~5 mm, vertical conveying height: 4m, horizontal conveying distance: 1m.

3) Compressed air supply: 4~6kgf/cm².

We reserve the right to change specifications without prior notice.

1.3.1 SAL-U Hopper Base Installation Size

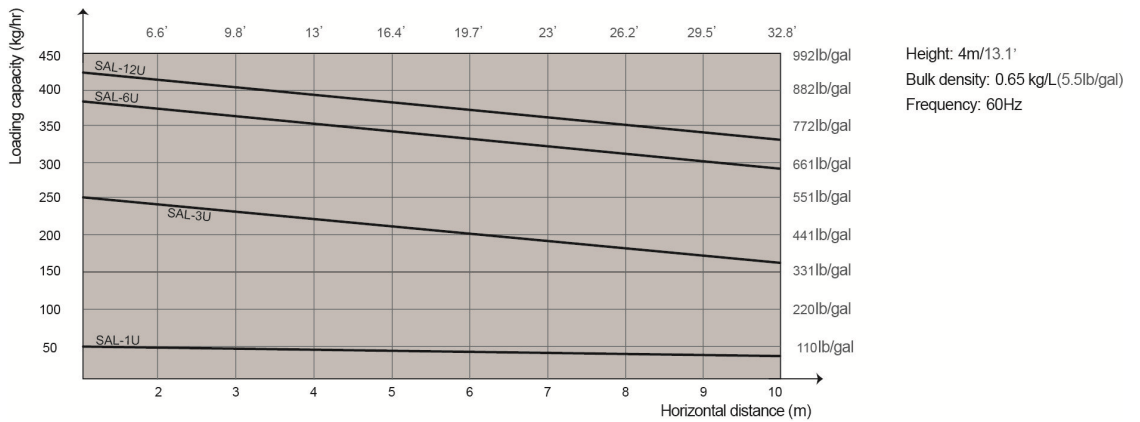


Picture 1-2: Hopper Base Installation Size

Table 1-2: Hopper Base Installation Size Table

Model	D×D	d×d	W	P
SAL-1U-E	120×120	50×50	11	$\phi 40$
SAL-3U-E	150×150	70×70	11	$\phi 55$
SAL-6U-E	150×150	70×70	11	$\phi 55$
SAL-6U-EA	150×150	70×70	11	$\phi 55$
SAL-12U-E	180×180	80×80	11	$\phi 55$
SAL-12U-EA	180×180	80×80	11	$\phi 55$

1.3.2 Loading Capacity



Picture 1-3: Loading Capacity

1.4 Safety Regulations

Strictly abide by the following safety regulations to prevent personal injuries and damage of equipment.

1.4.1 Safety Signs and Labels



All the electrical components should be installed by electrician.
Turn off the main switch and control switch during maintenance.



Warning! High voltage!

This sign should be attached on the cover of control box!



Warning! Caution!

Be careful when at the location or area where this sign appears!



Notice!

All screws of the electrical components in it are locked tight. No need to check it regularly.

1.5 Exemption Clause

The following statements clarify the responsibilities and regulations born by any buyer or user who purchases products and accessories from Shini (including employees and agents).

Shini is exempted from liability for any costs, fees, claims and losses caused by reasons below:

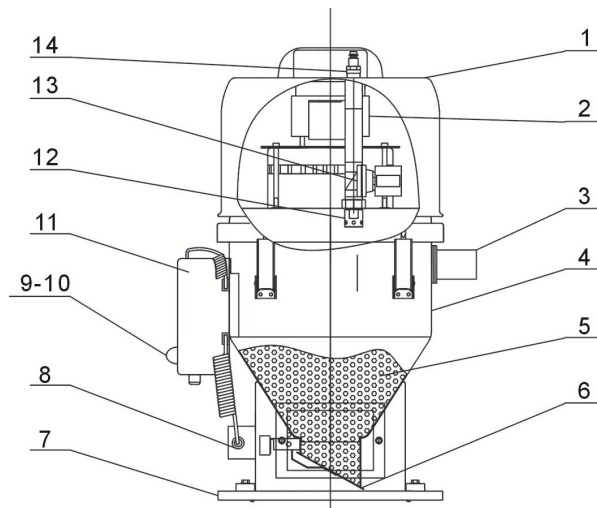
1. Any careless or man-made installations, operation and maintenances upon machines without referring to the Manual prior to machine using.
2. Any incidents beyond human controls, which include man-made vicious or deliberate damages or abnormal power, and machine faults caused by irresistible natural disasters including fire, flood, storm and earthquake.
3. Any operational actions that are not authorized by Shini upon equipment, including adding or replacing accessories, dismantling, delivering or repairing.
4. Employing consumables or oil media that are not appointed by Shini.

2. Structure Characteristics and Working Principle

2.1 Working Principle

SAL-U series of self-contained Hopper Loader is suitable for conveying plastic granules. It mainly conveys materials by running the blower to produce differential pressure inside the material hopper.

2.1.1 Working Principle Diagram of SAL-U-(CA)



Names of Parts:

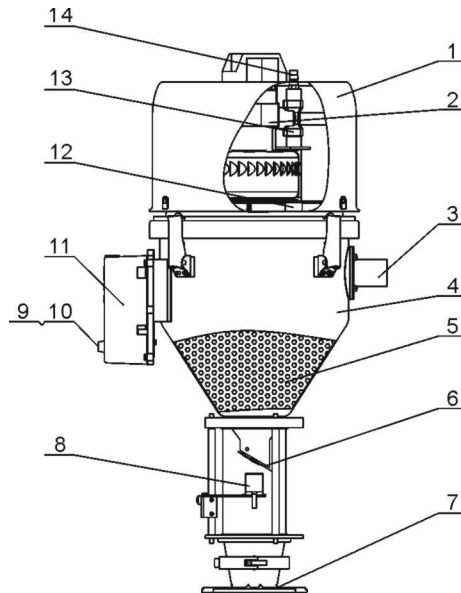
- | | | |
|-----------------------|------------------------------|------------------------|
| 1. Blower cover | 2. Blower | 3. Material inlet pipe |
| 4. Material hopper | 5. Raw material | 6. Non-return flap |
| 7. Hopper base | 8. Magnetic proximity switch | 9. Indicator (red) |
| 10. Indicator (green) | 11. Control box | 12. Auto dust cleaner |
| 13. Solenoid valve | 14. Air pipe connector | |

Picture 2-1: Working Principle of SAL-U-(CA)

After starting the machine, blower (2) begins to vacuumize material hopper (4). At the same time, the non-return flap (6) is closed. Materials in the storage bin will go into material hopper (4) from material inlet pipe (3) under differential pressure. When material conveying is completed, the blower will stop working. Materials will then fall down due to gravity. When magnetic proximity switch (8) detects that there is no material left in the hopper, the solenoid valve (13) will open. Thus, the air for cleaning will flow into auto dust cleaner (12) from the air pipe connector (14)

to clean the dust covering on the filter cloth and hopper inner wall. Then, the blower will start again. When lacking materials, the alarm light (9) on control box (11) will be on to sound an alarm. The equipment equipped with air accumulator can increase air storage capacity to reinforce the dedusting efficiency of the auto dust cleaner.

2.1.2 Working Principle of SAL-U-E(EA)



Names of Parts:

- | | | |
|-----------------------|------------------------|------------------------|
| 1. Blower cover | 2. Blower | 3. Material inlet pipe |
| 4. Material hopper | 5. Raw material | 6. Non-return flap |
| 7. Hopper base | 8. Photosensor | 9. Indicator (red) |
| 10. Indicator (green) | 11. Control box | 12. Auto dust cleaner |
| 13. Solenoid valve | 14. Air pipe connector | |

Picture 2-2: Working Principle of SAL-U-E(EA)

After starting the machine, blower (2) begins to vacuumize material hopper (4). At the same time, the non-return flap (6) is closed. Materials in the storage bin will go into material hopper (4) from material inlet pipe (3) under differential pressure. When material conveying is completed, the blower will stop working. Materials will then fall down due to gravity. When magnetic proximity switch (8) detects that there is no material left in the hopper, the solenoid valve (13) will open. Thus, the

air for cleaning will flow into auto dust cleaner (12) from the air pipe connector (14) to clean the dust covering on the filter cloth and hopper inner wall. Then, the blower will start again. When lacking materials, the alarm light (9) on control box (11) will be on to sound an alarm. The equipment equipped with air accumulator can increase air storage capacity to reinforce the dedusting efficiency of the auto dust cleaner.

2.2 Description of Electrical Components

2.2.1 Photoelectric Switch

- 1) It is applied to material conveying control and material shortage alarm for SAL-U-E series.
- 2) Mounted on photosensor fixing plate.



Picture 2-3: Photoelectric Switch

2.2.2 Magnetic Proximity Switch

- 1) It is applied to material conveying control and material shortage alarm for SAL-U-E series.
- 2) Mounted on photosensor fixing plate.



Picture 2-4: Magnetic Proximity Switch

2.3 Optional Accessories

2.3.1 Air Accumulator

Air accumulator is fixed on SAL-6U/12U-(CA) which can reinforce the auto cleaning.



Picture 2-5: Air Accumulator

Specification of Air Accumulator: HxD=170x76mm

Note: Please fix the air supply correctly. Air pressure not less than 4 bar.

3. Installation and Debugging

This series of models only could be applied in working environment with good ventilation.



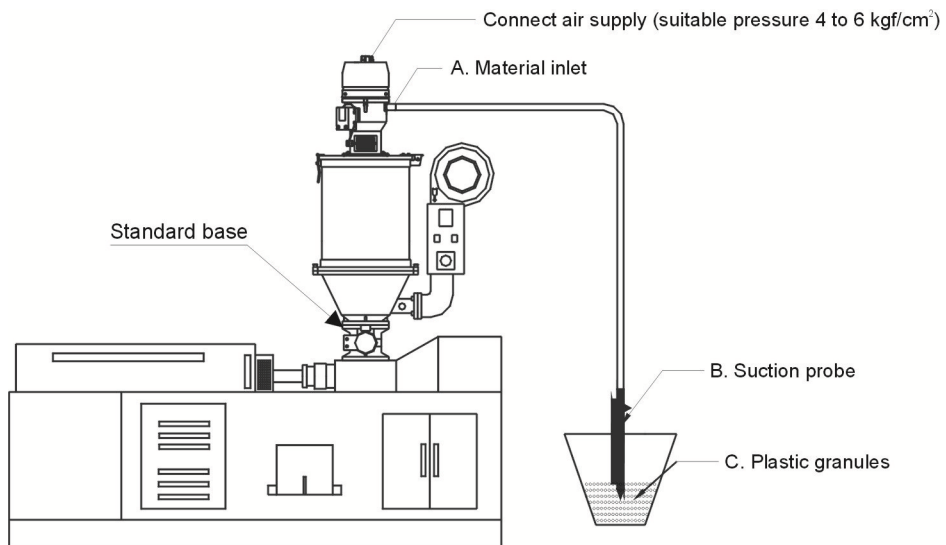
Notice!

Read this chapter carefully before installation of the machine. Install the machine by the following steps.

Power supply should be fixed by qualified technicians!

3.1 Install the equipment on dryers or molding machines.

3.1.1 Installation of SAL-U (-A)



Picture 3-1: Installation of SAL-U (-A)

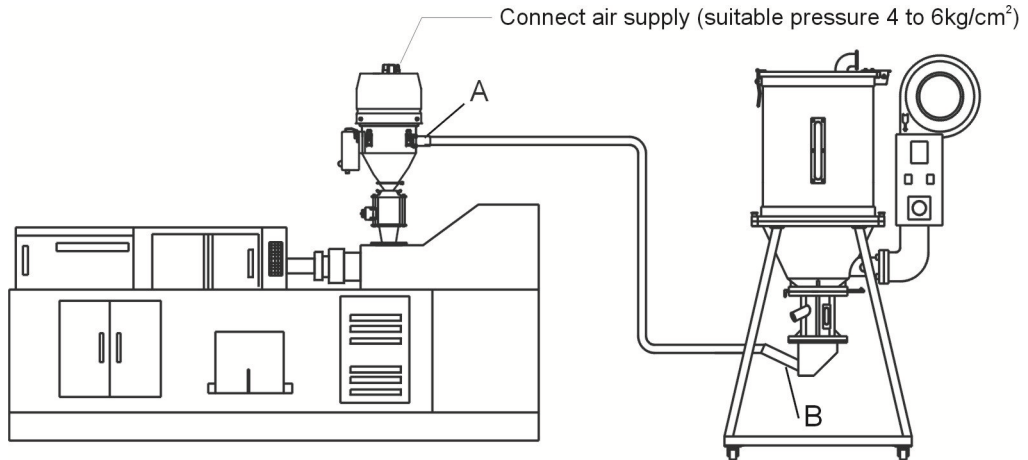
Install the Hopper Loader (SAL-U) on a hopper dryer (refer to the above drawing) by fastening the screws on the hopper base. Connect one end of the conveying pipe with material inlet (A) and the other end with suction pipe (B). Then insert the end with suction pipe B into the storage tank.

3.1.2 Power Supply of SAL-U (-A)

Connect SAL-1.5U / 3U / 6U / 12U(-A) with AC 1 Φ 230V, 50 Hz power supply and earth wire.

Note: Make sure that power supply is turned off before you connect the electrical wires.

3.1.3 Installation of SAL-U-E (A)



Picture 3-2: Installation of SAL-U-E (A)

Install the hopper loader (SAL-3U / 6U / 12U-E (A)) on the molding machine (refer to the above drawing) by fastening the 4 screws on the hopper base. Connect material inlet (A) with suction box (B) of the dryer. If equipped with optional air accumulator or cleaning function, please connect with air supply.

3.1.4 Power Supply of SAL-U-E(A)

Connect SAL-U-E (A) series of machines with AC1Φ, 230V, 50Hz power supply and earth wire.

Note: Make sure that power supply is turned off before you connect the electrical wires.


4. Application and Operation

4.1 Start / Stop the Machine

The start and stop of SAL-U series is controlled by start/stop switch on the control panel.




4.2 Keypad on the Control Panel

 Input values before selecting or canceling items.

 Input values before selecting or saving items. It is also used to clear the alarm when alarm occurs.

 Increase value.


 Decrease value.

 +  Stop the machine in 3 seconds. By then, the machine stop working and the screen doesn't display. Press  to resume operation.

Notice: The machine will restart if connecting the power supply again.



4.3 Parameters Setting



4.3.1 Enter Setting Mode of Layer One

Under normal operation, press  for about 1 second to enter [F.01] setting screen. Then the screen will alternately display [F.01] and the setting value respectively for 0.8 sec.

If [F.04] is set, the system will switch to [F.99]. The screen will alternately display [F.99] and the setting value respectively for 0.8 sec. Input correct password to enter [F.01].

4.3.2 Edit Parameters

Press  to increase parameter value. Hold  for about 1 second to quickly increase value to the maximum input.

Press  to decrease parameter value. Hold  for about 1 second to quickly decrease value to the minimum input.

Press **ENT** to confirm input setting and save input setting into the memory. It will switch to next item. If you did not change anything, press **ENT** to enter the next item.

Press **SET** to cancel input values and return to the setting screen. If you did not change anything, press **SET** to enter into next setting item.

4.3.3 Exit

Hold **SET** for 1 second to return to default display.

If no input for 20 seconds, it will return to default display without saving changes.

4.3.4 Layer One Function List

Para. code	Functions	Value Default/Range		Note
F.01	Blower suction time when lacking material. Action code: S.02	10 seconds	5-127 seconds	-
F.02	Blending time The blending time is set according to the material suction time. It is calculated by the following formula: material suction time×[F.02]%. Set 0 to disable the function.	0% no start	0-100%	-
F.03	Set blending times Means to start blending once every time when certain times of material suction is finished since startup. If set it to be 1, it means blending material after every time of material suction. If no require of blending, set [F.02] to be 0.	1 time	1-9 times	-
F.04	Password Layer One If [F.04] is not set as 0, the display will switch to [F.99] to require input of correct password to enter [F.01]. If the password is incorrect, the screen will return to default display. If it's set to be 0, it means turn off the password setting.	0	0-999	-

Note: The password can be set by yourself. Please contact us, if the equipment is lockup by password.

4.4 Function Setting

4.4.1 Enter Setting Mode

Start the machine, press **SET** for about 1 sec. to enter the initial setting mode. Hold both **SET** and **ENT** to enter parameter [F.05] in about 1 sec. The screen will alternately display [F.05] and the setting value respectively for 0.8 sec. If password [F.12] is set, the system will switch to [F.98]. The screen will alternately display [F.98] and the setting value respectively for 0.8 sec. Input correct password to enter [F.05].

4.4.2 Edit Parameters

Press **▲** to increase parameter value. Hold **▲** for about 1 second to quickly increase value to the maximum input.

Press **▼** to decrease parameter value. Hold **▼** for about 1 second to quickly decrease value to the minimum input.

Press **ENT** to confirm input setting and save input setting into the memory. It will switch to next item. If you did not change anything, press **ENT** to enter the next item.

Press **SET** to cancel input values and return to the setting screen. If you did not change anything, press **SET** to enter into next setting item.

4.4.3 Exit

Hold **SET** for 1 second to return to default display.

If no input for 20 seconds, it will return to default display without saving changes.

4.4.4 Layer Two Function List

Para. code	Functions	Value Default/Range		Note
F.05	Time delay The delayed time between material conveying cycles. Deafult 0: No time delay Action code: S.06	0 seconds	9990 seconds	10 secs. per unit
F.06	Auto Cleaning Duration Filter cleaning time before material suction Deafult 0: disable auto cleaning. Action code: S.01	3 seconds	0-99 seconds	-

F.07	<p style="text-align: center;">Auto Cleaning Duration</p> Filter cleaning time after material suction Deafult 0: disable auto cleaning Action code: S.03	3 seconds	0-99 seconds	-
Para. code	Functions	Value Default/Range		Note
F.C1	<p style="text-align: center;">Frequency of auto cleaning.</p> Cleaning once after several times of material suction.	3 seconds	1~99 seconds	-
F.08	<p style="text-align: center;">Check Discharging Time</p> Check the time for material discharge. If there is signal within the discharging time, enter into next action. If no signal within the discharging time, count it as one time of lacking material. If the times reach to the setting value [F.09], the machine will sound an alarm. Action code: S.04	10 seconds	0-99 seconds	-
F.09	<p style="text-align: center;">No material discharge alarm</p> Set times of no material falling into the material tank after which the machine sounds an alarm. Ways of clearing the alarm: 1. The alarm will be clear when the material tank receives material again. . 2. Press ENT will clear the alarm. 3. Restart the equipement. Action code: A.01	3	1-9	-
F.10	<p style="text-align: center;">Halt equipement for no material discharge</p> Set times of no material falling into the material tank after which the machine sounds an alarm and stop working. Ways of clearing the alarm: 1. Press ENT toclear the alarm. 2. Restart the equipement. Deafult 99: disable this function. Action code: A.04	99	[F.09]-99	-
F.11	<p style="text-align: center;">Delay setting after auto cleaning</p> If set it to be 0, it means no delay after auto cleaning.	30 times	999	-
F.12	<p style="text-align: center;">Second layer password</p> If [F.12] is not set as 0, then the display will switch to [F.98] to require input of the correct password [F.05]. If the password is incorrect, the screen will return to the initial display. If set it to be 0, it means to turn off the password setting.	0	999	-

Note: The password can be set by youself. Please contact us, if the equipment is lockup by password.

4.5 Function Setting: Special Process

4.5.1 Enter special process setting Mode

Enter setting mode according to the steps described in 6.4. Press to choose [F.11]; then keep holding and then press for about 1 sec. to enter into the setting of [F.13]. The screen will alternately display [F.13] and the setting value respectively for 0.8 sec.

4.5.2 Edit Parameters

Press to increase parameter value. Hold for about 1 second to quickly increase value to the maximum input.

Press to decrease parameter value. Hold for about 1 second to quickly decrease value to the minimum input.

Press to confirm input setting and save input setting into the memory. It will switch to next item. If you did not change anything, press to enter the next item.

Press to cancel input values and return to the setting screen. If you did not change anything, press to enter into next setting item.

4.5.3 Exit

Hold for 1 second to return to default display.

If no input for 20 seconds, it will return to default display without saving changes.

4.5.4 Special Process Function List

Para. code	Functions	Value Default/Range		Note
	Buzzer Tone			
F.13	Set buzzer tone 0: uninterrupted sounding 1: Slow, interrupted sounding 2: Quick, interrupted sounding	0	0-2	-
	Buzzer Time			
F.14	Default 999: Unlimited time	999	999	-
	First carbon brush alarm			
F.15	When the carbon brush use [F.17] for a certain while, [F.14] will sound an alarm. Please replace carbon brush ASAP. The alarm will last 5 minutes, and will repeat every 15 minutes until it become 0. Set 0 to cancel this function. Action code: A.05	80	0-999	1Unit= 10Hours
	Second carbon brush alarm			
F.16	When the carbon brush use [F.17] for a certain while, [F.15] will sound an alarm. Please replace carbon brush. The alarm will last 5 minutes, and will repeat every 15 minutes until [F.18] become 0. Set 0 to cancel this function. Action code: A.06	90	[F.14]-999	1Unit= 10Hours
	Third carbon brush alarm			
F.17	When the carbon brush use [F.17] for a certain while, [F.16] will sound an alarm. Please replace carbon brush. The alarm will last 5 minutes, and will repeat every 15 minutes until [F.18] become 0. Set 0 to cancel this function. Action code: A.07	100	[F.15]-999	1Unit= 10Hours
	Carbon brush service record			
F.18	Check and clear the working hours of carbon brush. Clear carbon brush working hours: set its value to be 0 and then press ENT to confirm.	0	0-999	Set"0":clear the value
	Blower soft start			
F.19	On and off of blower soft start function. 0 : means blower soft start is on, which means the blower is protected when starting. 1 : means blower soft start is off, which means the blower starts with full speed.	0	0:soft start on 1:soft start off	-
	Blower stop delay			
F.20	The vacuum breaking valve opens to suction air from the outside while the blower delays stopping, which cools the material suction blower and prevent it from frequent stop and start. Only suitable for SAL-UG/UGP Not suitable for SAL-U which must be set to be 0.	0	0~999 Seconds	-

Note: The password can be set by yourself. Please contact us, if the equipment is lockup by password.

4.6 Description of Operation Procedures

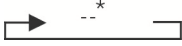
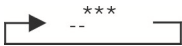
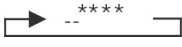
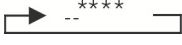
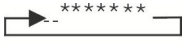
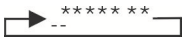
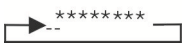
4.6.1 Operation Procedures

The equipment is capable of working without keypad connected. The following is about action codes.

Indicators	Action code	Operation procedures	Relative parameter	Parameter description	
				Default	Range
Red light on	S. 01	Auto cleaning of filter screen	F. 06	3 seconds	0-99 seconds
	S. 02	Material suction	F. 01	10 seconds	5-127 seconds
		Master batch suction	F.02	0%	0-100%
			F. 03	3	1-9 times
	S. 03	Auto cleaning of filter screen; Material starts to fall into the material tank.	F. 07	3 seconds	0-99 seconds
	S. 04	Wait for all materials to fall into the material tank.	F. 08	10 seconds	0-99 seconds
	S. 05	Check alarm information (instantly completed, no display on control panel.)	-	-	-
S. 06	Delay material suction.	F. 05	0 seconds	0-999 seconds	
Green light on	-	Stand by	-	-	-

4.6.2 Alarms

Alarm display and trouble shooting.

Alarm light symbol	Code	Possible reasons	Solutions	Remarks
	[A.01]	Material shortage alarm [F.9] 1. The setting material suction time is too short. 2. Unable to suck any material.. 3. Material suction pipe is blocked, 4. No enough suction power.	1. Add material. 2. Increase material suction time. 3. Turn off the equipment and check the pipes. The alarm will be cleared when the machine receives material again, or by pressing ENT on the control panel or by cutting off power supply.	
	[A.03]	Filter alarm Filter blocked.	1. Turn off the equipment for cleaning filter screen or replace it. The alarm will be cleared by cutting off the power or press ENT on the control panel.	
	[A.04]	Alarm for no material [F.10] After the material shortage alarm is up to certain times, the stop alarm will be given out.	Please refer to the solutions of [A.01] or modify the value of [F.10]. The alarm will be cleared by cutting off the power or press ENT on the control panel.	
	[A.05]	First carbon brush alarm After the carbon brush has been used for a certain while, [F.14] will sound an alarm.	Please replace the carbon brush. This alarm will last for 5 minutes, and will repeat every 15 minutes until the service time record of the carbon brush becomes 0.	
	[A.06]	Second carbon brush alarm After the carbon brush has been used for a certain while, [F.15] will sound an alarm.	Please replace the carbon brush and reset the service time record of the carbon brush to be 0. This alarm will last for 5 minutes, and will repeat every 15 minutes.	
	[A.07]	Third carbon brush alarm After the carbon brush has been used for a certain while, [F.16] will sound an alarm.	Please replace the carbon brush and reset the service time record of the carbon brush to be 0. This alarm won't stop until the service time record of the carbon brush becomes 0.	
	[A.08]	Data can not be stored into EEPROM.	Please contact us to replace the PCB.	

--Denotes the light is off, *Stands for flash of the light.

5. Trouble-shooting

5.1 Trouble Shooting of single phase SAL-U.

Failures	Possible reasons	Solutions
Lacking material for a long time; blower does not work	1. Failures caused by blower or magnetic proximity switch.	1. Replace or repair
	2. Magnetic proximity switch/ photoelectric switch is in poor contact or broken.	2. Adjust or replace.
	3. Signal wire is broken.	3. Reconnect the signal wire.
Blower can not fully load material hopper for several times, or machine sounds material shortage alarm.	1. No material left for conveying.	1. Add material.
	2. Air pipe leakage.	2. Firmly lock the air pipe or replace it.
	3. Filter is blocked.	3. Clean the filter.
Blower can not work.	Blower is burn out.	Replace.
Fuse melts after turning on the machine.	Short circuit.	Check electrical circuit.
Blower keeps working after material hopper is full-loaded.	<ol style="list-style-type: none"> 1. Failures of circuit board 2. The touch spots of the solenoid valve contact with each other. 3. The sensor is in poor induction. 	Repair or replace.
Poor material liquidity in the pipe	Over or lack of air quantity	Adjust air inlet location of the suction box. Avoid small bending of the elbow.

5.2 Trouble Shooting of 3-phase SAL-U

Failures	Possible reasons	Solutions
Lacking material for a long time; blower does not work	1. Failures caused by blower or magnetic proximity switch.	1. Replace or repair
	2. Magnetic proximity switch is in poor contact or broken.	2. Adjust or replace.
	3. Signal wire is broken.	3. Reconnect the signal wire.
Blower keeps working after material hopper is full-loaded.	Contactor malfunction.	Repair or replace it.
Blower can not fully load material hopper for several times, or machine sounds material shortage alarm.	1. No material left for conveying.	1. Add material.
	2. Air pipe leakage.	2. Firmly lock the air pipe or replace it.
	3. Filter is blocked.	3. Clean the filter.
Blower can not work.	Blower is burn out.	Replace.
Fuse melts after turning on the machine.	Short circuit	Check electrical circuit.
Blower overload alarm	1. Filter is blocked.	Clean the filter and press Reset on the overload relay.
	2. Phase shortage	Check the electrical circuit and press Reset on the overload relay.
Poor material liquidity in the pipe	Over or lack of air quantity	Adjust air inlet location of the suction box. Avoid small bending of the elbow.

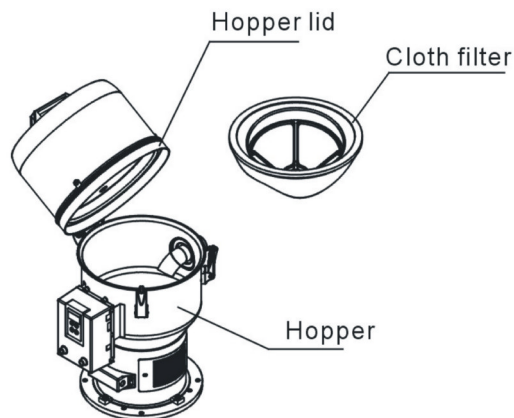
6. Maintenance and Repair

Note: All the repair work should be done by professionals in order to prevent personal injuries and damage of the machine.

6.1 Cloth Filter

Cloth Filter SAL-U

1. Loosen the snap hooks on the loader, uplift the hopper cover and externally rotate it along the axis, take out the filter bag and clear away the dust on it.
2. Filter bag cleaning period: Daily.



6.2 Material Hopper

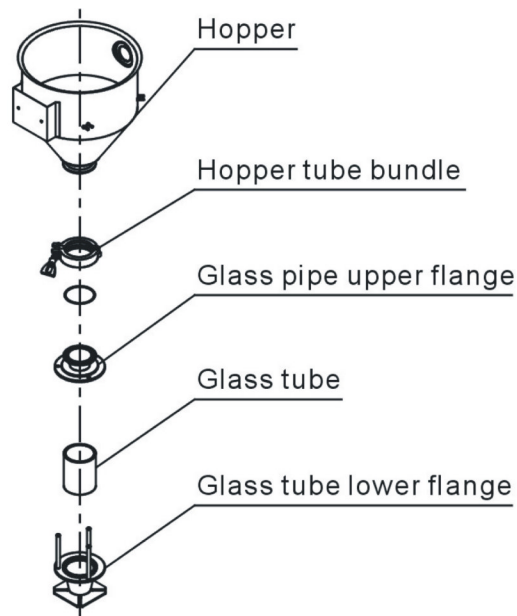
After a period time of operation, materials will adhere to the inner surface of material hopper. Please clean material hopper in time to ensure the optimal performance of equipment.

- 1) Loosen the snap hooks on the loader and open the hopper cover to take out the filter bag.
- 2) Put it back.

6.3 Glass Pipe

Glass Tube

Loosen the pipe clamp and take down the hopper; unscrew the screws of upper flange on the glass pipe. Then take out and clean the glass pipe.



Note: Be careful not to break the glass pipe when cleaning.

6.4 Magentic Proximity Switch, Photoelectric Switch

Magentic proximity switch

When the indicator of the proximity switch doesn't work, check the switch and replace with a new one if it doesn't work well.

- 1) Loosen the set screws of the outer box of the sensor.
- 2) Adjust the depth of the sensor going into the sensor shell or move it up and down until the indicator lights up. It means magnet is detected. By then, just tighten all screws.
- 3) If put a magnet close to the sensor, the indicator still doesn't light up, please check the connection.

Photoelectric Switch

When the indicator of the photoelectric switch doesn't work, check the switch contact. If it's in poor contact, please adjust or replace it.

- 1) Check if it's in poor contact
- 2) Please replace a new switch if it's damaged.

6.5 Maintenance Schedule

6.5.1 About the Machine

Model _____ SN _____ Manufacture date _____

Voltage _____ Φ _____ V Frequency _____ Hz Power _____ kW

6.5.2 Installation & Inspection

- Check if the suction pipe has been correctly connected.
- Check if that pipe clips is secured.
- Check if mounting base is secured.

Electrical Installation

- Voltage: _____ V _____ Hz
- Fuse: One-phase: _____ A Three-phase: _____ A
- Check power phase.

6.5.3 Daily Checking

- Check main power switch.
- Check filter
- Check working status of the blower.

6.5.4 Weekly Checking

- Check all the electrical cables.
- Check if there are loose connections of electrical components.
- Check the screw of the base is secured.
- Check the air filter.

6.5.5 Monthly Checking

- Check the spring lock on the hopper cover is loosed or not.
- Check the hopper flap is deformed or not.
- Check the performance of magnetic proximity switch/photoelectrical sensor.