## SAL-UGP Series

Vacuum Powder Loader

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## 1. General Description

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

SAL-UGP series separate-vacuum hopper loader has all features that come with SAL-UG series product. There is also double-stage blower available as an option. Different model of hopper is available for each individual output capacity needs, especially suitable for 30% and 100% powder loading.



Model: SAL-5HP-UGP (Main Unit) Plate Filter + Bag Filter SHR-P-60U material storage tank+ storage hopper



## 1.1 Coding Principle



## 1.2 Feature

- Data backed up on EPROM in case of power failure and does not require back up battery.
- It consists of a cyclone dust separator and a dust collective bin to effectively reduce the load of filter.
- Function for setting regrind mix ratio via optional SPV-U.
- Standardly equipped with warning lamp as the alarm device.
- Based on customer's requirements, there are two types of filters: bag and plate, for 30% and 100% powder conveying respectively. The air accumulator and self-cleaning device are standard equipment for hopper.

All service work should be carried out by a person with technical training or corresponding professional experience. The manual contains instructions for both handling and servicing. Chapter 6, which contains service instructions intended 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 excellent after-sales service. Should you have any problem during using the machine, please contact the company or the local vendor.

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## **1.3 Technical Specifications**

1.3.1 Dimension (Main Unit)



SAL-1HP~3HP-UGP

SAL-5HP-UGP

SAL-10HP-UGP

Picture 1-1: Dimension

1.3.2 The Outer Dimension of Hopper





SHR-P-30U~SHR-P-90U





#### 1.3.3 The Installation Dimension of Hopper



Picture 1-3: SHR-P-30U~SHR-P-90U Table 1-1: The Installation Dimension of Hopper

Model	D1(mm)	D2(mm)	D3(mm)	D4(mm)	D5(mm)
SHR-P-12U	Ф197	Ф254.5	Φ275	Φ231.5	Ф9
SHR-P-30U	Ф377	Ф413	Ф430	-	Φ7
SHR-P-30U-1	Ф377	Ф413	Ф430	-	Φ7
SHR-P-30U-2	Ф377	Ф413	Ф430	-	Φ7
SHR-P-60U	Ф437	Ф470	Ф490	-	Φ7
SHR-P-60U-3	Ф437	Ф470	Ф490	-	Φ7
SHR-P-90U	Ф547	Ф583	Ф600	-	Φ7
SHR-P-90U-5	Ф547	Ф583	Ф600	-	Φ7

#### 1.3.4 Specifications

#### Table 1-2: Specifications

For Conveying Raw Material Contains 30% Powder (BAG FILTERS are fitted to the powder receiver)

Main Unit Powder Receiver								Dimensions (mm)		
Model SAL-	Motor Power (kW) (50/60Hz)	Specifi-cati on	Applied to	Conveying Pipe Dia.	Air Suction Pipe Dia.	Hopper Capacity (L)	Hopper Dia. (mm)	Conveying Capacity (kg / hr)	Filter Cloth Quantity	er (Main Unit) htity H×W×D
1HP-UGP	0.75 / 0.85		SHR-P-12U	4.5	4.5	12L	Ф270	300	3	
2HP-UGP	1.5 / 1.8		SHR-P-30U	1.5	1.5	30L	Ф380	400	7	1000×400×500
3HP-UGP	1.85 / 2.0							650		
5HP-UGP		3Ф	SHR-P-60U	2"	2"	60L	Ф440	1000	10	1380×470×600
5HP-UGP-D	3.75 / 4.2							1200		1380×670×600
10HP-UGP										1830×585×675
10HP-UGP-D	7.5 / 8.6		SHR-P-90U	2.5"	2.5"	90L	Φ550	2000	19	1830×740×675



## For Conveying Raw Material Contains 100% Powder (PLATE FILTERS are fitted to the powder receiver)

١	Main Unit				Powder R	eceiver				Dimensions	
Model SAL-	Motor Power (kW) (50/60Hz)	Specifi- cation	Applied to	Convey ing Pipe Dia.	Air Suction Pipe Dia.	Hopper Capacity (L)	Hopper Dia. (mm)	Conveying Capacity (kg / hr)	Filter Cloth Quantity	(Main Unit) H×W×D	
1HP-UGP	0.75 / 0.85		SHR-P-30U-1			12L	Ф270	300	1		
2HP-UGP	1.5 / 1.8		SHR-P-30U-2	1.5"	1.5"	30L	Ф380	400	2	1000×400×500	
3HP-UGP	1.85 / 2.0								650		
5HP-UGP	/	ЗΨ	SHR-P-60U-3	2"	2"	60L	Ф440		3	1380×470×600	
5HP-UGP-D	3.7 / 4.2						1200		1380×670×600		
10HP-UGP	P-UGP P-UGP-D			0.5"	0.5"		+ = = 0	0000	5	1830×585×675	
10HP-UGP-D			SHK-P-90U-5	2.5″	2.5″	90L	Φ550	2000		1830×740×675	

Note: 1) Test condition of conveying capacity: Use dried powder plastic material without any viscosity and its bulk density is 0.6kg/L,

We reserve the right to change specifications without prior notice.

vertical conveying height: 4m, horizontal conveying distance: 5m.

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



## 1.4 Safety Regulations

Strictly abide by the following safety regulations to prevent damage of the machine or personal injuries.

1.4.1 Safety Signs and Labels



All the electrical components should be installed by professional technicians.

Turn off the main switch and control switch during maintenance or repair.



Warning! High voltage!

This sign is attached on the cover of control box!



Warning! Be careful!

Be more careful at the place where this sign appears!



Attention!

No need for regular inspection because all the electrical parts in the control unit are fixed tightly!

#### 1.4.2 Signs and Labels





## 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 reasonable 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 machine, 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 Main Functions

SAL-UGP "Euro" separate-vacuum hopper loader are applicable to convey the mixture of plastic granule and powder or all powders. It makes good use of motor generated vacuum to form a pressure gap within hopper, by which means to convey.

#### 2.1.1 SAL-UGP Working Principle



Names of Parts:

- 1. Air suction pipe (blower use) 2. Blower
- 4. Steel wired plastic pipe
- 6. Air suction pipe (hopper use) 7. Filter 1
- 9. Red alarm light
- 12. Manual controller
- 15. Crew material
- 18. Wiring box
- 21. Filter 2

- 3. Vacuum breaking diaphragm valve
- 5. Dust collective barrel
  - 8. Filtering barrel
- 10. Main power switch 11. Electrical control box
- 13. Material inlet pipe 14. Hopper
  - 17. Magnetic proximity switch
- 19. Diaphragm valve

16. Non-return flap

- e 20. Storage tank
- Picture 2-1: SAL-UGP Working Principle

After starting the machine, blower (2) begins to work to produce high-pressure vacuum inside of material hopper (15), meanwhile close the reverse stopping



flap (17). Materials will be drawn into material hopper by pressure difference through material inlet (13). When material suction is completed, motor stops working, and the materials automatically fall down by self-gravity. Motor will be delayed when magnetic proximity switch (18) detects no materials left in the hopper. And then, open the diaphragm valve (19), the high-pressure air in the storage tank (20) will pass the washing device to clean the dust covered in the filter 1 (21) and hopper (14), then the motor starts again. If the machine cannot suck materials for three times, the red alarm light (9) on control box (11) will blink.

When the blower (2) sucks materials, the air inside the air-inputting pipe will past filter 2 (7) for filtering. Few dust sticks to the filter. After the blower finishes the suction, the vacuum breaking diaphragm valve (3) installed between the blower and filter will create a reverse impulsive airflow to shake down the dust sticking to the filter to the dust collection bucket (5).

## 2.2 Description of Electrical Components

- 2.2.1 Magnetic Proximity Switch
  - 1) Used for SAL-UGP series for control of material conveying and material shortage alarm.
  - 2) It is installed at the bottom of material hopper.



Picture 2-2: Magnetic Proximity Switch



## 3. Installation and Debugging

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



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

Power supply should be fixed by qualified technicians!

## 3.1 Installation Steps

- 1) Put the main body of the machine at a proper place and connect it with power supply.
- 2) Install material hopper onto the dryer and connect it with signal wires from the main body.
- 3) Use steel wire hose to connect the suction mouth of vacuum hopper to the relative suction mouth of dust-suction main machine, in turn connect the suction mouth of dust-suction main machine to the suction mouth of vacuum hopper.
- 4) Connect high pressure air pipe with air supply (pressure at 5~6kgf / cm<sup>2</sup>).
- 3.1.1 Power Supply

SAL-UGP series should be connected to 3Φ, 400V, 50 / 60Hz power and earth.





## 4. Application and Operation

## 4.1 Start / Stop of the Machine

The start / stop of SAL-UGP series is controlled by main switch in front of electrical control box and start / stop switches on the side.

4.2 Keys on the Control Panel



Picture 4-1: Keys on the Control Panel

- ET Choose an item or cancel current input.
- ENT Choose an item and store current input value. It is also used to clear the alarm when alarm occurs.



Increase setting value.



 $\blacktriangle$  +  $\blacksquare$  Stop the machine in 3 sec. Press  $\bowtie$  to resume operation.

Notes!

It will back to start status when power is connected again.

### 4.3 Parameter Setting

4.3.1 Enter Basic Setting Mode

During normal operation, press  $\mathbf{ET}$  for about 1 sec. to enter [F.01] setting screen. [F.01] and its value show alternatively after 0.8 sec. If you want to set



[F.04], the system will show [F.99]. [F.99] and its value will show alternatively after 0.8 sec. Input correct password to enter [F.01], then press  $\overline{\text{SET}}$  to switch to [F.04].

#### 4.3.2 Modify a Parameter

Press A to increase parameter value. Keep on pressing A to quickly increase it's value until the maximum of it. Press to decrease parameter value. Keep on pressing T to reduce it's value until the minimum of it. Press to confirm parameter setting to store its value into the microprocessor and enter next setting item. If you did not change anything, press to enter into next setting item. Press SET to cancel parameter setting and return back to current setting screen. If you did not change anything, press SET to enter into next setting item.

4.3.3 Finish Parameter Setting

Keep on pressing **SET** for about 1 sec. to return to normal display mode. If you did not touch any keys for 20 seconds, the machine will return to normal display mode without storing any changes of the parameter.



#### 4.3.4 Basic Parameter List

Para. code	Functions	Va	lue	Note
F.01	Material conveying time Material conveying time can be controlled and set by two manners: 1. [F.01] is defined as material conveying time (DIP8 is off). It is stored in the microprocessor. It's value could be seen when setting [F.01] and can be revised and re-stored in the microprocessor. 2. Set conveying time by DIP switch (DIP8 is on) on the control box. DIP switch is working according to a binary system. Material conveying time set by DIP switch will not be stored in the micro-processor, but the machine will read the value each time you start the machine. You can check the value of [F.01] for conveying time set by DIP switch. It can be revised and stored into the microprocessor through control panel. The machine will read set value as material conveying time each time you start the machine. Action code: S.02	10 seconds	5-127 seconds	F.01
F.02	Material mixing time This function will be started simultaneously with material conveying. It is set as a percentage of conveying time: it's value is calculated by following formula: conveying time×[F.02]%. Set it's value as 0 to disenable it.	0% Not enabled	0-100%	F.02
F.03	Material mixing frequency setting [F.02] means to start material mixing after a certain times of material conveying. Set [F.02] as 1, which means to start material mixing at every material conveying. Set it's value as 0 to cancel material mixing.	1	1-9	F.03
F.04	First layer lockup When to enter first layer setting, if [F.04] is not set as 0, then the screen will switch to [F.99], and require you to input a password before setting [F.01]. If the password is incorrect, the screen will return to normal display mode. Set [F.04] as 0 to cancel the password.	0	0-999	F.04

At delivery, the machine was not coded. You can set a code for the machine. In case of losing the code, please contact our company.

#### 4.4 Process Setting

#### 4.4.1 Enter into Process Setting Mode

Start the machine, press  $\overline{\text{SET}}$  for about 1 sec. To enter basic setting mode. Then press  $\overline{\text{SET}}$  and  $\overline{\text{ENT}}$  at the same time to enter parameter [F.05] setting. [F.05]



and it's value show alternatively. If you have set [F.12], the system will switch to [F.98]. Enter correct password to enter [F.05], then press SET to switch to [F.12].

#### 4.4.2 Modify a Parameter

Press  $\blacktriangle$  to increase parameter value. Keep on pressing  $\checkmark$  to quickly increase it's value until the maximum of it. Press  $\checkmark$  to reduce parameter value. Keep on pressing  $\checkmark$  to reduce it's value until the minimum of it. Press  $\bowtie$  to confirm parameter setting and store it's value into the micro-processor and to enter next setting item. If you did not change anything, press  $\stackrel{\text{SET}}{\stackrel{\text{SET}}}$  to enter into next setting item. Press  $\stackrel{\text{SET}}{\stackrel{\text{SET}}}$  to cancel parameter setting and return back to current setting screen. If you did not change anything, press  $\stackrel{\text{ENT}}{\stackrel{\text{ENT}}}$  to enter into next setting item.

#### 4.4.3 Finish Parameter Setting

Keep on pressing **SET** for about 1 sec. to return to normal display mode. If you did not touch any keys for 20 secretary, the machine will return to normal display mode without storing any changes of the parameter.

#### 4.4.4 Process Parameter List

Para. code	Functions	Va	Value		
F.05	Material conveying delayed time The delayed time between first material conveying and later conveying action. 0 stands for no delaying time. Action code: S.06	0 seconds	9990 seconds	10 seconds for unit	
F.06	Filter screen cleaning time before material conveying 0 stands for no filter cleaning action. Action code: S.01	3 seconds	0-99 seconds	-	
F.07	Filter screen cleaning time after material conveying 0 stands for no filter cleaning action. Action code: S.03	3 seconds	0-99 seconds	-	
F.CT	Cycle of mesh cleaning Mesh cleaning is done after several times' suction.	3 seconds	1~99 seconds	-	
F.08	Check material discharging time Check material discharging time after material conveying. If there are directive signals, then the machine gets into next procedure. If not, add 1 to material shortage counter. When this situation continues until material shortage times exceed the setting value of [F.09], the machine will raise the alarm. Action code: S.04	10 seconds	0-99 seconds	-	



Para. code	Functions	Va	lue	Note
F.09	Material shortage alarm If there are not any materials for discharging for several times, the machine would sound the alarm. 1. The alarm will be reset if the machine can get material again. 2. Press ENT on the control panel to clear the alarm 3. Restart the machine. Action code: A.01	3	1-9	-
F.10	<ul><li>Material shortage counting and stop of the machine</li><li>If there are not any materials for discharging, the machine</li><li>would stop and sound the alarm.</li><li>1. Press ENT to clear the alarm.</li><li>2. Restart the machine. Set it's value as 99 to cancel this function.</li><li>Action code: A.04</li></ul>	99	[F.09]-99	-
F.11	Setting waiting time before or after loading Set screen clean as 0, for either before or after each loading. So it is waiting to be shut before loading. If set 0 for screen clean after loading, so it is waiting to be shut after loading. Set as 0, which indicates no waiting before or after loading.	30	999	-
F.12	Second layer lockup When to enter second layer setting, if [F.12] is not set as 0, then the screen will switch to [F.98], and require you to input a password before setting [F.05]. If the password is incorrect, the screen will return to normal display mode. Set [F.05] as 0 to cancel the password.	0	999	-



At delivery, the machine was not coded. You can set a code for the machine. In case of losing the code, please contact our company.

## 4.5 Special Process Setting

#### 4.5.1 Enter into Special Step Setting Mode

Enter into setting mode according to the steps descripped in 4.4. Press  $\overline{\text{SET}}$  to choose [F.11], then press  $\overline{\text{SET}}$  for about 1 sec. to enter into the setting of [F.13]. [F.13] and it's value will show alternatively.

#### 4.5.2 Modify a Parameter

Press  $\blacktriangle$  to increase parameter value. Keep on pressing  $\blacklozenge$  to quickly increase it's value until the maximum of it. Press  $\heartsuit$  to decrease parameter value. Keep on pressing  $\heartsuit$  to reduce it's value until the minimum of it. Press  $\blacksquare$  to confirm parameter setting and store it's value into the microprocessor and to enter next setting item. If you did not change anything, press  $\blacksquare$  to enter into



next setting item. Press **SET** to cancel parameter setting and return back to current setting screen. If you did not change anything, press **SET** to enter into next setting item.

#### 4.5.3 Finish Parameter Setting

Keep on pressing **SET** for about 1 sec. to return to normal display mode. If you did not touch any keys for 20 seconds, the machine will return to normal display mode without storing any changes of the parameter.

#### 4.5.4 Parameter List of Special Process Setting

Para. code	Functions	Value		Note
F.13	Buzzer working mode Setup buzzer working mode 0: uninterrupted sounding 1: Slow, interrupted sounding 2: Quick, interrupted sounding	0	0-2	-
F.14	Set buzzer sounding period Set buzzer sounding period: Set [F.13] as 999 to cancel buzzer sounding function.	999	999	-
F.15	First carbon brush alarm When carbon brush working hours [F.17] get to a certain point, [F.14] will raise the alarm. Please replace the carbon brushes. The alarm will last 5 minutes, and will repeat every 15 minutes until [F.17] set as 0. Set [F.14] as 0 to cancel this function. Action code: A.05	0 (SAL-UGP invalid)	0-999	-
F.16	Second carbon brush alarm When carbon brush working hours [F.17] get to a certain point, [F.15] will raise the alarm. Please replace the carbon brushes. The alarm will last 5 minutes, and will repeat every 15 minutes until [F.17] set as 0. Set [F.15] as 0 to cancel this function. Action code: A.06	0 (SAL-UGP invalid)	[F.14]-999	-
F.17	Third carbon brush alarm When carbon brush working hours [F.17] get to a certain point, [F.16] will raise the alarm until [F.17] set as 0. Please replace the carbon brushes.Set [F.16] as 0 to cancel this function. Action code: A.07	0 (SAL-UGP invalid)	[F.15]-999	-



Para. code	Functions	Value		Note
F.18	Carbon brush usage record Checking and clear the working hours of carbon brush. Clear carbon brush working hours: set its value as 0, press ENT to confirm.	0	0-999 Set its value as 0 to clear the record.	-
F.19	Motor startup protective switch Set to on or off the motor startup protective switch 0: if it is on, which indicates slow speed protection of the start up loading motor 1: if it is off, which indicates full speed protection of the start up loading motor.	0	0: soft start on 1: soft start off	-
F.20	Motor Delay Stop Time When motor delay stop, vaccum breaking valve is opened and suck up air, to cool conveying blower and avoid starting/stopping frequently. Olny suitable for SAL-UG/UGP. Not suitable for SAL-U. Must be set to "0".	0	0~999 seconds	-

## 4.6 Explanation of Operation Procedures

#### 4.6.1 Operation Procedures

The machine can work without control panel connected with it. The following is an explanation of operation procedures.

Indicators	Action code	Operation	Relative	Parameter description	
maloatoro		procedures	parameter	Default	Range
	S. 01	Filter cleaning.	F. 06	3	0-99
	0.01			seconds	seconds
	S. 02	Material suction.	F. 01	10	5-127
Red light flickering				seconds	seconds
		Masterbatch suction.	F.02	0%	0-100%
			F. 03	3	1-9 times
	S. 03	Filter cleaning and material falling into	F 07	3	0-99
		storage bin.	1.07	seconds	seconds
	S. 04	Wait until materials	E 08	10	0-99
		completely discharged.	1.00	seconds	seconds
	S. 05	Check alarm information (instantly completed, no display on control panel.)	-	-	-
	S 06	Delayed time for material	F. 05	0	0-999
	3.00	conveying.		seconds	seconds
Green light shines	-	Time for material conveying confirmation.	-	-	-



#### 4.6.2 Alarms

Alarm information display and relative solutions.

Red alarm light	Code	Possible reasons	le reasons Solutions	
-**	[A.01]	<ul> <li>Material shortage alarm [F.9]</li> <li>1. Material loading time is too short.</li> <li>2. Can not get any materials.</li> <li>3. Conveying hose blocked,</li> <li>4. Not enough suction power.</li> </ul>	<ol> <li>Add material.</li> <li>Increase material conveying time.</li> <li>Stop the machine and check the conveying hose.</li> <li>The alarm will be cleared when the machine can again load the material, or by pressing ENT on the control panel or by cutting off power supply.</li> </ol>	
***	[A.03]	Filter trouble alarm 1. Filter blocked	<ol> <li>Stop the machine to clean filter screen or replace it.</li> <li>The alarm will be cleared by cutting off the power or press ENT on the control panel.</li> </ol>	
****	[A.04]	Non-operation alarm [F.10] 1. After a certain period time of material shortage, the machine will stop working.	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. Please fix the control panel onto the machine and modify its value.	
****	[A.05]	First carbon brush alarm When carbon brush working hours [F.17] gets to a certain point(800 hrs), [F.14] will raise the alarm.	Please prepare the carbon brush for replacement. The alarm will last for 5 minutes. The machine will repeat the alarm every 15 minutes until you reset carbon brush working hour.	



Red alarm light	Code	Possible reasons	Solutions	Remarks
******	[A.06]	Second carbon brush alarm When carbon brush working hours [F.17] gets to a certain point (1000 hrs), [F.15] will raise the alarm.	Please replace the carbon brush and reset carbon brush working hour. The alarm will last for 5 minutes. The machine will repeat the alarm every 15 minutes until you reset carbon brush working hour.	
►*******	[A.07]	Third carbon brush alarm When carbon brush working hours [F.17] gets to a certain point (1100 hrs), [F.16] will raise the alarm.	Please replace the carbon brush and reset carbon brush working hour. The machine won't stop the alarm until carbon brush working hour is reset.	
·******	[A.08]	Data can not be stored into EEPROM.	Please contact our company to replace the PCB.	

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



## 5. Trouble-shooting

Failures	Possible reasons	Solutions	
Motor does not work	1. Main power switch or control switch is off or poorly connected.	<ol> <li>Turn on main switch or control switch and make sure they are well connected.</li> </ol>	
long after material discharge.	<ol> <li>Poor contact or broken of magnetic proximity switch / capacitor contactor.</li> </ol>	2. Repair or replace.	
	3. Signal wire is broken.	3. Reconnect signal wire.	
Motor can not fully	1. No material left for conveying.	1. Add the material.	
or machine sounds	2. Air pipe leakage.	2. Firmly lock the air pipe or replace.	
material shortage alarm.	3. Filter is jammed.	3. Clean the filter.	
Motor can not work.	Motor is burn out.	Repair or replace.	
Fuse melts when turn on the machine.	Short circuit or motor is burn out.	Check electrical circuit.	
Motor keeps on working after material hopper is full-loaded.	PCB problems.	Repair or replace.	
Poor material liquidityin 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

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

Main body, Filter Inspection and Storage Hopper Cleanup



## 6.1 Material Hopper

Clean material hopper periodically or when you find conveying capacity reduced. Please loose the spring clips, take down the hopper lid, and take out filter screen. Remove all the dusts and fines on filter screen and inside of material hopper.



## 6.2 Main Body

Take out the air filter to make it clean periodically or when you find conveying capacity reduced. Always keep smooth air flow through air filter to maintain good conveying capacity.

Cleaning steps:

- 1) Loosen spring clips of filter cover and butterfly screws, and take out the filter.
- 2) Remove the dusts adhering to the filter to keep good suction power.

## 6.3 Reed Switch, Photoelectric Switch

#### Reed switch

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

- 1) Unscrew the outer box of the sensor.
- Adjust the depth or move position the sensor inserted into the box, the indicator lamp lights means that magnetism has been detected and the swith is well worked.
- 3) If magnetism cannot be detected by magnets, please check whether the switch is bad contacted or damaged.

Photoelectric Switch

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

- 1) Check whether the wires are bad contacted.
- 2) Please replace with a new one if the switch is damaged.

## 6.4 Weekly Checking

- 1) Check if there are broken electrical wires or not. Replace the broken wires immediately.
- 2) Check the function of the keys on the control panel.
- 3) Check if screws at material inlet and the seal ring are loose or not.



Cut off power supply when you check electrical wires.



## 6.5 Monthly Checking

- 1) Check if the clips of hopper lid is loose or not.
- 2) Check if the discharging plate is out of shape. If it is, please replace it.
- 3) Check the contact performance of magnetic proximity switch. If there is any poor contact, place adjust it or replace it.

### 6.6 Maintenance Schedule

#### 6.6.1 About the Machine

Model	SN	Manufa	acture date	
VoltageΦ	V Frequ	iency H	z Power	kW
6.6.2 Installation	& Inspection			
Check if the Check if tha Check if mou Electrical Insta	e takeover pipe ha at pipe is locked u nting base is locked allation	as been correctl ıp by clips. d tightly.	y connecte	d.
Voltage: _	V g current: One-p se sequence of p	Hz hase: A ower supply.	Three-p	hase:A
Check main p Check main p Check filter m Check workir	ing bower switch. hesh. hg status of the mot	or.		

#### 6.6.4 Weekly Checking

Check all the electrical cables.

Check if there are loose connections of electrical components.

Check the screw of the feed-in pipe's flange is loosed or not.

Check the air filter.

6.6.5 Monthly Checking

Check the spring lock on the hopper cover is loosed or not.



Check the reversal stop piece is deformed or not.

Check the performance of magnetic proximity switch/photoelectrical sensor.