SES

Auto Loader of Big Bag

Date: July 2025

Version: Ver.A (English)

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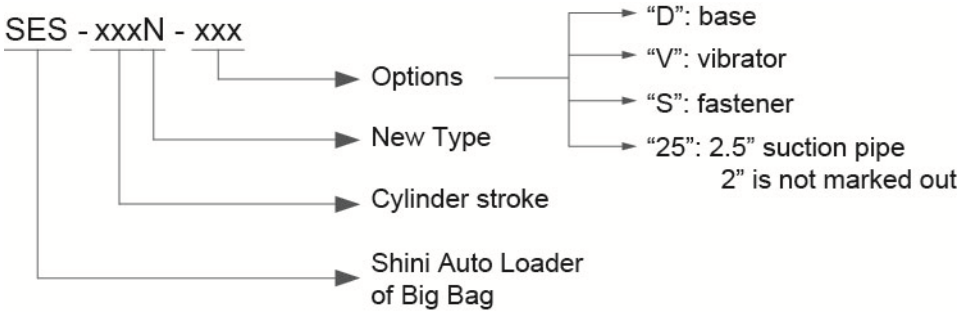
1. General Description

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

The auto loader of big bag is applicable to loading, conveying, discharging of particles with good flowability (not suitable for glass fibers) in plant; simple structure, strong loading capacity for wide applications in particles related industries.

Model: SES-1200N

1.1 Coding Principle



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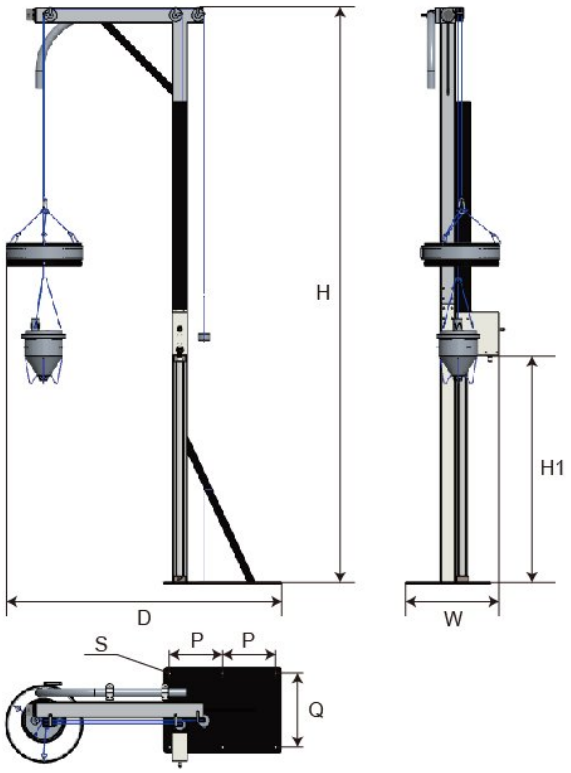
Please refer to shini.com/en/worldwide.html for local vendor near you.

1.2 Technical Specifications

1.2.1 Dimensions



Picture 1-1: External dimensions

1.2.2 Specifications

Table 1-1: Specifications

Mode / Items / Parameters	SES-1200N
Cylinder stroke(mm)	1200
Cylinder pipe dia.(mm)	Φ8
Cylinder withstand pressure(Bar)	15.0
Cylinder speed range(mm/s)	30~800
Conveying Pipe Dia.(inch)	2
Fully-extended height of the big bag (mm)	< 1900
External Dimension (W×D×H)(mm)	584×1617×3362
Weight (kg)	130

Notes: 1) Big bag height should not exceed 1.5M.
2) Power supply requirement: 1Φ,220V, 50Hz.

We reserve the right to change specifications without prior notice.

1.3 Exemption Clause

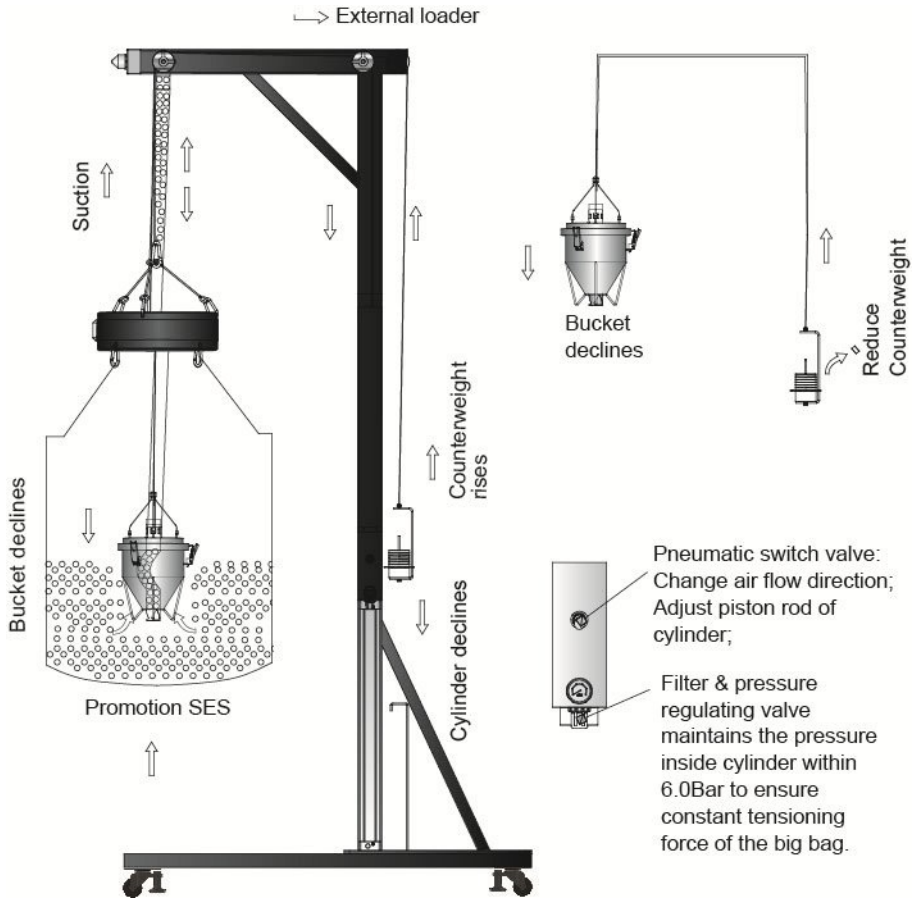
The following statements clarify the responsibilities and regulations born by any buyer or user who purchases products and accessories from Shini (including employees and agents).

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



Picture 2-1: Working Principle

Start the pneumatic reversing valve to make cylinder rise, the lifting device will decline to fix the height of container bag. After fixation, activate the pneumatic reversing valve to make cylinder decline, the lifting device will tighten the container bag. Reduce the balancing weight to make loader decline into the container bag for material suction. During the suction, the container bag gradually loses its weight till less than the tightening force. Then the whole container bag will be lifted up, and the bottom material can also be sucked. Simultaneously, the cylinder reaches the limit and touches off the sensor and the alarm lights on, and then the suction is finished.

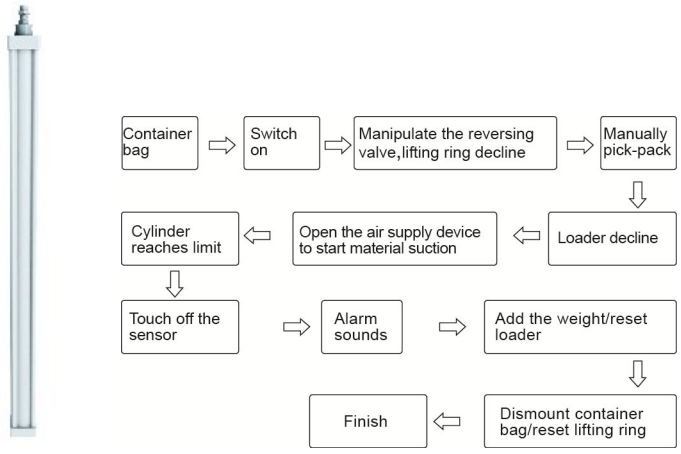
2.2 Suction Device

Picture 2-2: Suction Device

Air supply device: before material suction, open the air supply device and adjust the size of the inlet according to the suction situation for smooth operation.

A hopper hung by wire rope serves as suction device. It can rise and fall vertically since its weight is different from the balancing weight. In addition, the air supply device can adjust material suction situation.

2.3 Air Cylinder Device

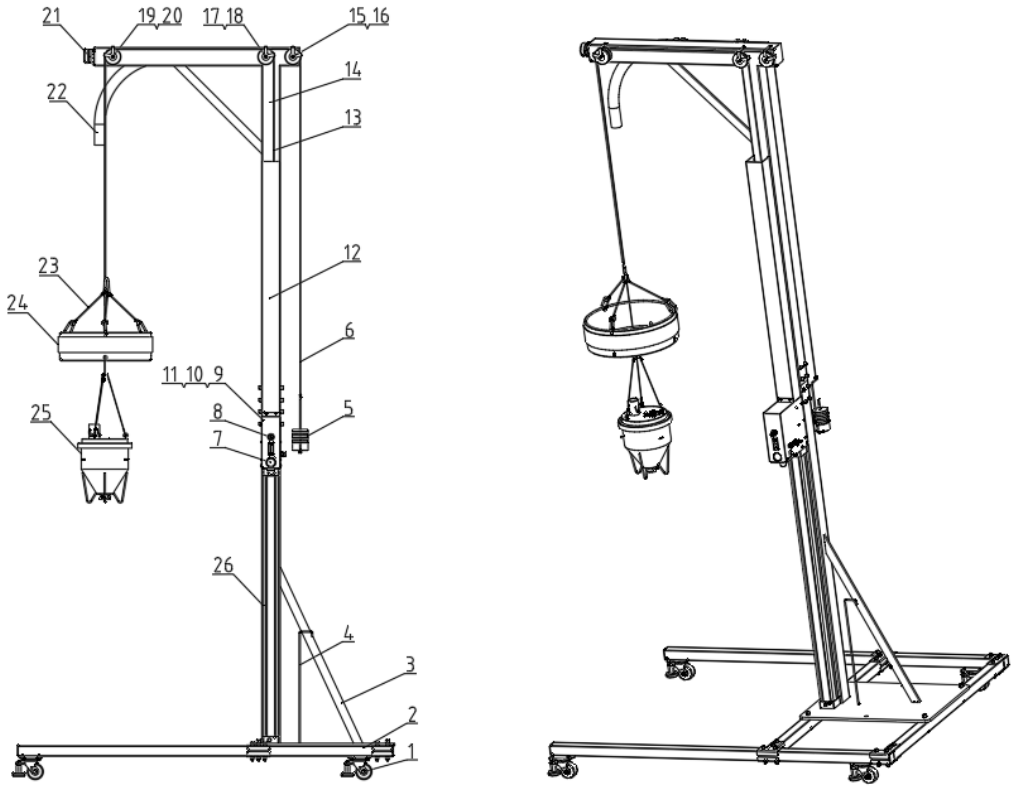


Picture 2-3: Air Cylinder Device

The cylinder collocated with pressure adjusting valve to adjust the air pressure. When the cylinder extends, the lifting ring will decline; when the cylinder shrinks, the lifting ring will rise. When the cylinder reaches the limit, it will touch off the sensor and send signal.

2.4 Assembly Drawing

2.4.1 Assembly Drawing



Remarks: Please refer to material list 2.4.2 for specific explanation of the numbers in assembly drawing.

Picture 2-4: Assembly Drawing

2.4.2 Parts List

Table 2-1: Parts List

No.	Items	Parts No.
1	Castor 3'' (with fixed foot shock)	YW03000301000
2	Base	SES-1200N-A-05
3	Lower bracket	SES-1200N-A-04
4	Lower weight hook	SES-1200N-A-13
5	With weight assembly	SES-1200N-A-14
6	Stainless steel wire rope in 2MM diameter	YW90000200500
7	Pressure regulating valve SR200-08	YE30200800500
8	Manual exhaust valve 4H230C08	YE90423000700
9	Position limit switch	SES-1200N-A-08
10	Controller bottom plate	SES-1200N-A-09
11	Control box	SES-1200N-A-11
12	Cylinder cover	SES-1200N-A-10
13	Stainless steel wire rope in 4MM diameter	YW90000400600
14	Upper bracket	SES-1200N-A-01
15	Pulley assembly 3	SES-1200N-A-18
16	Steel wire baffle 1	SES-1200N-A-24
17	Pulley assembly 2	SES-1200N-A17
18	Steel wire baffle 1	SES-1200N-A-24
19	Pulley assembly 1	SES-1200N-A-16
20	Steel wire baffle 1	SES-1200N-A-19
21	Alarm light (red and white flickering) AC115V/230V	BL90011500020
22	Suction pipe	SES-1200N-A-15
23	Wirerope 2	BL90803501420
24	Lifting ring	SES-1200N-A-20
25	Hopper assembly	SES-1200N-A-23
26	Cylinder SI-63X1200	YE30631200000

* means possible broken parts. ** means easy broken parts. A spare backup is suggested.
Please confirm the version of manual is competitable with equipement before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

3. Application and Operation

When the auto loader of big bag is working, the hopper weight is always greater than the weight of the weight. The weight of the weight is determined by the size of the loader. The bigger the loader, the lighter the weight. On the contrary, the weight is greater, but it is not greater than the weight of the hopper.

1. Put the big bag in the proper place of the auto loader.
2. Connect the power supply and plug the air pipe in;
3. Open the pneumatic reversing valve to make the cylinder rise, let the ring drop to the position where can be fixed, and fix it;
4. Then, use pneumatic reversing valve to let the cylinder decline, and use lifting device to tighten the big bag;
5. Drop the hopper down into the big bag by reducing the weight (adjust the weight according to the size of the loader) (placed above the material);
6. Open the air supply device;
7. Start loading
8. The cylinder reaches the stroke;
9. Trigger the sensor;
10. The alarm light is on;
11. Increase the weight to reset the hopper;
12. Open the pneumatic reversing valve to make the cylinder rise and let the big bag drop to the position where can be removed, and remove the big bag;
13. Open the pneumatic reversing valve to drop the cylinder and reset the lifting ring;
14. The operation is finished.