



PNEUMATIC CONVEYOR

Installation & Operating and Maintenance Instructions

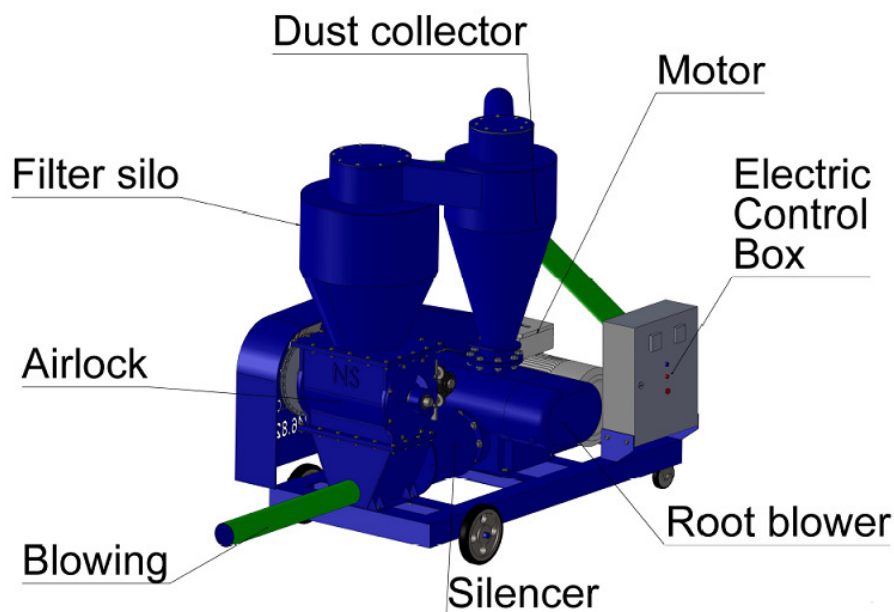


1) INTRODUCTION

The **pneumatic conveyor** is machine used for conveying many kinds of material such as rice husk, rice, corn, wheat, soybean meal, cashew husk, mustard seeds, rapeseed, coffee bean, all kind of beans, agricultural product, cotton seed, fertilizer, plastics resins, cement, fly ash... The pneumatic conveyor systems uses differential air pressure to efficiently move materials from one point to the others. *For example:* loading and unloading truck, ferry, boat... picking up material from ground level or storage yard and delivering to Boiler silo or filling truck for transportation....

2) MAIN PARTS AND ACCESSORIES

2.1) Main parts



Picture 1: Main parts

2.2) Accessories



Suction Nozzle



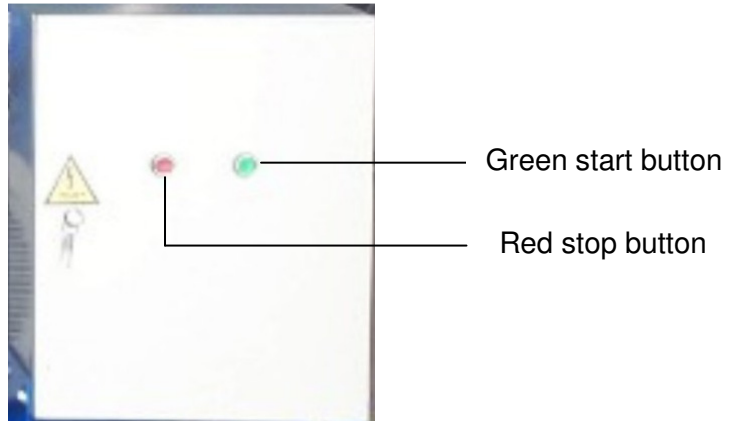
Discharge cyclone



PVC hose

Picture 2: Accessories

3) CONNECTION:



Picture 3: Electric control box

For the machine operated by motor

- Connect 3 phase to CP and mass wire to frame
- Press start button to startup (on electric control box)
- Press red stop button to stop (on electric control box)
- 3 leds show 3 phases
- Check direction of the pump correctly before operation

4) OPERATE THE MACHINE

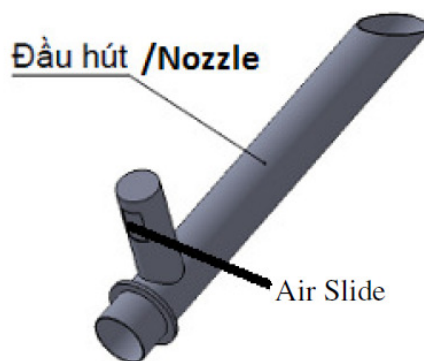
4.1: Starting up the procedures:

Disconnect Suction Nozzle from rice husk before starting up

Press green button to start up

Operation tips

- Ensure all hoses are straight as possible, and if there is any elbows, use as wide of a radius as possible.
- Attach the straight suction nozzle onto the hose and open the air slide by the handle all the way
- For machine with PTO (Power Take Off): Bring the tractor PTO up to full speed.
- Place suction nozzle into product and start to slowly close air slide until machine's receiver is flowing with product (the product should be 2/3 across the inspection window and flowing).

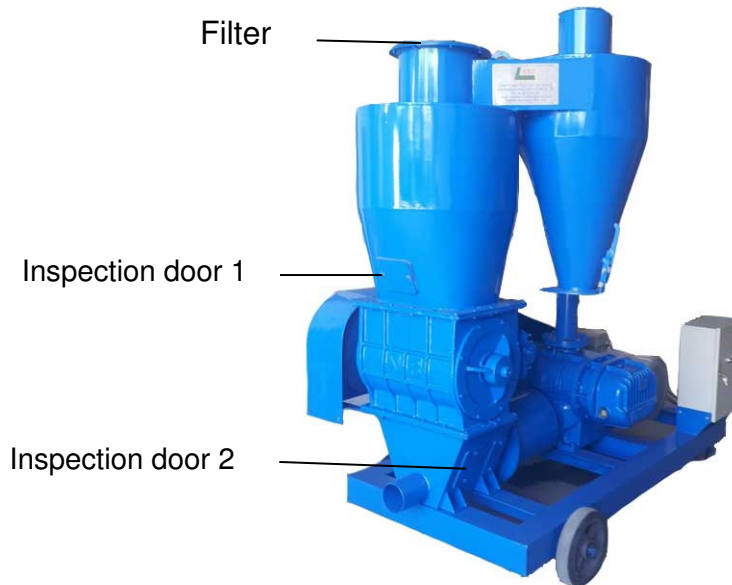


Picture 4: Suction Nozzle

4.2. Stopping procedures:

- Disconnect nozzle from rice husk about 20 seconds before stopping
- Press red button to stop.

5) MAINTENANCE SCHEDULE:



Picture 5

Before you start cleaning or maintenance your machine, make sure you turn off the power.

- a. Clean the visible dust from Filter (in picture 5) inside silo every 15 days of operation (it is very important to do this to keep the machine in good condition).
- b. Check oil level in root blower and engine before starting up
- c. Change oil SAE20w50 root blower every 500 operate hours

6) TROUBLE SHOOTING GUIDE

Trouble symptoms	Probable causes	Tests and Remedy
Slow suction	Air leaks	Tighten all connections Look at seal condition Ensure seal on precleaner lid is secure Ensure receiver is tight to frame Inspection door is sealed: inspection door 1 and 2 in the Picture 5
	Choke	Check choke operation
	Defective blower	Check blower clearance

	Defective airlock Air slide position	Check tip clearance(0.004") Adjust air slide to proper air flow intake
Slow blowing	Air leaks Choke Defective Blower Defective airlock Improper flow to airlock	Tighten all connections Check choke operation Check blower clearances Check tip clearances (0.004") Reset flow control
Machine pulsing	Not enough air flow Too many bends	Open air slide on nozzle as required Increase blower speed or decrease line size Straighten intake lines
Hot blower	Not enough air flow Low oil level	Open air slide on nozzle as required Add proper quantity of oil
Product damage	Liners worn out Poor connections Liners wearing Excessive RPM speed	Replace wear liners in cyclone Tighten and seal all connections Eliminate elbows and keep as straight as possible Decrease air flow by slowing blower speed or increasing line sizes Increase material quantity by closing air slide
Blower bogging	Dust from pre-cleaner going through blower	Clean pre-cleaner tank frequently
Loss in V-belt line	Belts slipping Localized wear	Tighten as required Check cross section dimension :

		Narrow=pulley spinning
		Swollen=belt failing internally
	Unequal stretch	Defective belts
	Belts overloaded	Belt failed or worn out
	Belt separation	Belts too tight
	Envelope seams opening	Eliminate oil contamination
	Abnormal envelope wear	Check for misalignment or slip
	Belts softening	Eliminate oil contamination
	Belts hardening	Eliminate heat

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