





# **Application:**

5XZ-3A gravity separator is used to separate seed and grain with same size but difference in specific weight.

To remove partially eaten, immature, insect damaged sick seed and moldy seed from your grain or beans.

Widely used in seed and grain industry, with best performance for wheat, maize, corn and others.

# **Specification:**

Model	5XZ-5B
Capacity (count by wheat)	5000 kg/h
Power	9 KW
Dimension of sieve	2000*630 mm
Amplitude	4 mm
Purity	>98%
Percentage of broken seed	<0.2%
Dimension(mm)	4000*1900*3100 mm
Weight(kg)	1550 kg





#### **Motor Details:**

#### **Double Vibration Motors:**

YZU-3-6L,0.25kw, 960r/min YZU-3-6L,0.25kw, 960r/min (if in special Hz or voltage, we can only use one set vibration motor of YZU-6-6,0.37kw)

#### **Air Blower Motor:**

Y2-B35-2,7.5KW, 2880RPM

Motor for grain return groove:

YS-7114, 0.25KW, 1400 r/min.

**Motor for Elevator:** 

Y90S-6, 0.75KW 960r/min.



#### **Drives:** Double Vibration Motors

No easy quick-wear parts, long lifetime and high efficiency, and the vibration more stable which makes best results.

# Introduction of working process:

By air aspiration and sieve oscillation, seed is fluidized and stratified.

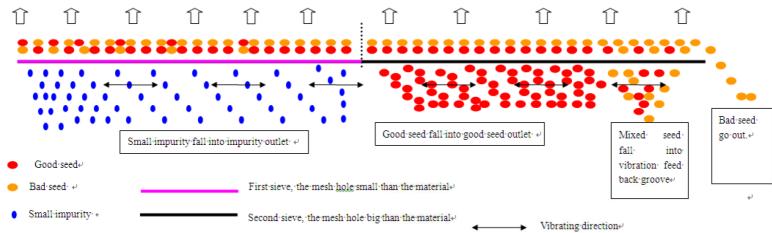
Heavy seed sink into the sieve bottom layer, while light seed suspend to the top layer.

After stratified, seed go forward to the discharging part.

Bottom layer good seed and mixture quality seed fall through the sieve discharge from different outlets successively.

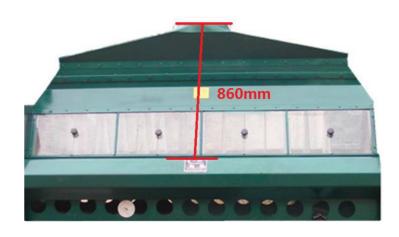
Top light seed with bad quality was discharge directly

Mixed quality seed in the middle layer fall through sieves and return back by vibrate feeding groove.









#### **The Widest Sieve**

The widest sieve can make the grains spread more evenly, the selection function more sufficient, also improve capacity.

#### The highest air chamber in China

Which makes air flow more unobstructed, more air storage capacity, stronger air suction that lead to better selection results.

#### Advantage of 5XZ-5B Gravity Separator in wheat processing:

Our 5XZ-5B Gravity Separator can remove all bad wheat, wild oats, wild barley and aegilops tauschii from the wheat. This is the unique machine which can achieve this function.



bad wheat

wild oats

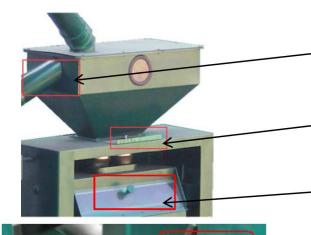


wild barley

aegilops tauschii



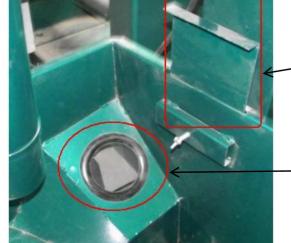
## Adjustment:



When the grain over-feeding into the hopper, there is an over flow pipe makes the grain back to the inlet of bucket elevator.

The Insert Plate under Inlet Hopper can control the feeding volume.

Inside have a buffer plate, which ensure grain fall down to sieves evenly.



The elevator hopper adjusting plate is used to adjust grain feeding speed.

And the observe window is used to keep watching the volume of return mixed grain to make them flow smoothly.

**Air Blower:** 4.5A, 7.5KW.





#### Air Adjusting handle to control the air volume produced from air blower.

14 air adjusting baffle plates will be adjusted according to selection results to control stratified of heavy and light seeds.





This is the inside sieve set.



#### The front sieve of Gravity Separator.

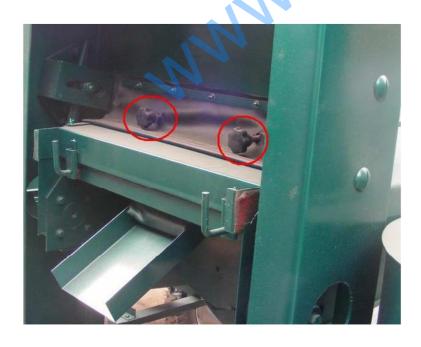
By the air aspiration and sieve oscillation, grain seed will finish layering on front sieve, then seed will go forward to back sieve for separation.



#### The back sieve of Gravity Separator.

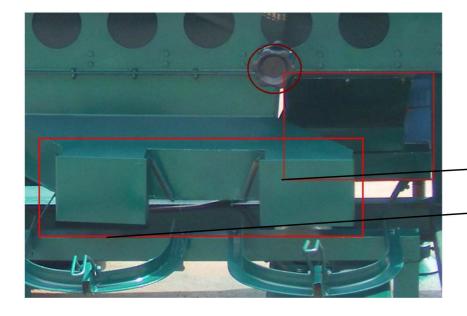
The triangle gap can be adjusted according to different material.

Bad seed will be separated from good seed and discharge from different outlet.



The two black adjusting handles is end of back sieve, it is used to adjust the triangle gap size, lead to control the separation of mixed grain and light grains while control the flow volume of light grains.







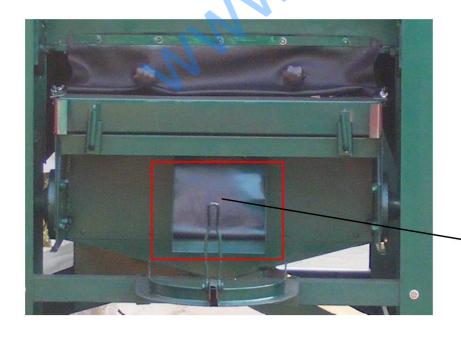
The above outlet is **outlet for good seed**, and there are two sack holders under it.

From top to Bottom are adjusting handle, outlet of mixed seed and outlets of good seed.

The black handle is called **material separation baffle plate adjusting handle**, it is used to adjust separation point of heavy seed and mixed seeds.

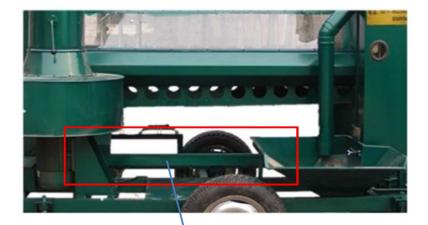
Under the outlet of good seed, there are sack holders which use to hold bags to fill in grain.

The grain from the outlet of mixed seeds will flow into grain returning groove and flow back into inlet hopper of elevator for second time selection.









# 7.3 Mixed Material Reflow Groove

## **Grain Returning Groove**

The grain seed which mixed good and bad seed will flow from this groove and back into inlet hopper of Gravity Separator for second time selection.





#### **Damping mechanism:**

Which can balance the vibrating force to make working steady,



# We are the best choice for you!

## **Factory view**



## We have professional manufacturing equipment!





## We can provide over sea machine assembly and staff training services!



## We have strong production capacity!





## We have customers all over the world!



# Healthy Grain, Pretty Beans, Strong Seed. SYNMEC

We serve for



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