

# **VIBRATORY SIEVE SEPARATOR**

## **AIR-RECYLING ASPIRATOR**





- A) Product Input
- B) Product Output
- C) Aspiration Connection
- D) Oversize Output Chute
- E) Undersize Output Chute
- F) Oversize Screen
- G) Undersize Screen

#### Wide range of applications

Akyurek VSP- Vibro Sieve Separator is implemented in separation of Oversize and Undersize admixtures from seed lot in... Grain ;wheat, durum, corn/maize, rye, soybean, oat, buckwheat, spelt, millet, and rice mills for basic cleaning Pulse; beans, lentil, chickpea, pigeon pea, yellow pea, vetch for basic cleaning

Spices; cumin, coriander, mustard, Caraway, black pepper, Clover and Fennel for basic cleaning

Oil Seeds; sesame, sunflower seed, pumpkin seed, flax, pistachio, rape, safflower for basic cleaning or in bulk storage systems for pre-cleaning.

In addition, the machine is also successfully used in animal feed production plants, seed treatment systems, oilseed cleaning installations, and cocoa bean grading systems.

In addition, it grades a wide variety of products by size.

Efficient grain cleaning at high throughput rates

• Using a screen separation system, the Separator VSS separates the grain from coarse impurities such as oversize grains,

strings, straw, wood, stones and pebbles, or clods of earth plus fine impurities such as sand or broken grains.

• The VSS achieves high throughputs up to 24 t/h in cleaning applications and 100 t/h in pre-cleaning applications in bulk storage installations.

• As an option, it is possible to install a downstream aspiration channel or air-recycling aspirator in order to separate low-density particles such as dust, hull particles, or husks and thus to optimize the cleaning result.



### Operation

The product is fed to the machine by means of the inlet stub-pipe, and then moved to the front part of the sieve basket where the grain distribution device spreads the grain across the whole sieve width. On the first sieve deck, impurities larger than cereal grain are separated and moved out of the machine. The throughs from the first sieve deck move to the second sieve deck where impurities smaller than cereal grain are separated. These impurities are collected in the bottom of the sieve basket from where they are discharged. The overtails from the second sieve deck represents the good grain which leaves the sieve separator, either to the basic aspiration case (for dust removal) or to a pneumatic channel where a jet of pressurized air separates impurities lighter than grain. In the pneumatic channel, the air flow rate can be precisely adjusted by means of the moving back channel wall, which allows for very accurate separation by specific weight.

#### Construction

The vibratory sieve separator consists of:

- sieve basket with two decks of sieves and product inlet and outlet.
- supporting frame.
- drive consisting of two electric vibrators mounted to sieve basket sides.
- outlet stub-pipes for outputting impurities.
- aspiration case or pneumatic channel, depending on the version of the machine.
- Perforated Screen and ball trays are separate.

#### **Advantages:**

- Speed and capacity adjustment with inverter
- Drive by electric vibratory motors for negligible maintenance and highly effective screening.
- -Choice of aspiration systems from basic aspiration case to high performance pneumatic channels, as follows:

Version "A" - separator with basic aspiration case - for removal of dust.

Version "B" - blower located below the sieve basket in separator frame to blow dust of cleaned product.



	In put Cleaning Capacaity		Sieve Size	Air Volume	Drives				Overall Diemensions (mm)		
Models	Silo Pre-Clean t/h	Mill High Perf. t/h	W x L (mm)	Pneumatic Channel Cubic Meter/h	Screen Deo (kW)	ck	Pneuma Chann (kW)	ntic el	A	В	С
C.SAS-013 100x200	58	15	1000x2000	4800	2 x 0,50	rpm	4	rpm	3000	1600	2020
C.SAS-013 150x200	65	18	1500x2000	4800	2 x 0,75	1500	4 1400	1400	3000	2100	2020

Please note that the input and output quantities that can be obtained interdependent and also depend on the input contamination. The throughput capacities shown are also dependent on the input contamination and the required quality of output. Also anothe capacity element is if cleaner machine working alone or integrated to a cleaning plant.

# AIR RECYLING ASPIRATOR



### **Work Principle**

The air-recycling aspirator ARA is applied for the separation of low-density particles in an aspiration channel from granular producys such as soft wheat, rye, barley, oats, beans, chickpeas, sunflower seeds, Sesame Seeds, corn (maize). High degree of separation thanks to excellent separating efficiency.

The air-recycling aspirator ARA is characterized by its excellent separating efficiency, which ensures a high degree of separation.

The uniform distribution of the air across the entire width of the aspiration channel ensure stable and reliable separation.

The degree of separation can be selected with high precision, preventing unnecessary product loss.



### **Air-Recyling Aspirator**

1- Product feed with eccentric drive

2- Aspiration channel with double adjustable wall

3- Integrated separator for low density product

4- Radial fan for recycling air

5- Air recycling channel

6- Screw conveyor with discharge gate for low-density product7- Outlet with finger valves for discharge of heavy product



**Optioanl Helper Equipments** 



Pre-Cleaner Vibrotory Sieve Seperator





### **Detailed Photos**









# VIBRATORY SIEVE SEPARATOR AIR-RECYLING ASPIRATOR



