ALVAN BLANCH
Processing the World's Crops

VIBRATORY SEPARATOR

- For high performance precleaning of grains or fine cleaning.
- 5 models offered-precleaning capacity 25 tonne/hour-100 tonne/hour.
- Very low maintenance – due to vibratory motor drive.
- Choice of 4 aspiration systems.

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VIBRATORY SEPARATOR

The modern design of the vibratory sieve separator allows it to achieve high quality cleaning at large capacities, whilst having small overall dimensions and low power consumption. It is used to separate over and undersize impurities from granular materials.

The separator is offered with the choice of four aspiration/pneumatic separator systems.

APPLICATION:

Vibratory sieve separators are commonly used for:
- precleaning of grain.
- high quality cleaning and grading of cereal grain and other seeds.
- offal sorting lines.
- cleaning lines of coffee, cocoa etc.

ADVANTAGES:

The features of the vibratory sieve separator are as follows:

- smooth and silent operation.
- drive by electric vibratory motors for negligible maintenance and highly effective screening.
- good access to sieves and easy sieve change.
- possibility to change the sieve inclination angle within the range of 0 – 12°.
- choice of aspiration systems from basic aspiration case to high performance pneumatic channels, as follows:

Version “0” – separator with basic aspiration case – for removal of dust.
Version “A” – separator with narrow pneumatic channel – for precision separation when cleaning at reduced capacities for optimum accuracy.
Version “B” – separator with deep pneumatic channel – for precision separation on precleaning throughputs.
Version “C” – separator with pneumatic channel with settling chamber – for pre-separation of heavier liftings from air; leaving less impurities going to cyclone.

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.

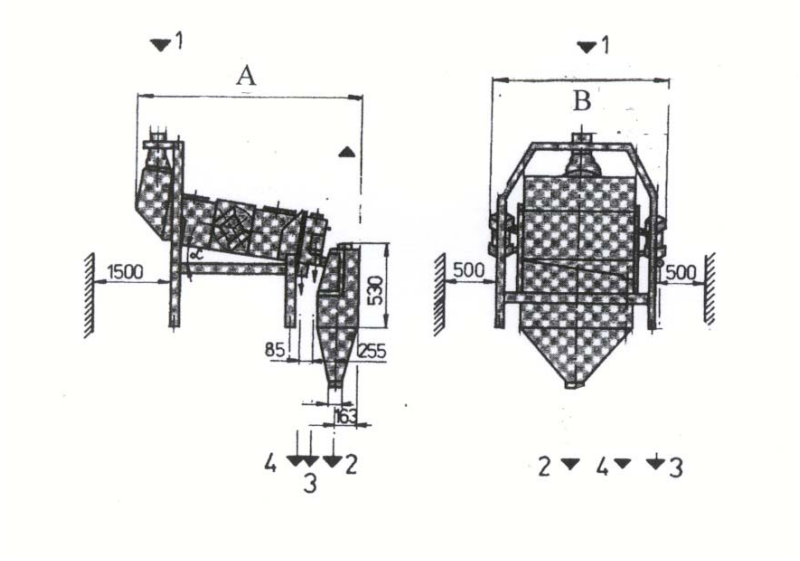
Vibratory Sieve Separator Data Sheet

	Cleaning Capacity		Sieve Size	Air Volume	Drives		Overall Dimensions (mm)				Shipping Specifications	
Model	Pre-clean. t/h	High Perf. t/h	W x L (mm)	Pneumatic Channel m^3/h	Screen Deck (kW)	Pneumatic Channel (kW)	A	B	C	D	Vol. (m^3)	Weight (kg)
VS7510	25	6	750x1000	3600	2x0.25	0.16	2102	1323	1906	1820	8.26	917
VS10010	35	9	1000x1000	4800	2x0.25	0.32	2102	1573	1906	1870	9.55	1044
VS10015	50	12	1000x1500	4800	2x0.25	0.32	2608	1573	1953	1870	12.53	1263
VS15015	65	18	1000x2000	4800	2x0.55	0.32	3096	1625	2050	1870	14.45	1340
VS15020	100	24	1500x2000	7200	2x0.55	0.32	3096	2125	2100	2050	18.90	1770

Notes:

1 Capacities are based on wheat at 16% moisture content wet basis.
2 Net weight are based on version 'B' pneumatic channel.

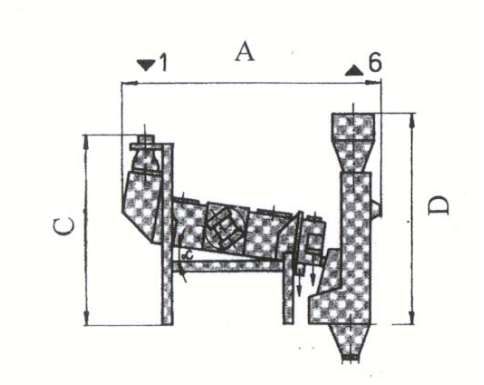
Sieve Separator with Basic Aspiration



Marking

1. Product inlet
2. Cleaned product outlet
3. Outlet of large impurities
4. Outlet of small impurities
5. Outlet of larger lighter impurities
6. Outlet of air with lighter impurities

Sieve Separator with Pneumatic Channel.
Channel type A or B



Sieve Separator with Pneumatic Channel.
Channel type C.