WINDSHIFTER

Advantages

All Air Flow windshifters are based on a laminated airflow blowing through falling material, whichgives you the best result as opposed to conventional systems based on suction of air.

Ample technical studies have confirmed that this way of separation has other advantages, like less energy consumption due to lower air volumes and improved separation results. Separation levels up to 99.9 % are possible. The construction of the windshifter is very robust and compact, therefore, the windshifter can be built/placed in nearly every situation.

Thanks to the well-designed but simple construction the windshifter is made for a trouble free operation with very low down time and little maintenance.

Low cost - High effeciency

The Air Flow series windshifters are a perfect answer to the increased demand for low cost - highefficient separation of products based on density and surface (shape). The Air Flow windshifters are used for a wide variety of applications from primary separation of waste to improvement of product purity. The technology is based on more than 15 years of experience with windshifting.

Working of airflow windshifters

All Air Flow windshifters consist of a feeding unit, which can be a conveyor belt or a vibrating table, depending on the application. At the end of the feeding unit, the material falls into an airstream created by a fan. This air stream is directed by an air nozzle which gives the necessary pressure to separate the fractions. The light fraction is blown across a rotating separation drum into the expansion hood. The heavy fraction falls before the separation drum. Most of the air is returned via the expansion hood to the fan. Due to an ingenious interior construction of the expansion hood, the external air tubes are reduced to a minimum, giving a compact set-up.

Flexibility and versatility

The Air Flow windshifter has a wide range of settings to adjust to get an optimal result and to be able to use the windshifter in a wide range of applications. The following settings can be adjusted:

- 1. Air speed by adjusting the rpm of the fan
- 2. Air direction by adjusting the inclined position of the nozzle
- 3. Horizontal position of separation drum
- 4. Vertical position of separation drum
- 5. Turning speed (rpm) of separation drum

If the Air Flow windshifter is fed by a conveyor belt, the speed of this belt can be adjusted as well. All adjustments can give improvements in the separation for a certain application. Very often a combined adjustment gives the optimal result in separation.

Capacities

Capacities are based on the type of input material. For heavy fractions like demolition material capacities range from 10-250 ton/h. For light fraction separation (like RDF) capacities range from 10-40 ton/h. On demand higher capacities can be achieved.

Airflow models

Different types of models can be delivered, like:

- Stationary windshifters stand alone or for static sorting lines
- Semi-mobile windshifter with hooklift or quick hitch
- Mobile windshifter for off-road on wheels or tracks



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The windshifters are delivered in standard sizes wide:

800 - 1200 - 1600 - 2000 - 2500 mm.

The windshifter can be delivered with a feeding vibrating table or conveyor belt. The conveyor belt can be integrated in the process line to eliminate an extra drop point. The double lane windshifter can treat two different fractions with one machine.

Windshifter 3-D

An integrated combination of Air Flow windshifters makes it possible to separate 3 fractions in one go, the first windshifter can for instance separate the light RDF type material and the second windshifter cleans aggregates from the mid-heavy combustibles.

Options

A wide range of options are available to tune the windshifter to your situation, like:

- Integrated filter unit and covered inlet for dust free operation
- Ingenious automatic cleaning of interior of fan for extended life time and
 easy maintenance
- Platforms and cage ladder for easy access
- Support frame
- Special coating

Applications

The Air Flow windshifter is designed for a wide range of applications, not limited to:

- Construction and demolition waste
- Commercial and industrial waste
- Municipal solid waste
- Civic amenities
- Co-mingled and dry recyclables
- Incinerator slags
- Manual sorting
- Gypsum recycling

- Compost cleaning
- Wood cleaning
- Metals cleaning
- Glass cleaning
- RDF/SRF production
- Biomass production
- Car shredder residue
- Inert cleaning