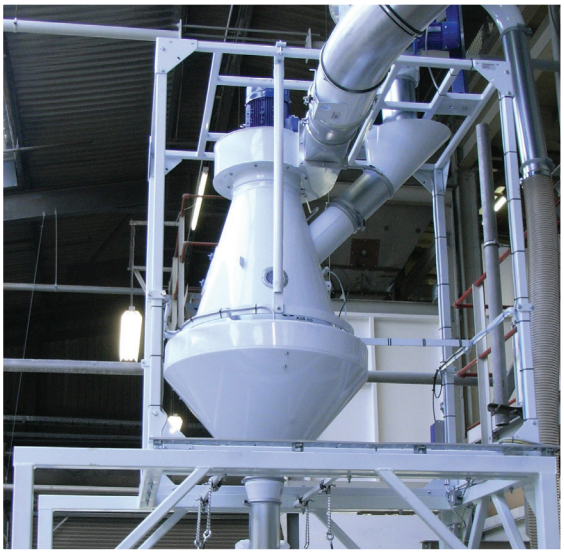
Dedusting and Separation

Dedusting and Separation Systems for Granulates, Virgin Material, and Regrind

KONGSKILDE

KIA Aspirator



The Kongskilde Industrial Aspirator (KIA) separates light impurities or dust from material or granulated plastic using innovative pneumatic technology.

The KIA has become a bench mark in PET bottle re-processing with many companies worldwide using it as their preferred method of removing label fragments after initial size reduction. This cost effective and low maintenance system offers payback in a relatively short period of time.

The KIA range has the capacity to handle throughputs of 100 – 5000lbs/hr (45 – 2250kg/hr) depending on the type of material.

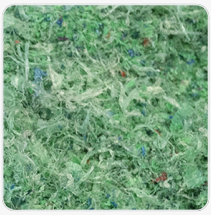
HOW IT WORKS

How the KIA separates material

1. The material enters the KIA via a gravity feed pipe into the main body where the material enters an upward air stream.
2. The light impurities are removed and evacuated to the dust cyclone and filter socks using the fan which is mounted on top of the KIA.
3. The material then falls through the bottom outlet of the aspirator.

Before Cleaning

After Cleaning

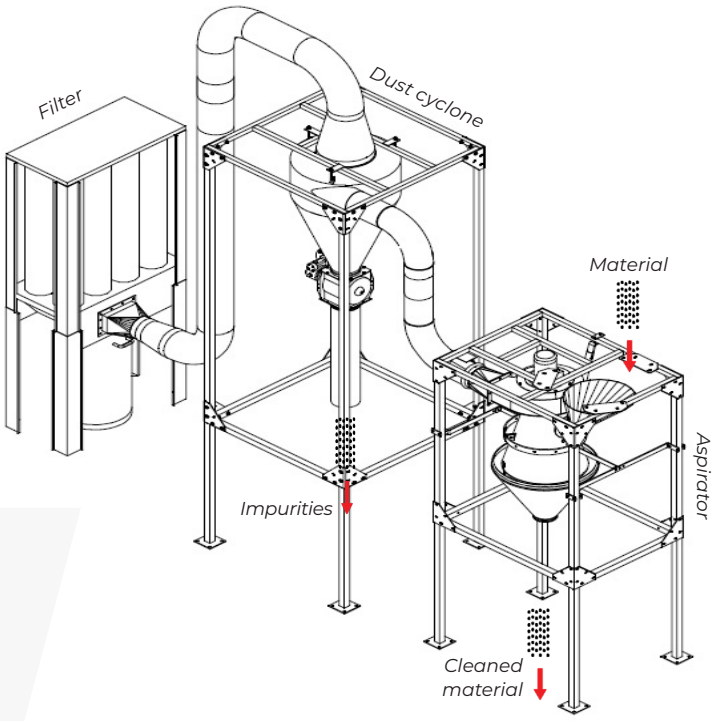


Waste Removed

Benefits

- Capable of cleaning both shredded and granulated plastic.
- Suited for use with in-house recycling or at a materials recycling facility.
- Automatic loading is possible using Kongskilde's pneumatic conveying technology.

KIA ASPIRATOR SYSTEM



AirWash System

Kongskilde's AirWash is the only plastics de-dusting system in today's marketplace that can convey and clean simultaneously.

The AirWash precisely evacuates and cleans material from granulators, mixers and other process equipment using a two stage cleaning process. After cleaning, the material can be recycled/reused directly in the production line again. The AirWash is ideally suited for in-house recycling where it can perform uniform cleaning of the material.

The AirWash range has the capacity to handle throughputs of 20 – 2500lbs/hr (9 – 1150kg/hr) depending on the type of material. The Airwash can be easily adjusted if material characteristics change. This allows for maximum dust removal while minimizing material loss.

HOW IT WORKS

Dust and fines are separated from regrind in 2 steps:

1. First, adjustable cleaning is done in the separation cyclone where the material is cleaned by adjusting the diffuser to increase or decrease the flow of air.
2. The second cleaning is done in a cascade section where gravity causes the material to fall and pass adjustable vacuum slots.

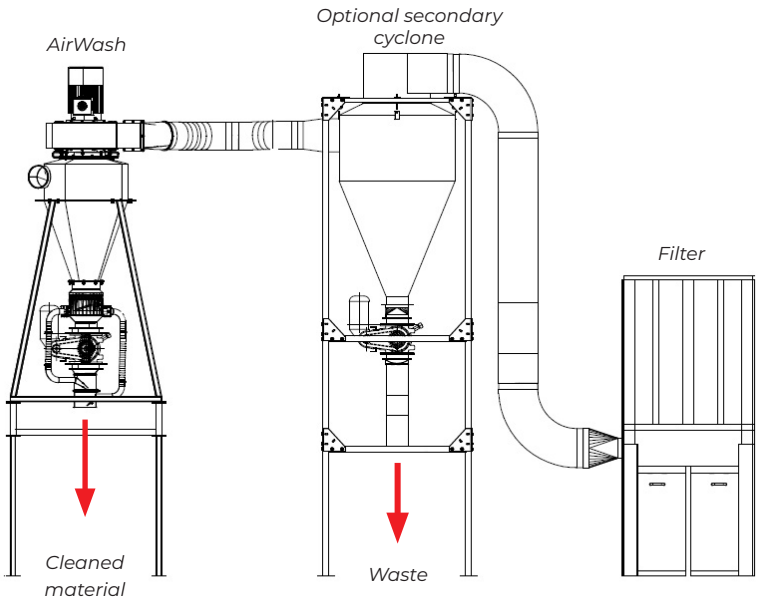
Suitable regrind materials for the AirWash include:

- PP
- PET
- PE
- HDPE
- Carpet – fibers
- Nylon
- ABS
- Rubber
- Most plastic pellets

Benefits

- Eliminate pelletization and drastically reduce processing costs.
- Ideal for in-house recycling systems.
- Can be integrated with Kongskilde technology to feed into silos or bins automatically.
- Antistatic equipment can be added to remove static charge in materials.
- Controls packages available.

AIRWASH SYSTEM



K-Series Bag Filter

The K-Series bag filter is a modular dust collection unit ideal for indoor dedusting installations.

This unit creates a clean, sealed system in the production area. Waste collection is available in the form of bags, barrels, or a dump bin.

About the Superbag:

- Suitable for varying dust loads and virtually any type of dust
- 99% efficient high-quality filter media
- Strong anti-static properties
- Low pressure drop and low energy consumption

Strength and Durability:

- Special shape maintains high efficiency over time
- Patented construction and strong polyester fiber for durability
- Seamless body for easy cleaning

User Benefits:

- Easy emptying process
- Modular design for flexibility
- Simple setup and maintenance

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