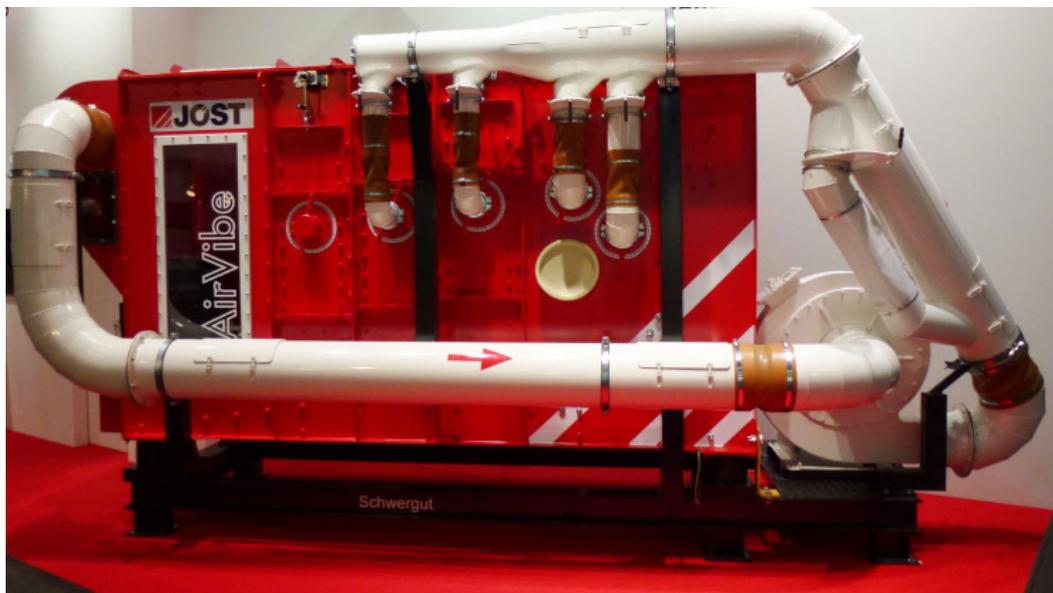


Vibrating air separator AirVibe 2

The JOEST AirVibe 2 – Vibratory Air Separator provides a coarse separation of inhomogeneous, mostly dry recycling material with a maximum particle size of 300 mm (12 inches). The material mix is separated by different densities, shapes and surface characteristics into the desired product groups. The unique combination of multistage ballistic and cross flow air separation ensures a very high degree of separation. This opens up new ways in the processing and separation in the recycling industry.

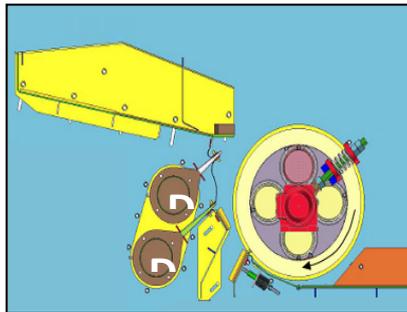


The AirVibe 2 is vibrating with a linear stroke using 2 unbalanced motors. This motion is important for the transport, fluidization and even distribution of the infeed material. An adjustable air knife, positioned at the end of the impact area blows through the material stream. Light material particles like paper, plastic and card board are blown into the expansion room of the AirVibe 2 and discharged at the light material fraction of the end of the AirVibe 2. The medium weight particles which were not separated in the first separation stage based on size and shape hit an adjustable separation plate. Especially light particles with a larger surface area and those with a higher grip will be moved over the separation plate due to the linear stroke of the machine and added to the light material fraction. Round, rolling particles and those with a smooth surface like stones and glass are sliding down the separation plate and added to the heavy material fraction.

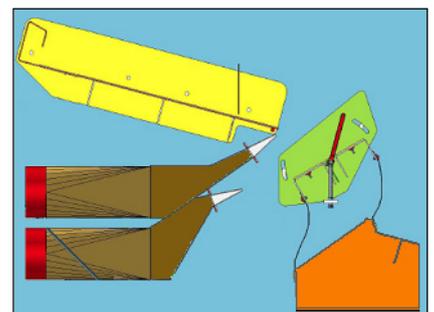
A second air knife under the impact area is blowing directly onto the separation plate. This way light, rolling particles like plastic bottles can be separated and distracted with the light particles. The integrated chain curtain separator allows a much more compact machine design due to a smaller expansion chamber. For surface wet materials a special design with a separation drum with a scraper instead of a plate, have proven to be very effective and low maintenance. The AirVibe 2 has many possibilities for adjustments according to the inhomogeneous and very different and damaging materials to be separated. This includes the adjustment of the separation plates and air knives, impact area as well as the vibration parameters of the machine. The max. capacity of the AirVibe 2 is about 15t/h.



Execution with drum unit



Drum unit



Separation plate

Key features:

Multi Stage Separation

- + Very high degree of separation
- + Higher throughput capacity
- + Throughput capacity at glass waste between 10 and 15 t/h, depending the material composition and purity
- + Separation into 3 different material fractions possible

Recirculating Air Flow

- + For most products total or partial recirculation of the air possible without adding an expensive bag house
- + Reducing investment and operating costs significantly

Fine particle separation

- + Integrated centrifugal fines separator
- + Multi stage chain curtain for the separation of fines particles from recirculating air flow

Integrated Finger Screens

- + Optional dual stage finger screens on the heavy material fraction side; especially for glass recycling

Compact "All-In-One" Solution

- + Combination of a ballistic separator and air separator
- + Integrated vibratory feeder
- + Integrated Centrifugal Fines Separator
- + Chain curtains for additional separation of fines particles
- + Stand alone, complete solution which does not need connection with bag house
- + Only few interfaces required

Options:

- Dual stage finger screens in the heavy fraction, especially for glass recycling
- Separation of the material into several fractions
- Vibratory feeder for infeed material

Application areas:

- Glass recycling
- MSW
- Industrial waste
- RDF
- C&D
- Wood/mulch
- Shredder protection