Size/Density Separator
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Removes Undersize and Underweight Materials from Grains, Plastics, Glass, Wood Particles

This Kason Vibro-Air™ Size/Density Separator employs vibratory screening to remove undersize particles, and airflow to simultaneously remove low bulk density materials.

It efficiently separates: fines and chaff from grain products; fines, angel hair, strands and film scrap from plastic pellets/regrind; labels from recycled glass; fibers, saw dust and wood flour from wood chips/shavings; and other undersize and low bulk density matter from on-size products.

Material fed through a port on the unit's hood cascades over a series of strategically placed internal trays, and ultimately onto a vibrating, fine mesh screen that moves on-size material in controlled flow patterns toward and through a discharge port at the screen's periphery. Heavier fines and a portion of the lighter fines pass through the screen onto a chute leading to a lower discharge spout.

Simultaneously, air drawn into the base of the air-tight chamber flows upward, drawing the balance of low density fines, along with airborne dust, fibers, films and strands, into an airstream that increases in velocity (as the hood tapers) before venting to a cyclone and/or dust collector.

The combination of air flow and vibration removes a greater portion of fines and low density materials from on-size particles with higher efficiency than possible with screening alone.

Optional is a coarse screening deck positioned above the fine mesh screen to scalp oversize particles from on-size material.

The separator is available in 24 to 100 in. (610 to 2540 mm) diameters, in carbon steel or stainless steel, and is offered as a stand-alone unit or a complete system integrated with a dust collection system, exhaust fan and electrical controls on a mobile frame, ready to plug in and run.

The screening assembly is suspended on springs that allow it to vibrate freely while minimizing power consumption and preventing vibration transmission to the floor. Beneath the assembly is an imbalanced-weight, gyratory motor that creates multi-plane inertial vibration for the purpose of controlling the flow path of material on screen surfaces and maximizing the rate at which material passes through the screen.

Options:
- "Air-Lift" Quick Screen Change System
- Clean-In-Place (CIP) Design, Construction and Finish
- Ball Tray Anti-Blinding Device
- Kleen Screen Anti-Blinding Device
- Auto-Lube Automatic Lubrication System for gyratory motors
- Design, Construction and Finish to FDA, 3-A, BISSC, EEC and other sanitary standards
Plastics shown (clockwise from top left) as 1) mixture of on-size pellets, undersize powder and low bulk density film, 2) on-size pellets, 3) low bulk density film, and 4) undersize powder as separated by screen vibration and airflow.

Wood shown (clockwise from top) as 1) mixture of undersize chips and powder, 2) low bulk density powder, and 3) on-size chips as separated by screen vibration and airflow.