

AIRMEC DESIGN LIMITED

AIR & MECHANICAL WASTE HANDLING SPECIALISTS

Airmec Air Impingement Waste Separators

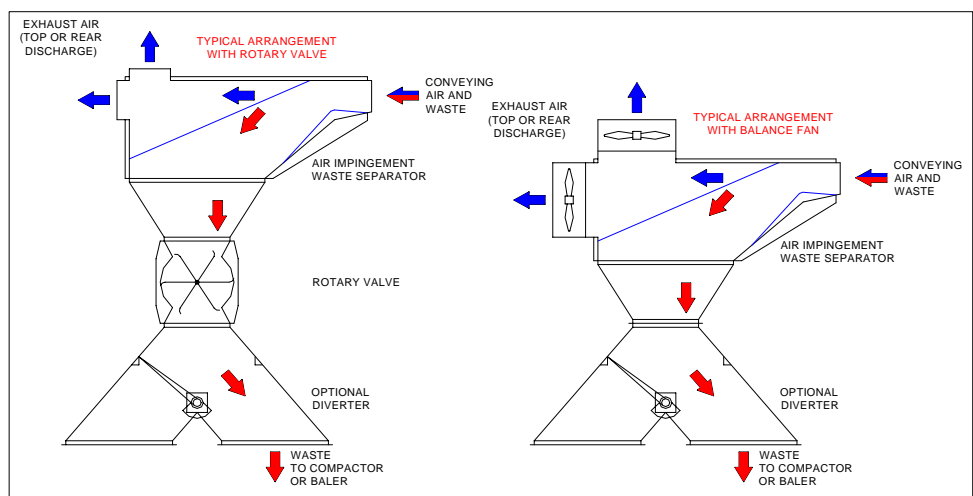
The Airmec range of system products includes the new 'third generation' *Air Impingement Waste Separator*, specifically designed for strength and durability. Engineered to process a wide range of dry production waste' from tissue trim through to corrugated board and even tin cans.



Coupled with our wide range of Rotary Valve units or Balance Fan configurations, our bespoke designed units provide reliable and economical feed of Air System transferred process waste, into compactor or baler units with consistent reliability and efficiency. Thus ensuring your important production process will continue unhindered.

Operation

Process trim and transfer air enter via single or multiple inlets. The manually adjustable full width aerofoil accelerates the transfer air and waste down the full length of the impingement screen, ensuring the screen remains clean and separates at full capacity. Waste is directed to the rear face of the separator unit where it rapidly decelerates and falls through its own weight into the compacting unit.



Heavy-duty perforated separation screens ensure the dusty air is removed for either filtration and bagged collection, or exhausted to atmosphere if the dust loading is sufficiently light.

Should the conveying air have a heavy dust loading such as that generated by shredding or milling processes, it can be filtered to a high quality to collect all of the dust, improving environmental conditions both inside and outside the building.

Heat Loss Recovery

Energy conservation can also be achieved to save on winter heating by returning the cleaned air to the production area or perhaps to an air curtain over a large doorway to achieve significant energy savings. Similarly, summer/winter changeover can also be added to vent the clean air to atmosphere during summer months to assist the natural ventilation of the factory.

Quality... Value... Efficiency... Improved Productivity... Increased Waste Revenue...

Airmec Cutter/Conveyor Fans

These fans are equipped with high tensile steel impellers specifically designed for handling large volumes of waste materials and are built for heavy industrial use. They should not be confused with lightweight fans or those made from mild steel.

The fan impeller runs on twin heavy-duty bearing blocks and is equipped with replaceable hardened steel cutting blades, which are of particular benefit when handling large volumes of waste materials. All fans are fitted with external grease nipples connected to the fan bearing assembly.



Airmec Rotary Valves

These are large diameter, heavy duty units designed exclusively for handling paper, and board waste, they should not be confused with smaller lightweight units which have a tendency to jam when passing large volumes of material.

Each of its rotor blades is fitted with a wear resistant seal (not the more common canvas backed rubber) to ensure high reliability waste transfer and to provide the necessary air seal to the system. Each unit is fitted with an adjustable torque sensor to provide protection of the equipment and feedback information to the control system, if fitted.



Airmec CA Reverse - Jet Filters

Airmec CA Reverse Jet Filters have been developed specifically for the print, paper and board converting industries to provide high quality air cleaning in true non-stop 24-hour operation, handling large volumes of contaminated air. Please see our enclosed datasheet.

The quality of the air returned from our CA filters is some ten times better than current U.K. requirements. In addition, the filtering and returning of the conveying air to the main production area avoids the building operating under negative pressure, overcoming cold draughts, ingress of dirt from outside. All of this is particularly important to those companies wishing to achieve or maintain ISO 14001, or even those who just supply goods to the food industry.



PLC System Control

The system can be simply controlled, with the compactor feed diverter signalled directly from the compactor and individual fans operated from their own starter panels. However, unexpected stoppages can still occur, for example when one compactor has a fault and the other has a full bin and, given the importance for reliability, Airmec can provide a full function control system. This would automatically monitor all key components i.e. Compactors, Baling Presses, Rotary Valve, High level Sensors, Filter pressure, etc. to protect the plant if a serious fault is detected.



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Airmec's Extensive Range Of Services
Includes: -

- Process Waste Extraction Systems.
- Dust Filtration Solutions.
- Fume Extract & Ventilation.
- LEV Testing.
- System Service & Maintenance.
- Spare Parts Stockist & Bespoke Manufacture.