# Aeromec Conveying Systems For Powders and Granules

Manufactured by Entecon UK Ltd

# Aeramec Aero Mechanical Conveyors

Aero Mechanical Conveying was introduced to the U.K. market by Entecon Limited in 1968. Since then thousands of these systems have been sold throughout the world to handle powders and granular materials, cleanly and efficiently and in an enclosed environment.

Continuous research and development, the high quality of the product and the Company's experience and expertise in materials handling, have established Entecon, now Entecon UK Ltd, as the first choice for disc in tube type conveying systems.

Aeromec<sup>™</sup> conveyors are built to endure conditions where materials may contain particularly abrasive or corrosive properties. The fully enclosed construction helps to maintain a dust free working environment demanded by health and safety legislations. Additional benefits are the energy efficient running costs.



The AMC is of tubular construction having a tensioned wire rope fitted with equally spaced plastic discs, running between terminal sprockets. The discs, which are a loose fit in the tubes, travel at relatively high linear speed creating both air and material displacement. This effect fluidises the product, surrounding each particle with air giving high throughput with minimal damage and separation.



Rope and Disk Assembly

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# Aeramec VHC - HVC Conveyors



# Aeremec HVH - HDC Conveyors

## HVH - Horizontal Vertical Horizontal Conveyors

The HVH is an extension of the high speed range of conveyors, providing a single machine for installations where three straight line conveyors would otherwise be necessary. The HVH accepts the majority of options available with the Aeromec<sup>™</sup> range plus the facility for multi infeed stations.

### HDC - Horizontal Distribution Conveyors

These conveyors are operated at slow speed for distributing material to multiple outlets. Inlet and outlet positions can be varied by using a choice of cut-off valves and mid tube outlets, allowing the products to be conveyed to any of the discharge points automatically via remote PLC.

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# Aeremec Accessories and Optional Extras



Diverter



Hinged Inlet



Aluminum Discharge End

#### Products commonly handled by Aeromec<sup>™</sup> conveyor systems manufactured by Entecon UK Ltd

Coffee	Flour
Теа	Dried Flaked Vegetables
Breakfast Cereals	Frozen Foods
Spices	Seeds
Food Mixes	Starch
Sugar	Cereals
Beverages	Sodium, Potassium and
Milk Powder	Calcium Compounds
Lime/Chalk	Gypsum
Plastic Nibs	Polymer Powders
Detergents	Rubber Crumb
Carbon Black	Resins
Titanium Dioxide	



Vibrated Inlet



Stainless Steel Feed End



Stainless Steel Discharge End

#### Aeromec<sup>™</sup> conveyor systems are installed in many different industries including:-

Building products Paint Metallurgical Brewing Adhesives DIY Products Ceramics Pigments Road marking Confectionery Cement Plastics Food Pharmaceutical Cosmetics Chemical

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# Aeremec RMC - Ring Main Conveyors

The Ring Main Conveyor is a versatile and compact single tube conveying circuit using the wire rope, discs and many other standard Aeromec<sup>™</sup> components.

The layout of the system, the inlet position, the location and number of distribution points, height of lift and length are all infinitely variable and designed and built to suit the customer's requirements.



A typical installation

A wide range of options and material specifications are available.

The system is virtually self-cleaning and requires little maintenance.



### Rotovalve

By incorporating a number of Rotovalves into a distribution system, products can be conveyed to any of the discharge points automatically via a remote PLC.

The unique design of the patented Rotovalve offers distinct benefits over conventional valves ensuring minimal damage to fragile or sensitive products, no product retention beneath the closed valve, minimum contamination of dissimilar products and a high accuracy when controlling product flow from a loss-in-weight batch process.

When closed or not in use the Rotovalve maintains a smooth internal bore through which the rope and disc travel and a sealing device to ensure there is no dust or product leakage to atmosphere.

Patented Rotovalve for product discharge control



Safety guards removed for illustration purposes

### Rotopurge

The patented Rotopurge cleaning system developed for effective cleaning both during or after a production batch. This optional feature enables pressurised clean dry air to be effectively injected into the conveyor end assemblies to elliminate cross contamination between the conveying of different process materials.



Internal view of end housing fitted with rotopurge



# Materials of Construction

Aeromec<sup>™</sup> conveyor systems are manufactured to very high standards of quality, ensuring long working life and minimal maintenance.

Taking into account the characteristics of the material being handled, Aeromec<sup>™</sup> conveyors are custom-built to suit specific site conditions and applications. In addition to a basic mild steel/aluminium specification a comprehensive range of alternatives are available, from epoxy and nickel surface coatings through to 316 stainless steel specification for all metal parts.

Wire rope assemblies are galvanised mild steel or 316 stainless steel. Discs are produced in nylon, polyurethane, estane and polycarbonate and are selected to suit individual product characteristics.

# **Test Facilities**

We maintain complete testing facilities at our Camberley factory for analysing problems in conveying, bag opening and FIBC handling.

The facilities are available for use by any customer who has a particular problem to solve. Tests are conducted free of charge by Entecon UK staff and the customer or company representative is cordially invited to observe.

### **Conveyor Throughputs**

(Average Rates) A. High Speed Conveying (Aero Mechanical)

Conveyor	75mm (3")	100mm (4")
Size	Diameter	Diameter
Material Rate m³/hr (F ³/Min)	15 (9)	30 (18)

#### **B. Slow Speed Conveying**

Conveyor	75mm (3")	100mm (4")
Size	Diameter	Diameter
Material Rate m³/hr (F³/Min)	7.5 (4.5)	15 (9)

Average noise level 75 db dependent on type of product being conveyed.

Due to a programme of continued research and development, designs and specifications may be changed without prior notice.

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