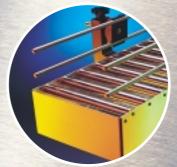


#### **ARNOTT CONVEYORS LTD**







Arnott Conveyors are housed in spacious modern facilities in the heart of England within easy reach of the M1, M6 and A1 via the A14 link road, enabling existing and potential customers to visit us easily and quickly, whether to inspect and test systems being manufactured on their behalf, to discuss future projects or perhaps to study our latest innovations.

> With over 25 years experience in the design and manufacture of single conveyors or complete turnkey projects, we can offer a comprehensive service to clients throughout many different industries.

The latest Auto-CAD design technology allows detailed designs to be produced and discussed with clients to ensure their requirements are met to the latest detail.

Over the years Arnott have become well known and respected for our expertise in all aspects of conveying in the food and pharmaceutical industries, where our knowledge of hygiene requirements in high risk areas is second to none, resulting in the majority of our equipment being manufactured in Stainless Steel.

However, we also produce systems for such diverse clients in waste handling, automotive components, laundries, paint production, blow moulding etc.

Be assured, you are probably just a phone, fax or email away from all the assistance you need for the solution to your handling problem.

> Telephone: 01604 882232 Fax: 01604 882270 E-mail: conveyors@arnott-group.co.uk Website: www.arnott-group.co.uk

# **Side Flexing Modular Belt Conveyor**

Feeding three lanes of sauce covered ready meals from filling lines to freezer without spillage is achieved with this easily cleanable multi-directional modular belt. For hygiene purposes the belt can be lifted from the openly constructed support deck in seconds. Knife edge wire belt transfers at each end to ensure a level passage of the product at infeed and discharge end. Spray bars and inspection grills can be included if required.

# **Integrated Indexing System**

By integrating the drive of the cross conveyor to the infeed of the long conveyor, product can be accurately dropped into each pocket, feeding an automatic form fill and seal or multihead weigher on demand.

As usual, particular attention is paid to the hygiene requirements of the food industry with strategically placed C.I.P. stations, and safe yet open construction.

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This chain driven roller turntable is manufactured entirely in stainless steel, extremely robust and is ideally suited for use in clean areas with wet and/or low temperature applications.

Standard heavy duty chain driven and free running powered roller systems are available for general pallet handling, all with fully integrated control systems.

#### **Belt Bend Conveyors**



Arnott's belt bend conveyors can be supplied with standard conical end rollers or 15mm diameter knife edges.

Angles are typically between 45° - 180°.

The food quality belt is guided by means of roller sets mounted on the outside edge of the belt. Each set consists of two ball bearings covered with a nylon running surface to reduce friction and achieve low noise levels.

In keeping with Arnott's usual awareness of food industry requirements, knife edge belt bends are available with an easy to clean facility.

The top guide rail is quickly removed exposing the parts not usually accessible and a quick release clamp relieves the belt tension, exposing hidden areas.

After thorough cleaning, the procedure is reversed, ready for a speedy restart with little disruption to production.

#### **Ultra Violet Disinfection Conveyors**



UV disinfection is a universally proven and industry accepted method of effective reduction of pathogens on surfaces, in water or in air. A typical system can provide as great as 99 - 99.9% reduction of all common bacteria and viruses. Unlike chemical disinfectants, which rely on chemical oxidation to disrupt the life functions of micro-organisms, UV is simple light energy that cripples the DNA of harmful organisms. By disabling their DNA, the life functions of these organisms are interrupted, rendering them harmless. Because no chemicals are involved, there are no worries of handling harmful chemicals within the workplace, with their associated by-products and stringent COSHH regulations.

All systems are specifically designed to ensure maximum disinfection; they are individually tailored to the size and shape of the product passing through it. Each system is also designed and fitted with numerous safety features, making it totally safe for use by standard operators after minimal training. To maintain system integrity, every lamp is individually monitored and connected to both audible and visual alarms.

# **Hose Through Portable Transfer Conveyor**

Side buffers for good location, stainless steel lockable, adjustable height castors, pivoting nose bar for good product transfer, every part accessible for hosing, FDA, USDA approved acetal belt, easy to manoeuvre yet extremely robust. The conveyor is designed for the stringent hygene requirements of high risk area food production.

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This multilane radius conveyor has replaced two 90° wire belt conveyor bends, plus the connecting conveyor between them.

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This has eliminated two product transfer points and reduced the number of drives and controls from three to one.

The result is much more efficient and low maintenance system. Product flow is controlled by a simple, easy adjustable diverting plough, which could be upgraded to an auto-version if required.

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The installation begins with an overhead gantry and travelling hoist, transporting 500kg bags of biscuit crumb to the pot filling and packing room. The crumb is elevated to feed a multi-head weigher on demand. After filling and sealing, the pots are conveyed via a check weigher to the packing area. D

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A flighted belt with corrugated side walls contains the product and hinged top covers allow easy access to the belt.

The finished pots are delivered by two 90° Fleximove conveyors to a turntable for cartoning, then they finally pass through a tape sealing machine and are palletised.

# **Powered Roller Systems**



A full range of powered roller conveyors are available, from single units to fully integrated systems. Packages as small as 250mm long can be handled on the modular system with its 37mm diameter close pitch rollers or the more traditional lineshaft type is available with 50mm diameter rollers.

Bends, cross transfers, merges, diverts and lift up personnel gates are manufactured for both types.

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# **Gentle Handling Systems**



The client's requirement was to transport boiled sweets from the cooling lines to the storage units via a vibratory grading hopper and metal detector to portable storage trolleys.

The key components in this system were the retracting flighted conveyors. These extended almost into the bottom of the portable storage trolley and slowly retracted as the unit filled. Two trolleys are positioned ready for filling and when one is filled, the cross conveyor reverses to repeat the operation on the second trolley. The full trolley is removed and replaced. Result, a user friendly, low maintenance system with absolute minimum product breakage.

#### **Pressureless Combiner System**



Manufactured from Brushed finish stainless steel or mild steel, our pressureless combiner systems are principally designed to allow a range of pre manufactured products to be manually or automatically unloaded into a system where single file is a prerequisite further into the production line.

Receiving the product randomly in mass within the confines of the feed table allows the product to trickle feed or flood off the end of the feed table and enter the multi lane pressureless combiner conveyor.

By use of the multi lane slats at differing speeds, the random bulk of flow are persuaded by former guided to separate into single file. Thereafter single slat type conveyor can deliver the product for orientation and presentation to filling, capping and labelling and palletising operations. In addition, our selective electronic control system provides us with the flexibility to cater for differing line speeds, Irregular shape containers and containers with special handling characteristics without necessarily introducing costly part changing operations.

### **Retracting Belt System**

Manufactured from stainless steel, this flat pastry belt conveyor system is configured to complete preparatory sheeting of pastry for pizza and pitta bread products.

Dough balls are manually or automatically deposited into the system and reduced in height by an adjustable powered roller assembly used in conjunction with inline sheeting units.

The product direction can be predetermined by a selection switch on the control panel which results in the retractable conveyor either, when retracted, positioned to drop the product through 90 degrees on to the transfer belt beneath, or, if in the extended position, transfer the product on to the in line take away conveyor, and continue in the original direction of flow.

The stainless steel panel contains selective plc control requirements for the system.

#### Wire Belt Conveyor

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Arnott's wire belt conveyors lend themselves to a multitude of uses and are manufactured with our usual care and expertise. Various end transfers can be produced including knife edges, pivoting and retractable ends.

Removable spillage trays, belt washers and brushes can be provided and additions such as glazing sprays and flavouring dispensers can be easily fitted.

90 and 180 degree wire belt bends are also produced to complete the wire belt range, keeping products in perfect alignment. The inside radius of 406mm is constant whilst belt widths are available from 254mm to 1200mm. The end transfer rollers are 40 diameter, enabling a smooth transfer of product.

### **Swan Neck Modular Conveyor**



Transporting loose product, possibly wet or sticky, from low level to high level is made easy by a swan neck modular belt conveyor.

The hopper and side guides can be easily removed or folded back. Hose through grills are fitted, some with interior spray bars and connections for high pressure hoses or a continuous washing facility.

Adjustable feet or castors are provided and electrical control panels are optional additions.

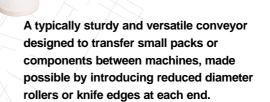
### **De-elevating Conveyor**

Using heavy duty plastic modular belting this flighted de-elevating conveyor accepts frozen or chilled unpacked products from high level freezer/chiller outfeeds and handles them in a controlled manner down to packing areas with the minimum possible product damage.

This particular belt not only 'swan necks' as in the example shown but, if required, can change direction through 180° degrees and continue horizontally as one continuous belt, avoiding awkward transfers to product.

Hinged undertrays are provided where required, as are belt washers or brushes, all with Arnotts usual care and knowledge of the environment in which they are to be used.

### **Transfer Belt Conveyor**



Available with mechanical or electrical variable speed control if required and with a variety of side guides, this conveyor suits many applications and is available in belt width and length to customers' requirements.

#### **Modular Belt Conveyor**

Designed predominantly for raw meat and vegetable products, modular belt conveyors are available with a variety of U.S.D.A. approved polypropylene, polyethylene or acetal belts with various open or closed surfaces, depending upon the application.

Infeed and discharge ends can be as small as 40mm diameter to ensure good transfer of products.

Stainless steel or polyethylene side tables can be provided as can drip trays, continuous belt washers and spray bars for plug-in high pressure hoses.

The acceptance by food processors of this type of conveyor has meant an end to poor belt tracking, fraying and slippage problems, resulting in a much longer belt life and little down time for maintenance and repair.

#### **Turntables**

Several designs of turntable are available. Simple stand alone "Lazy Susans" for general product collection or more sophisticated units with infeeds, outfeeds and adjustable product guides.

Integrated packing tables are a useful addition at little extra cost.

Our turntables are usually 1000mm, 1200mm or 1500mm in diameter and can be fixed or variable speed.

#### **Adjustable Feet**



Adjustable feet are available with thread diameter ranging from M10 to M30, the threaded section for which can be supplied zinc plated or stainless steel with thread length to suit individual customer requirements.

Each foot is supplied with a moulded, durable non-toxic polypropylene base with a ball and socket arrangement to compensate for uneven floors. The bases are available in 50, 80, 100 or 120 diameter in conical or bolt down form either black or white. Loading per foot is calculated at M10/M12 - 150 Kg, M16 - 400 Kg, M20 - 450 Kg, M24/M30 - 700 Kg.

For heavier applications the foot can be supplied with a mild steel or S/S machined base.

#### **Gravity Roller Track**



A wide range of gravity roller conveyors are manufactured to suit individual customer requirements. This range includes such items as straights, bends, transfer sections and lift up gates. Side frames are available in extruded aluminium sections, stainless steel or mild steel painted. Any of our range of gravity rollers can be fitted in our track with roller pitch, width and diameter being determined by individual customer requirement. If required each track can be fitted with additions such as guides, end stops or stands.

Stands may be galvanised mild steel, stainless steel or powder coated.



**Gravity Rollers** 

The standard roller diameters available are 20, 25, 30, 40, 50 or 60mm.

These comprise of a rigid ABS tube fitted with acetal copolymer end bearing and a mild or stainless steel spindle which is spring loaded as standard.

Alternatively the shaft can be supplied loose with either drilled and tapped or threaded ends according to individual customers requirements. On the 25, 40 and 50 diameter rollers the ABS tube can be replaced with polypropylene, aluminium or stainless steel for different applications.

#### **Conveyor Drums**



Food quality heavy duty polypropylene drums available up to 1800mm face width, diameter 50, 60, 88, 110, 125, 140, 165, 225, 250. Drums can be manufactured in any diameter up to 250mm if the face width does not exceed 750mm.

Polypropylene drums are suitable for drive, tail, snubbing or idler applications and can be supplied with a fixed shaft or complete with double sealed precision bearings and additional double lipped seals with circliped shafts. Other options available include tracking groove, polycord groove, tapered rollers, crowning, shaft machining i.e. keyway, holes centres, flats etc, and non-slip lagging.

Alternatively we produce a range of mild steel, anodised aluminium and stainless steel conveyor drums. Various types of plating can be applied to the mild steel drums with all types being available with rubber covered surface if required.