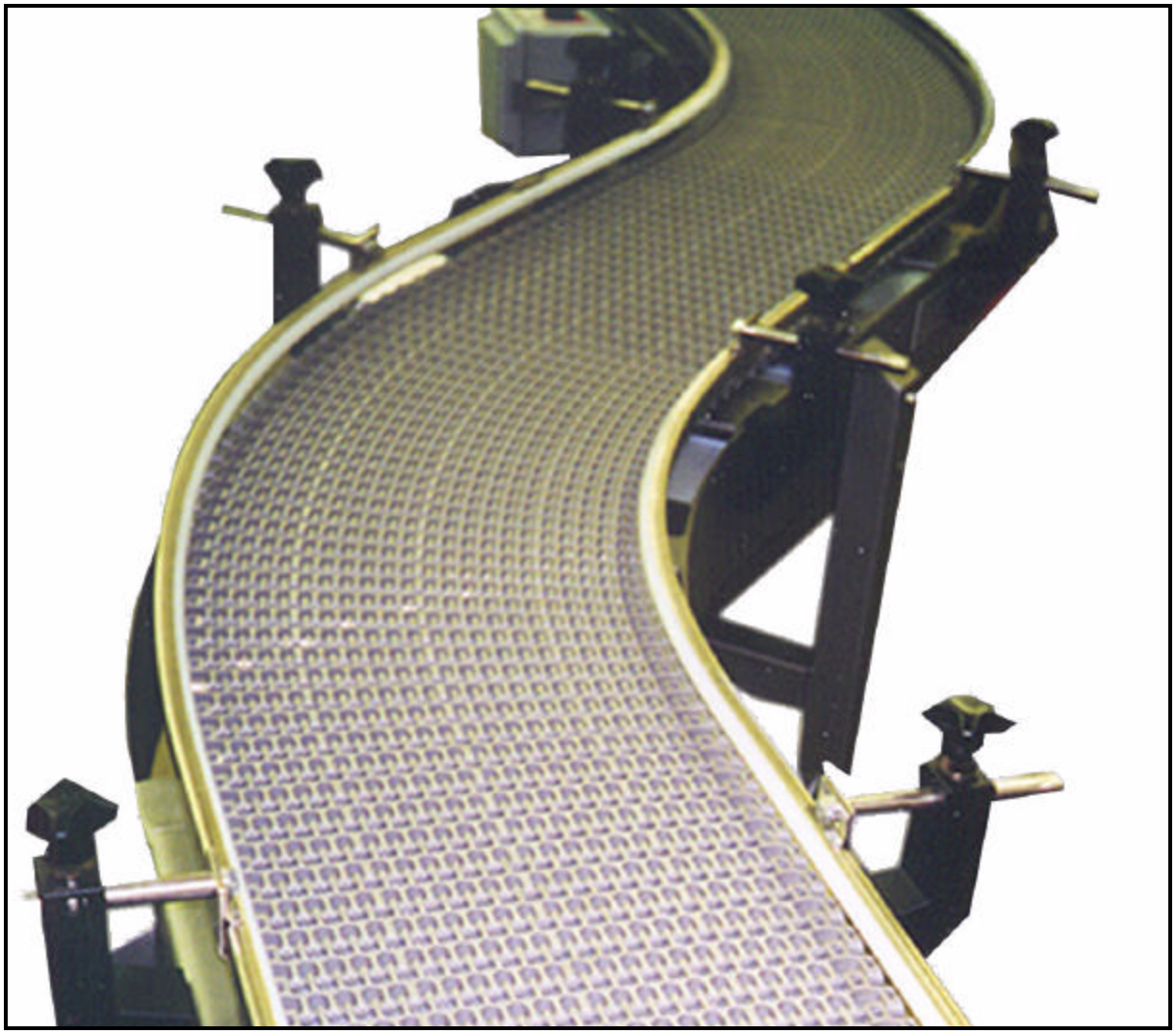


WRABACON INC.
creative automation

150 Old Waterville Road
P.O. Box 7
Oakland, Maine 04963
Tel: 207-465-7270
Fax: 207-465-2134
E-mail: Sales@Wrabacon.com
Web Site: www.Wrabacon.com

# Product Bulletin No. C-19

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Multi Level Bi-Flow Accumulation Table

Shown with infeed and discharge intact
during extensive testing prior to shipment.

Discharge

Infeed

Tables Only

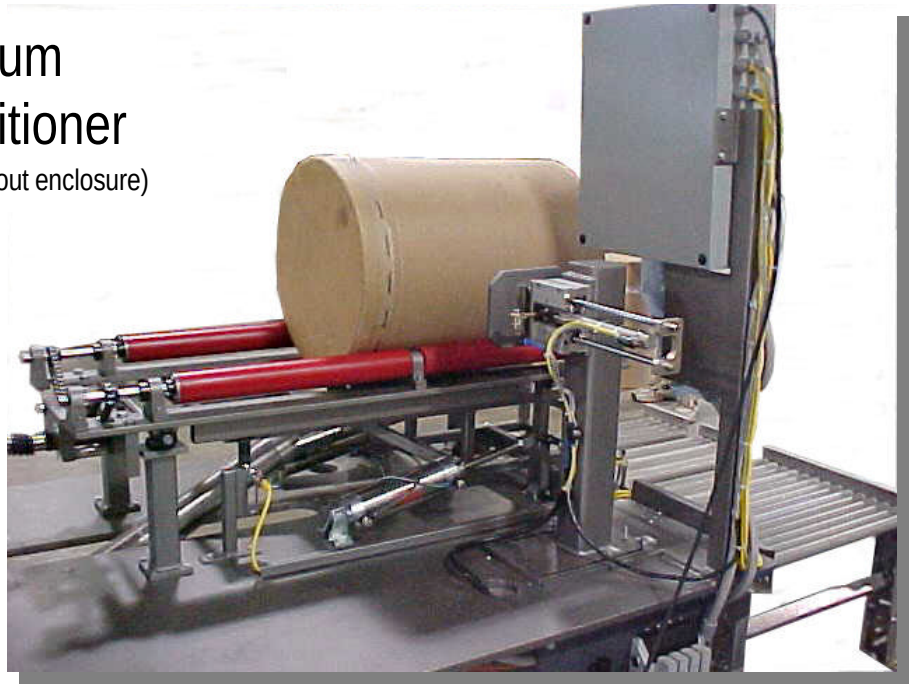
This custom Four Tier Bi-Flow Accumulation Table handles pucks containing medical devices at a rate of 400 ppm. Each table consists of seven driven conveyor belts on a single frame. The center belt is a dedicated feed lane which allows the pucks to pass through the system. The outer belts are used for accumulation. Should it be necessary to accumulate product, a gate will restrict the pucks from exiting the table. The pucks will then circulate on the table until downstream delays have cleared and the gate releases them. The four accumulation tables will hold up to 10,600 3” diameter pucks.

# Product Bulletin No. C-18

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Drum Conditioner

(shown without enclosure)



Break down solid product to a near powder form. Pre-program the force of the hammering and the length of processing time.

The feed conveyor delivers the drums to the load/unload section, which consists of a segmented conveyor and a load/unload device. The loader automatically takes the standing drum and gently lays it down on its side in the enclosed processing station (photo shown without enclosure for pictoral purposes).

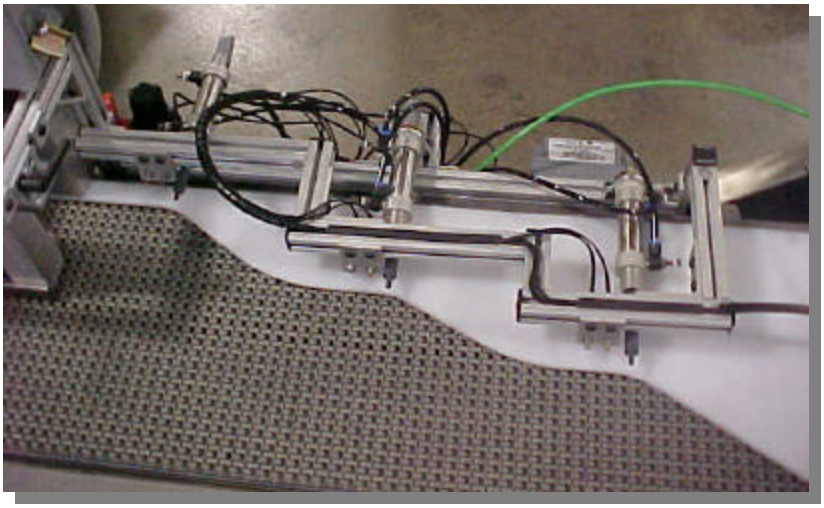
The rollers automatically rise up from under the loader and raise the drum. The rollers continuously rotate the drum while in the processing station.

A hammering mechanism pounds on the side of the drum until time expires. The hammer stops and the rollers automatically lower and place the drum back onto the loader/unloader. The unloader stands the drum upright, where it is again on the segmented conveyor and ready to transfer to a discharge conveyor.

# Product Bulletin No. C-17

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Bottle Orientation



This particular bottle orientation system receives square Clinique bottles at the rate of 120 bpm and rotates each bottle, if necessary, until all of the "C" face panels are facing the same direction.

A container separator controls the spacing between bottles and sensors detect the orientation of each bottle. If orientation is correct, it will be allowed to pass straight through untouched. If it is not properly oriented, the first turner will extend and the bottle will be turned 90-degrees. The sensing and turning process will repeat three times. Upon exiting the system, all bottles are facing in the same direction and ready for case packing.

# Product Bulletin No. C-16

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

***Wrabacon, Inc.*** designs and manufactures a wide variety of quality and innovative custom product handling systems. These include Product Feeders, Pick and Place Systems, Product Merging, Product Dividers, Product Stackers and Destackers, Semi-Automatic Case Erectors, Product Accumulators, Container Denesting, Tray Stackers, and Conveyors. In addition, we offer complete system integration and custom equipment design tailored to meet specific needs.

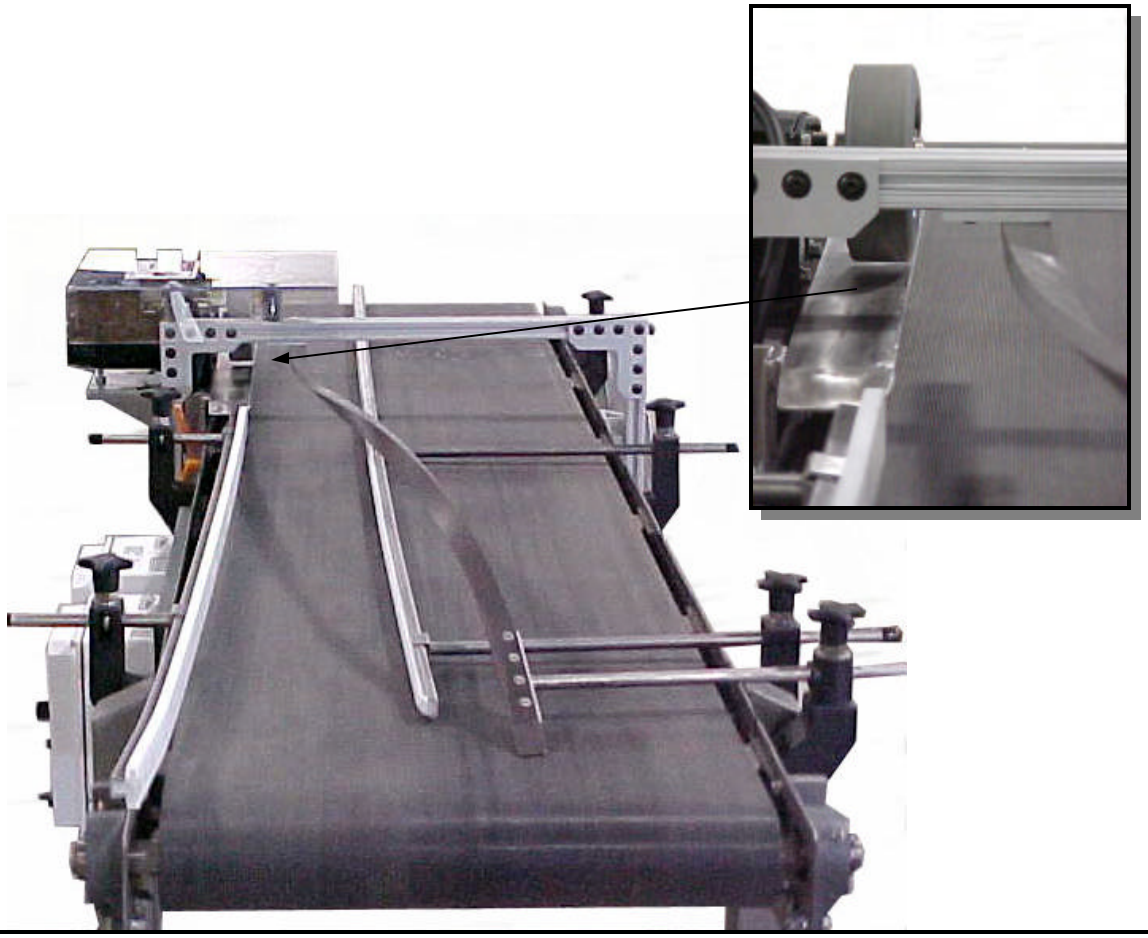
## Egg Roll Counting


Until Wrabacon came along, these 48 people, who are paid by piece work, were forming egg rolls, placing them on trays and carrying them to one of the deep fryers.
This new USDA approved system allows the people to form the egg rolls and immediately place them on their own designated conveyor belt. Photo sensors will count each egg roll in each lane before automatically loading them into the fryers. Each lanes/operators egg roll counts are kept in a PLC so that the payroll department can retrieve the information at any given time via Ethernet communication protocol.
The system is equipped with individual start/stop and emergency stop buttons along each individual conveyor. There is also an Allen Bradley panel view, which allows the operators to look at any given lane and get a running count or an end of day count.

# Product Bulletin No. C-15

**P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134**
**E-mail: sales@wrabacon.com Web-Site: www.wrabacon.com**

***Wrabacon, Inc.*** designs and manufactures a wide variety of quality and innovative custom product handling systems. These include Product Feeders, Pick and Place Systems, Product Merging, Product Dividers, Product Stackers and Destackers, Semi-Automatic Case Erectors, Product Accumulators, Container Denesting, Tray Stackers, and Conveyors. In addition, we offer complete system integration and custom equipment design tailored to meet specific needs.



*Wrabacon* custom designed and manufactured this system, which receives open clamshells trays at rates up to 70 per minute. The closure bar folds the lids up and over to the closed position. Lids are held in place as the clamshell passes through the roller button lock. The button sealed clamshell then exit the conveyor. The closure bar and the roller button lock are adjustable for the various clamshell sizes/heights. The equipment was constructed of stainless steel and USDA approved .

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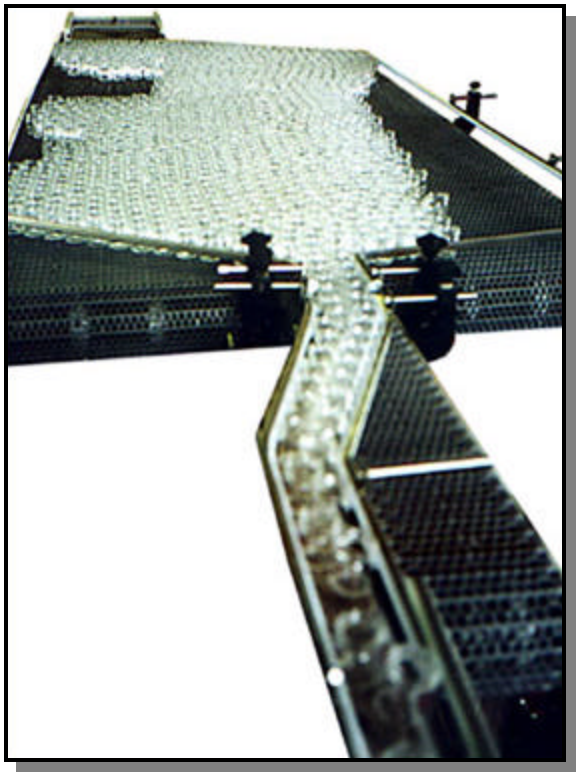
# Product Bulletin No. C-14

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-site: www.Wrabacon.com

## Bi-Flow Accumulation Table



This 48” x 96” Custom Bi-Flow accumulation table has a semi automatic container feeder which removes empty containers from a RSC case and feeds them onto the accumulation table.

This system has the ability to handle containers ranging in sizes of 1.5 oz. to 27 oz. at rates up to 270 cpm.

The equipment was built from heavy duty painted steel tubing with leveling pads. All product surfaces are stainless steel. All hardware devices are Allen Bradley 800T series or equal, all sensors are by Banner, and PLC by Allen Bradley.

Construction material options are many, depending on the needs or requirements of the customer.

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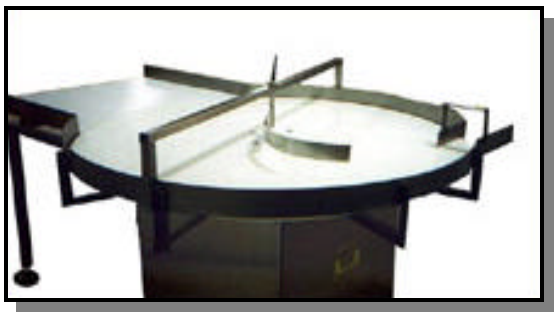
# Product Bulletin No. C-13

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Rotary Accumulation Tables



*Wrabacon's* rotary accumulation tables are designed to integrate with a customers' existing production lines at both infeed and discharge ends.

Table designs allow for manual loading or unloading, or as transfer stations to control product flow between existing systems.

Standard tables have an overall height of 35" (+/- 2") and table diameters of 36", 48" and 60". Drives include a T.E.F.C. motor with reducer to run at fixed speeds of 3 or 6 RPM. Operator-controlled variable speed drives are optional. Choices of construction include painted steel table frames, 110 VAC, Nema 12 or stainless steel, 110 VAC, Nema 4. Table top construction is of durable UHMW-PE.

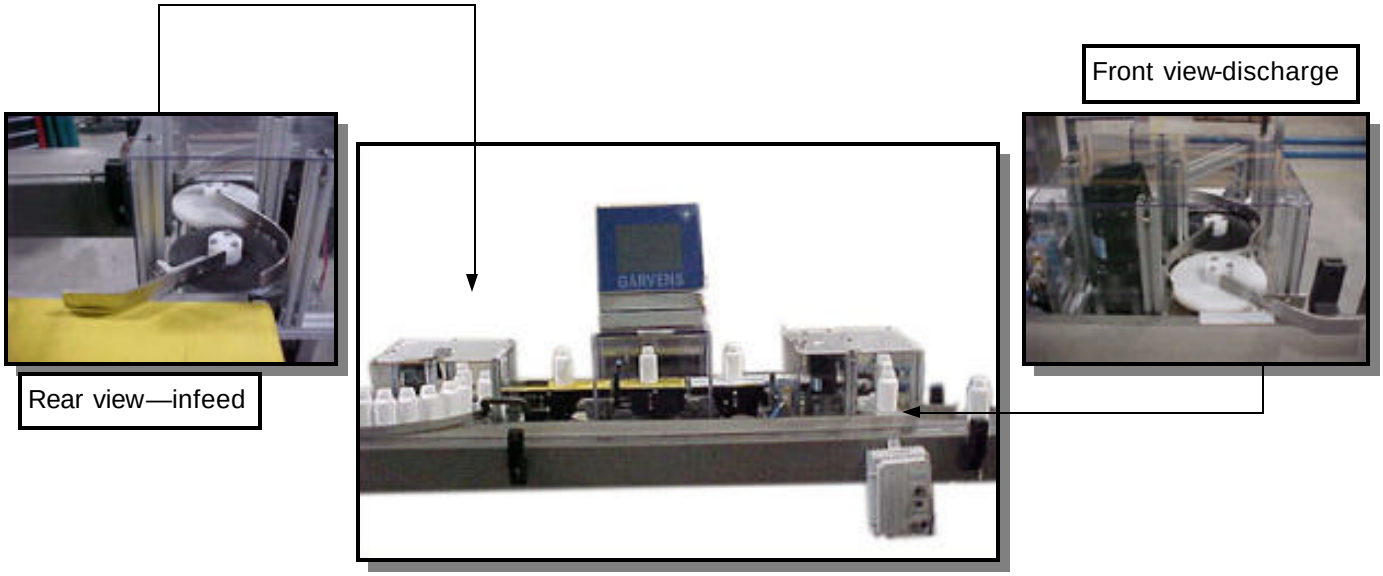
Standard tables are designed and manufactured on a custom basis according to product and a customer's application needs.

In addition to these standard tables, *Wrabacon* will modify designs to meet any unusual requirements a customer may have.

# Product Bulletin No. C-12

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Rotary Transfer System




*Wrabacon's* Rotary Transfer System was designed to take small plastic bottles out of the conveyor line, feed through a checkweigher on 9 inch centers, and discharge back onto the same conveyor.

The first infeed rotary table rotates counter-clock-wise and the second rotates clock-wise. The discharge has the opposite rotations. Each table has its own side transfer guides.

The spacing of the bottles, within the check weigher, is accomplished through the adjustable speed of the rotary tables. If the weight of a bottle is inaccurate, the reject system will automatically remove it from the production line.

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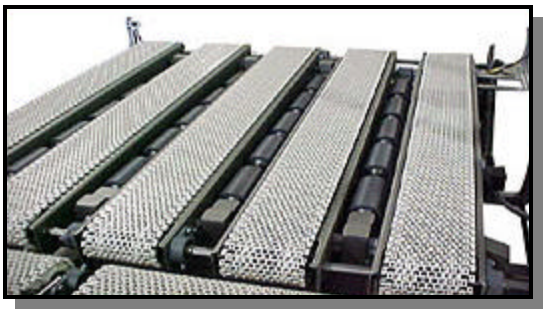
# Product Bulletin No. C-11

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

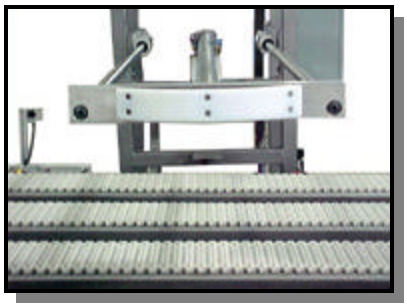
## Heavy-Duty Conveyor with 90-degree Push Transfer

Twin belt incline feed to



5-belt transfer with lift rollers

500 lb bale ready to transfer



90-degree pusher bar

*Wrabacon* custom designs and manufactures product handling systems for the most delicate and intricate products for the pharmaceutical and food industries, up to hefty systems for heavy industrieslike the one shown here. This system was designed to convey and 90-degree-transfer large product bales in the 500 to 600-pound range.

# Product Bulletin No. C-10

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Incline Conveyors

*Wrabacon* designs and manufactures specialty conveyors for many companies and corporations in the food processing and packaging industry.

Designs can be Nema 4 and Nema 4x, USDA and FDA approved. Our conveyors are designed around the products to be handled. Based on product samples provided prior to beginning the design phase, we determine the appropriate belting material to best handle the product.

Conveyors are designed to run at fixed or variable speeds to fit in with existing applications a customer may be using. Our conveyors will operate independently, or can be integrated with other equipment.

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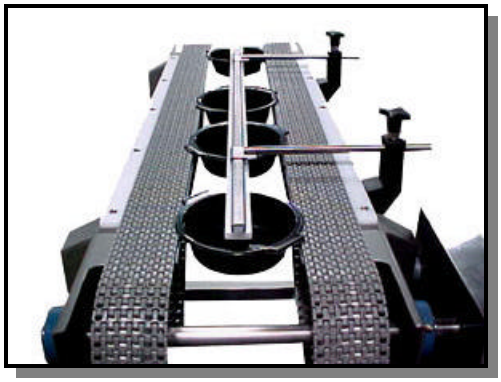
# Product Bulletin No. C-9

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-site: www.Wrabacon.com

## Custom Labeler Conveyor

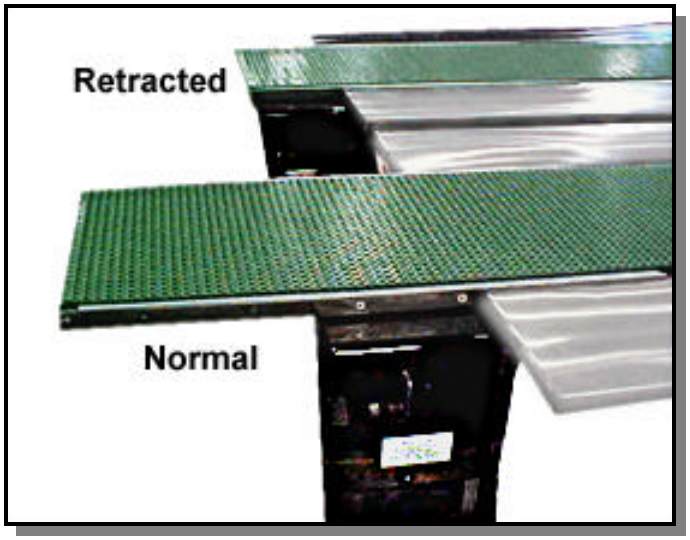


*Wrabacon* designs and manufactures custom conveyors for all types of labeling applications, including bottom, top and side labeling. While this particular design was for a bottom, pressure-sensitive labeler, we have also designed and manufactured conveyors for print and apply, ink jet, and laser coding systems.

# Product Bulletin No. C-8

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Retracting Conveyors

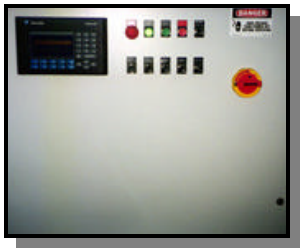



*Wrabacon* designs and manufactures conveyors to meet all needs and applications. The pair shown here are retracting conveyors and were designed with the retract on the infeed to dump product not wanted down stream. The retract distance on these particular conveyors is 10 inches. A retract conveyor can be designed for any length of product, as long as the fixed section of the conveyor is approximately 2-1/2 times the length of the retract portion. The retracting section can be at the infeed or discharge, depending on the customer's needs. Some of our customers prefer a retracting discharge for their metal detector conveyors simply as a means of locally collecting and retaining rejected product, or because of space limitations on either side of the conveyor that does not permit use of a push off or blow off system. Speed of product (FPM) and length of retract are key factors in determining if this type of conveyor will suit your needs.

# Product Bulletin No. C-7

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Wrabacon Control Systems



2-door enclosure, 72” high x 66” wide x 18” deep

One side of panel in 2-door cabinet

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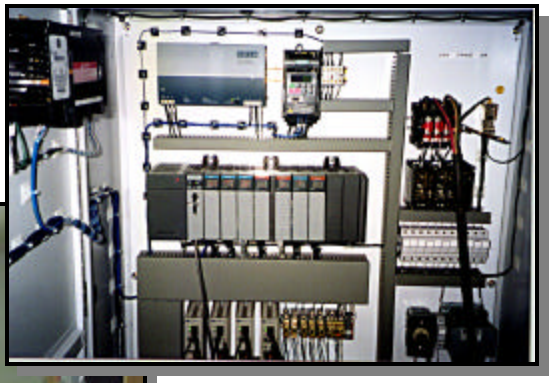
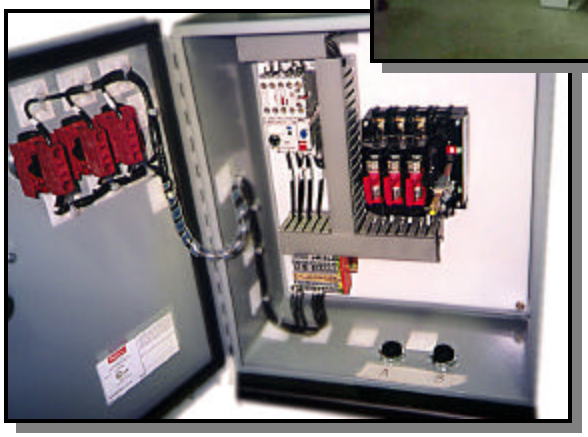
# Product Bulletin No. C-6

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Wrabacon Control Systems





*Wrabacon* designs and builds a specialized electrical control system for most every job. Many customers come to *Wrabacon* because they have special needs to fulfill unique automation applications within their packaging or processing application. Our control systems can be stand-alone units for just our own equipment, or the systems can be fully integrated with new or existing customer machinery. Our programming allows us to respond to the customer's existing line, up to our system controlling and operating the entire line. Whatever the task, *Wrabacon* guarantees to be in control at all times.

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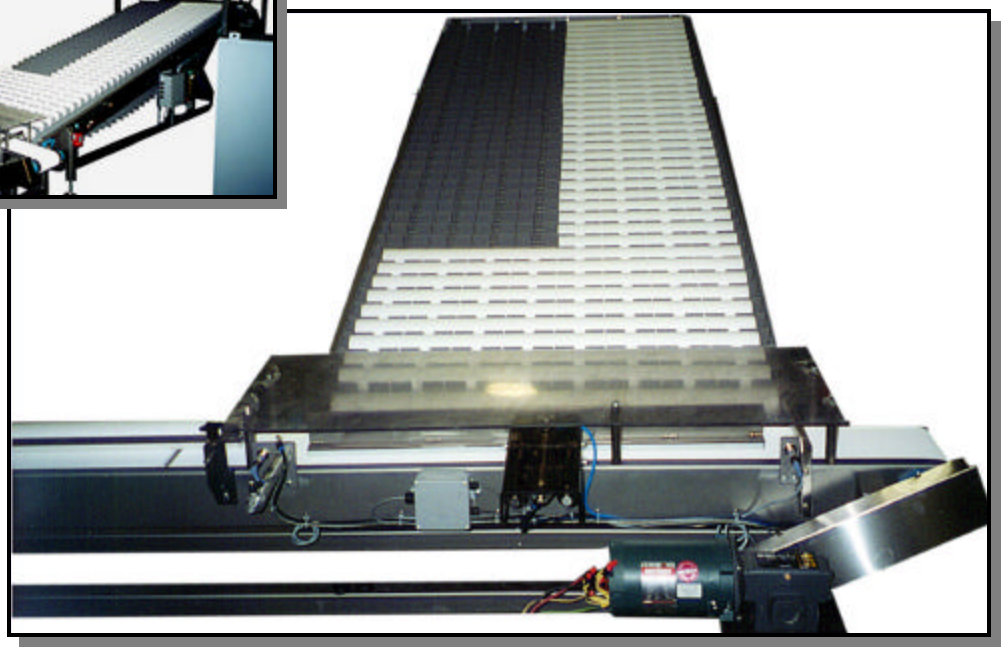
# Product Bulletin No. C-5

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Automated Filter Handling System



*Wrabacon* designed and manufactured this infeed conveyor and combination wrapper feed conveyor/accumulator to work with a Rose Forgrove automatic wrapper. Wrabacon control systems interact with the upstream saw and downstream wrapper. The system feeds single filters when the wrapper is running, and accumulates if the wrapper goes down. A signal is sent upstream when the accumulator is at maximum holding capacity (38 filters). The system handles 10”, 20”, 30” and 40” long filters.

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# Product Bulletin No. C-4

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Wrabacon Control Systems

**VFD**

**SERVOs**

**OPERATOR INTERFACE**

**PLCs**

**MOTOR CONTROLLERS**

**EMERSON**

**A/B**

**SIEMENS**

**GE**

**IDEC**

*Wrabacon*, Inc. has a full service panel shop with a staff of experienced professionals who design, build and program control systems. Systems can be built with varying levels of control to suit a customer's specific needs. *Wrabacon* has developed relationships with many electrical manufacturers, including but not limited to, Allen-Bradley, Siemens, Banner, GE, Emerson, Wago, Mitsubishi, Idec, Square D, Hoffman and Keyance. These relationships enable Wrabacon to gain a competitive edge when it comes to pricing, expediting orders and in general factory assistance, all of which are passed on to the customer. Let *Wrabacon's* control specialists design the solution to your next control problem.

# Product Bulletin No. C-3

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Gravity Conveyor

*Wrabacon* designs and manufactures gravity conveyors, as well as powered conveyors. This eight-lane conveyor was designed to meet an application requirement for a pet food manufacturing and processing plant to facilitate transporting cans of food.

The conveyor had an overall length of 11 feet and was approximately 4 feet wide. Each lane had 4.5-inch wide plastic rollers and used adjustable product side guides that could be suited to the particular product being processed.

The conveyor infeed had a height of 68.5 inches, and dropped down to 49 inches at the discharge which fed a packing station. The adjustable foot pads allowed for an overall height variance of +/- 2 inches.

Frame construction was of heavy-duty painted steel.

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# Product Bulletin No. C-2

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Dual-belt Conveyor with LaserInk Printer

*Wrabacon* designs systems that allow for printing and coding products in a variety of ways. This particular unit was designed to grip plastic bottles from the sides and carry them above the laser coder for bottom printing. The laser coder was purchased by the customer and shipped directly to the *Wrabacon* facility. Having the coder, along with product samples, we designed the conveyor and mounted the printer. Other similar projects have been completed for customers using print and apply labelers. Whatever the application, *Wrabacon* can give you the design that works.

# Product Bulletin No. C-1

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Two-Tier Pack-off Conveyor

*Wrabacon* designed and manufactured two of these stainless steel, wash-down capable conveyors for a company that packages frozen chicken products.

It was the company's desire to use the conveyors within various production lines, so we made them mobile by using lockable rolling casters. Four jacking screws were added near the corners as a twofold feature of adding stability to the unit while in operation, and allowing for a height adjustment of up to six inches.

Three full length work tables add to the utility of the conveyor. The lower table can accommodate up to four packers and is adjustable to two heights as predetermined by the customer. The table to the rear of the upper belt can be used as a holding or discard area and is clearly accessible from the rear of the conveyor. The upper most table is for holding empty cartons and can also be replenished from the rear, leaving the packers to work uninterrupted.

The belts are driven by DC motors that are controlled by the operator. The belts are reversible and run from 0 to 35 FPM, as required by the customer. The conveyor can be fitted with a single drive unit which controls both belts, or with a dual drive unit that allows one belt to move in one direction and the other belt to move in the opposite direction. The units are 110VAC, Single Phase, Nema 4.

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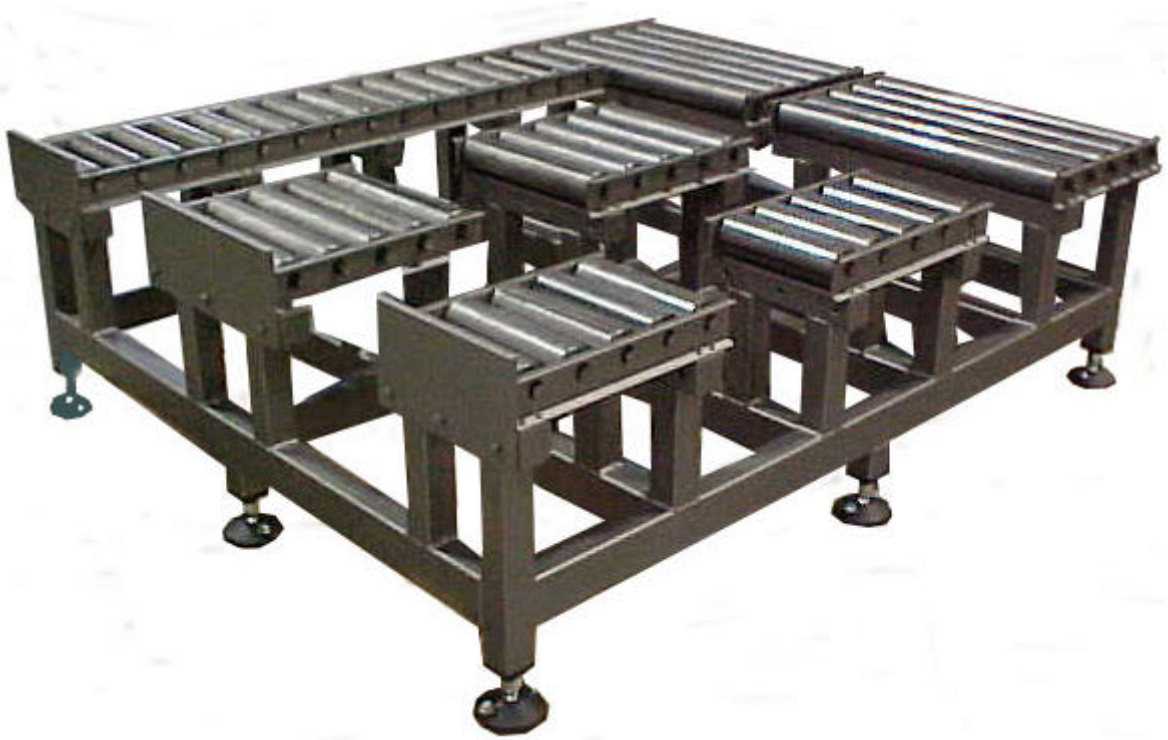
# Product Bulletin No. B-8

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Pallet Roller Conveyor



On this pallet roller conveyor, pallets roll down a slight decline before reaching a fixed stop. With 9 inch gaps between sections, forklift operators can access the pallets from two sides.

This particular unit is built on one frame and consists of 6 sections. I has been constructed of heavy duty painted steel with adjustable (+/- 2") foot pads. The over-all dimensions are 64" long x 54" wide x 21"-22" high.

Wrabacon can build the same or similar units to fit the customers unique needs.

WRABACON INC.
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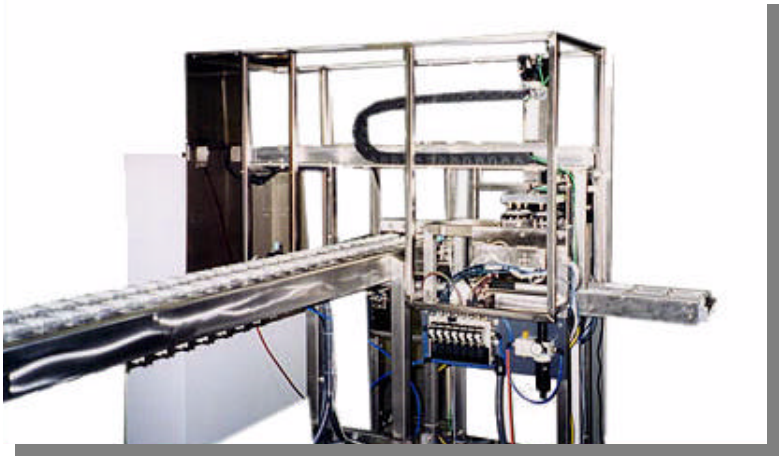
# Product Bulletin No. B-7

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-2068 FAX (207) 465-2751
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Product Handling System for Medical Products



This custom product handling system was designed to receive 2-inch by 4-inch packaged products from a Tiromat. Plungers with vacuum cups would place four packages at a time into a holding tray that would slide under an extractor. The extractor would invert the products 180 degrees where a pick and place unit would pick them up, slide to a position above a flighted conveyor and place each of the four product packages between flights on the belt. Each time four packages were placed on the conveyor, it would automatically index forward to await the next group of four.

Construction is of heavy duty stainless steel for the frame and legs, and the legs are fitted with leveling pads. This particular system was designed to run on 230VAC and was rated NEMA 4.

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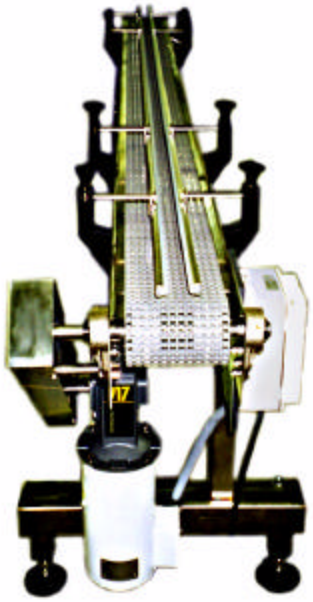
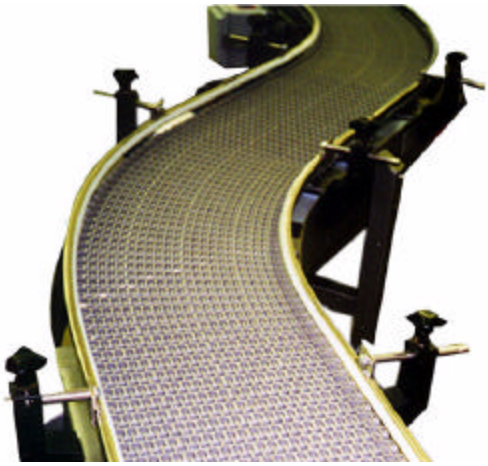
# Product Bulletin No. B-6

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Wrabacon Custom Conveyors





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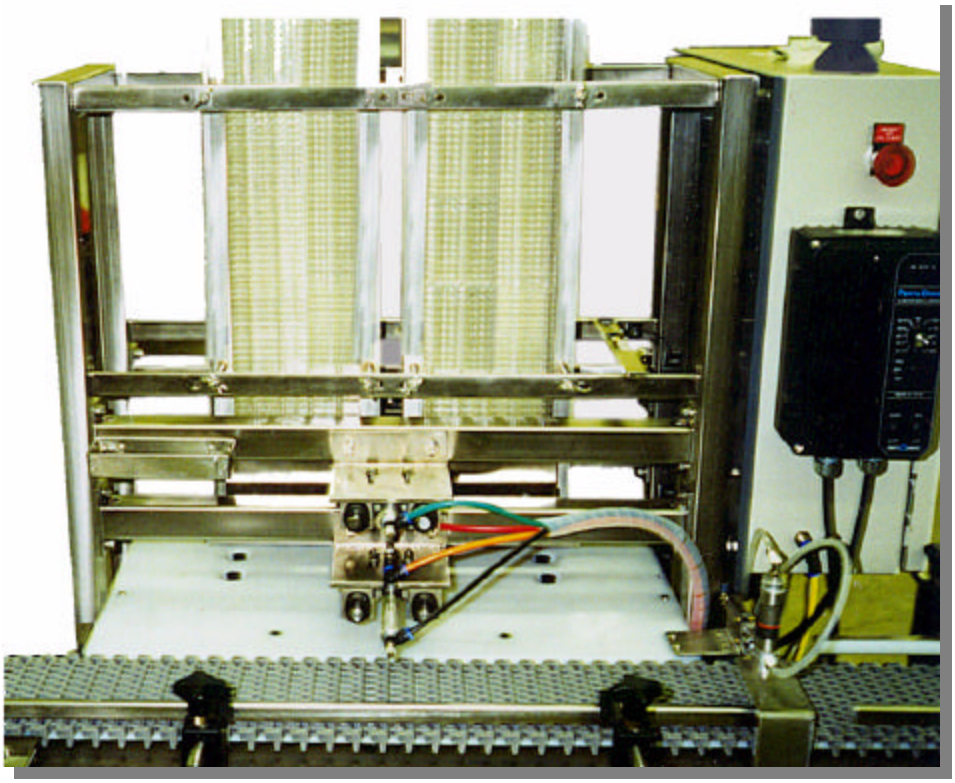
# Product Bulletin No. B-5

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com E-mail: www.Wrabacon.com

## Denester for Thermo-Formed Trays



This fully automatic container denesting system was designed with two fully adjustable tray-holding magazines and operates at up to 15 cycles per minute (30 trays per minute). Fully adjustable, vacuum-equipped “pick arms” pick two trays simultaneously from the bottom of the stacks and place them on a receiver plate. They are then pushed on the conveyor. A system such as this can be designed to operate at most any required rate per minute and accommodate just about any size tray. Each is custom designed to meet a given customer’s requirements. This particular system was designed to run on 115VAC and only required 60 to 75 psi of air to operate the pneumatics. Such a system can be a standalone unit, or be designed with an accompanying conveyor.

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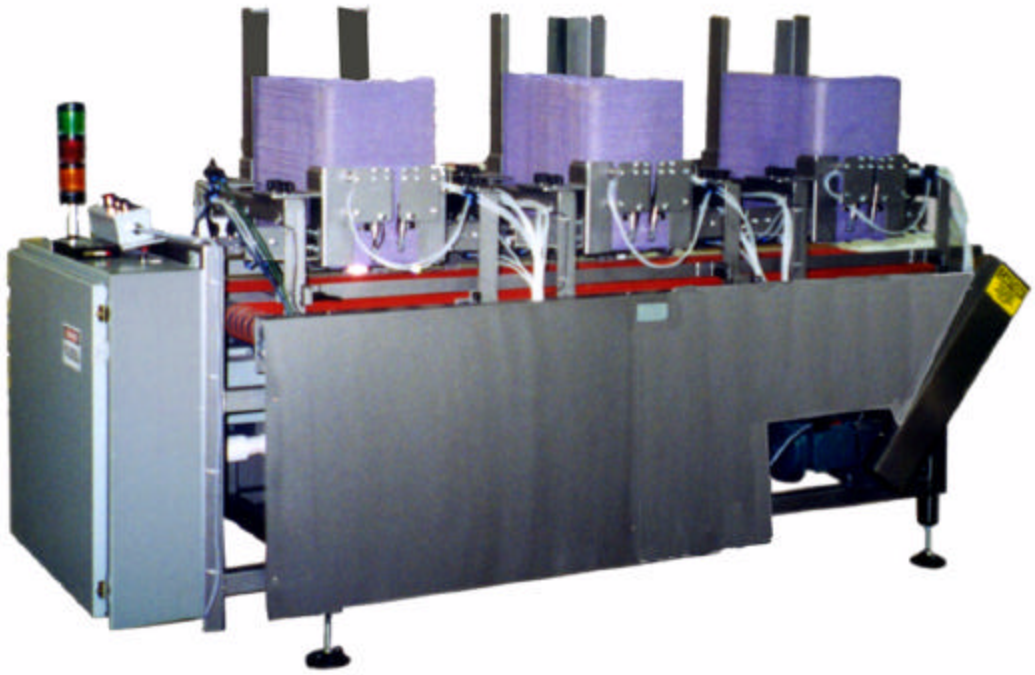
# Product Bulletin No. B-4

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Automatic Tray Denesting System



This fully automatic container denesting system was designed with three fully adjustable tray-holding magazines and operates at rates up to 70 per minute. The denester was designed to be straddle-mounted over a conveyor allowing product to be deposited directly onto a moving belt and continue downstream. The unit included a stack light and audio alarm signal system that would alert operators when key events were triggered, such as a product jam or low level of product in any of the three feed magazines. The unit was full self-contained with all integrated controls, and operational control buttons such as start, stop and emergency stop. This type of system can be designed to accommodate a variety of products and applications.

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# Product Bulletin No. B-3

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

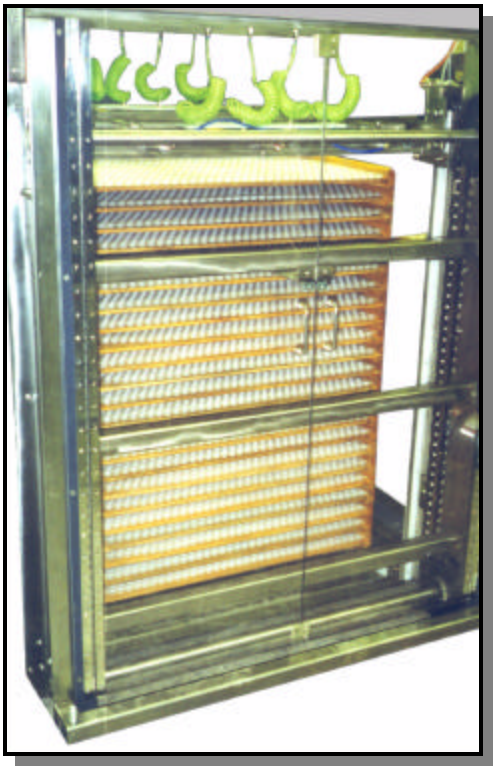
## Automatic Lid Denester & Capper

This automatic lid denester and capper was designed to cap one gallon pails. By use of an oscillating vacuum head, the lids are denested alternately from the dual sleeve magazine and transported to the capping head where the filled containers are capped. This unit is mounted on its own self-powered conveyor and utilizes powered capper rolls for positive closure. The frame is constructed of heavy-duty, painted steel and fitted with adjustable leveling pads. All hardwire devices are Allen-Bradley 800T series. The electrics are 480VAC, 3 Phase with a Nema 12 rating. Pneumatics are 60-70 psi at .75 cfm.

# Product Bulletin No. B-2

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Tray Stacker



This custom tray stacker was designed to be integrated into an existing production line for handling 19.5-inch X 37-inch wooden trays filled with product.

The system was designed to accept loaded trays from an existing conveyor onto a Wrabacon conveyor which transferred them to the stacker. The trays were individually lowered onto the customer's tray cart by means of twin chains with special carrier lugs. This method assured that trays would be stacked perfectly level.

Each cart could accommodate up to 25 trays per stack. When a cart was at full capacity, the system started accumulating trays on the infeed conveyor, while simultaneously alerting operators to remove the filled cart and replace it with an empty.

Included in the design was a Programmable Logic Controller system that would allow future tray stacking and destacking units to be added.

The unit was constructed from heavy duty stainless steel with leveling pads. Electrics were 220 Volts, Single Phase with a Nema 12 rating.

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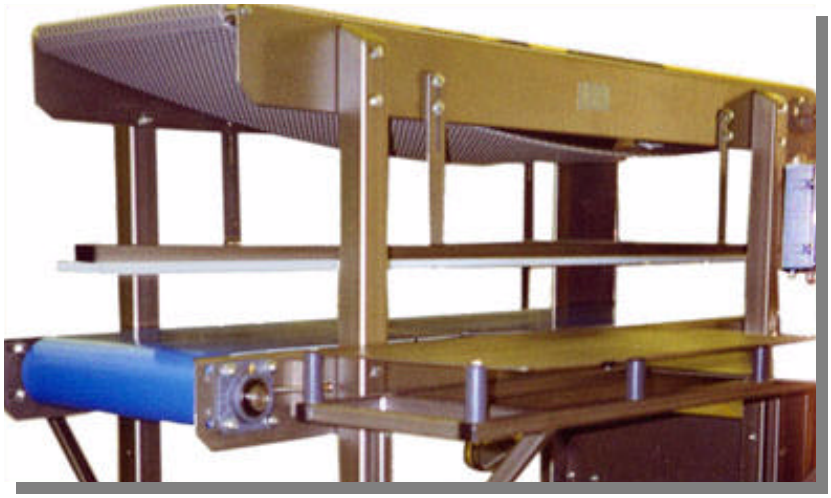
# Product Bulletin No. B-1

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Pack-off Conveyor

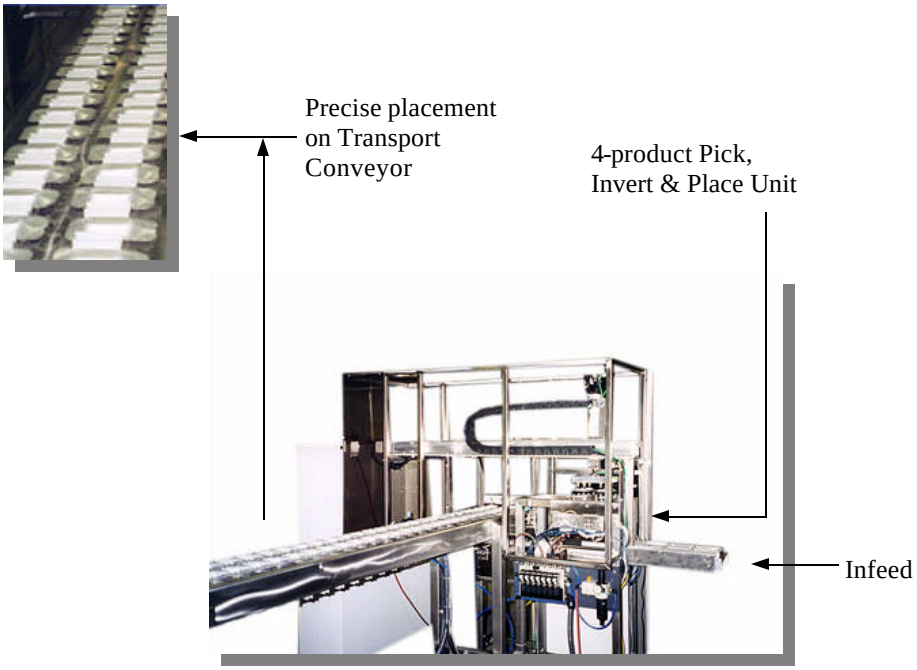


Over and under conveyors with side-mounted operator work station

# Product Bulletin No. A-26

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207)-465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Pick & Place and Conveying System




This Product Handling System was custom-designed and constructed for a surgical products manufacturing and distribution company that required its products to be automatically inverted 180 degrees while moving along the existing production line. The infeed end of the system receives 4 products at once in an Extractor. The Extractor slides inward where the 4 products are simultaneously picked, inverted to bottom-side up, picked again, and precisely placed between fligh ts on the two belts of the Transport Conveyor. At the discharge end of the conveyor, 8 products are picked and baded into a Tiromat Thermoformer. The system is programmed for a 4-second cycle and the P.L.C. program controls all actions of the two Pick & Place Systems and automatically indexes the conveyor. An operator-initiated Audit/Reject system is also included in the program.

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# Product Bulletin No. A-25

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Multi-Line Custom Product Handling System

This System represents one of *Wrabacon*'s more extensive design successes in developing, programming and manufacturing multiple, interacting components for a food processing corporation. The system accepts trayed product from one of three productions lines, orients and transfers product to a freezer infeed conveyor, then receives product from the freezer, places them in the required orientation and conveys them downstream.

Of the system's seven components, the four shown above are the infeed units: a 42" wide freezer crossfeed conveyor nearly 23' in length that is fed by three production accumulation sections, each with it's own product orientation and feed system. The cross conveyor's speed is matched to the speed of the freezer belt by means of an encoder which will automatically be adjusted to accommodate a change in products.

The output side units accept frozen product discharged from the freezer, orients it as required, and conveys it to a metal detector. After passing the metal detector, the *Wrabacon* conveyors transport the product to a cartoner and/or a shrink wrapper.

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# Product Bulletin No. A-24

P.O. Box 7, 150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.wrabacon.com

## Servo Merge System

This particular Wrabacon servo merge conveyor will accept incoming product in four rows. This system does not require any form of gate and release system. Product is not stopped prior to entering the servo merge. The system will also accept product in a random manner.

The servo merge system consists of a gap, correction, and merge conveyor sections. The system functions in the following manner:

The four gap belts receive product from the existing conveyors and create a gap on the incoming products. A special conveyor controller accepts pulses from an encoder driven by the belt on to which products are merged. This allows the servo drive to monitor the position and velocity of the merge conveyor. The correction conveyor meters products onto the merge conveyor at a velocity and distance interval specified by the user. Products are stopped and accelerated as necessary to maintain the desired spacing.

To control the flow of the product on to the merge conveyor from the four correction conveyors, a merge controller acts as a traffic cop. It determines the sequence in which the correction conveyors release product on to the merge. Also, this controller allows one or more of the input conveyors to be taken off-line while not affecting the throughput of the system. The system will accept incoming product at random speeds and spacing on all of the gap conveyors.

# Product Bulletin No. A-23

**150 Old Waterville Rd., Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134**
**www.wrabacon.com**

*The Boxer* is a semi-automatic case boxer which provides a very efficient work station. *The Boxer* allows an operator to erect and secure a knock-down case in seconds. With the case secured, the operator is free to load product efficiently with both hands because the case will not move, even though it is not taped on the bottom. Once the case is loaded, the operator closes the top flaps, presses a foot switch and the case is automatically powered into the sealer.

*Specifications*

| | |
|---|---|
| Case Size: | *The Boxer* will handle any combination of case sizes from 7” to 18” wide x 7” to 24” long with no adjustment. |
| *Boxer* Dimensions: | 36” long x 21” wide |
| Height: | Adjustable from 17” to 28” |
| Construction: | Heavy duty stainless steel and aluminum. |
| Utilities: | All pneumatic. 60-70 PSI @ .5 CFM |

The operator places the open, knock-down case at 45-degrees to the base plate. The front and rear minor flaps will fold under and into position.

As the case contacts the base plate, it triggers a switch which activates two automatically operated gates. The gates angle in, automatically closing the major flaps, thus holding the case securely against the base plate. The case is now ready for loading.

When the case is loaded, the operator closes the top flaps, presses a foot switch and the case is automatically pushed into the sealer.

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# Product Bulletin No. A-22

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Multi-Step Incline Conveyor

A custom-designed and manufactured multi-step incline conveyor can be a major asset to many manufacturing or packaging operations. The benefits of this type of conveyor are two-fold.

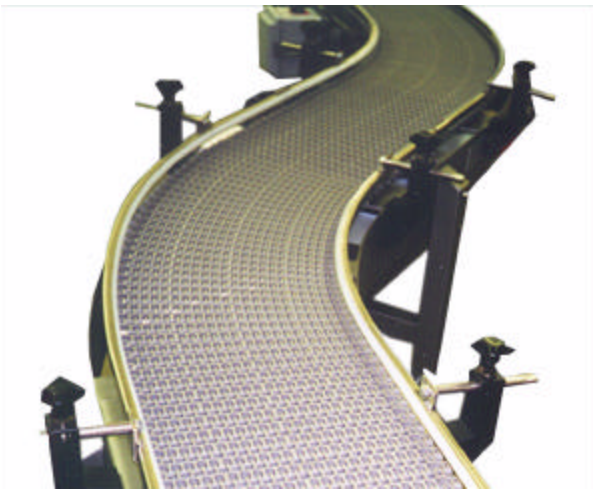
First, bulk product can be separated, or singulated, to accommodate downstream activity such as painting or coating, by controlling the speed of each belt. A single drive unit, using specific gears and sprockets, can operate multiple belts at desired individual speeds. Another option is for each belt to have its own drive assembly and variable speed motor controller, which would give much more flexibility to adjusting and controlling individual belt speeds when running more than one type of product.

Second, the conveyor can be designed at an angle of incline and length to meet a customer's exact needs for lifting product in a controlled manner. A wide variety of either flat or flighted belt types are available, depending on the product to be conveyed.

# Product Bulletin No. A-21

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Conveyors



Custom Conveyors designed and manufactured by *Wrabacon, Inc.* prove to be efficient and inexpensive assets to production and assembly operations. Conveyors reduce or eliminate physical handling of product, which in turn generates a controlled product flow through the system that can be increased or decreased as the demands of the system dictate. Our conveyors add that needed utility because they are designed to our customers' specifications; the customers know best, their needs. We have designed conveyors that are straight, inclined, declined and curved (45, 90 and 180 degrees). Conveyors let product travel around corners, over or under existing equipment, up to a higher level or down to a lower level, eliminating the need for the product to be physical carried. Our conveyors meet government regulations for carrying all types of products, including food and drug products. They can be constructed of painted steel or stainless steel. They can withstand regular soap and water washdown, as well as caustic solution cleaning.

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# Product Bulletin No. A-20

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Pouch Handling System

Employees having to manually count the number of products that go into a carton can be both time consuming in the overall production process and sometimes result in customer dissatisfaction when the advertised amount per carton is incorrect.

*Wrabacon* designed this unique Custom Pouch Handling System to eliminate those problems for a manufacturer, and designed and programmed the system so it could be inserted into the middle of an existing production line. The infeed end of the system was manufactured to a height that mated with existing equipment, while the outfeed end was elevated to accommodate employees. This particular system was designed to accept seven lanes of filled pouches at a rate of 50 per minute/per lane for a total output of 350 pouches per minute.

Pouches are conveyed upward to a continuous motion conveyor that is programmed to run at a slower speed than the infeed conveyor. Pouches are automatically counted as they are placed on the slower conveyor in a “shingle” formation. When the correct number of pouches is sensed, the conveyor momentarily speeds up, creating a gap between the groups. Thus, upon arriving at the employees’ stations, it becomes merely a matter of picking up the pre-counted group and placing that group in its carton.

*Wrabacon* can design and manufacture a similar system to accommodate most any type of product.

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# Product Bulletin No. A-19

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Product Handling and Merge System

This 2 to 1 Merge Conveyor is part of a Custom Handling and Merge System designed and manufactured for a Pennsylvania packaging company to additionally automate their line and decrease labor-intensive production.

The system uses two automatic case erectors, thus eliminating the need of hand assembly. Assembled product shipping cartons are fed to a dedicated conveyor for each case erector and conveyed to the Merge Conveyor. While this system was designed to accommodate shipping cartons 15" high X 9.25" long X 8.375" wide, and 15" long X 7.25" wide, *Wrabacon* can design to accommodate almost any carton size.

The Merge Conveyor design incorporates a gate stop and release system for merging and will allow incoming cases to accumulate, if required, then release them in sequence where they will be merged into a single line configuration and fed to the case packer. The system will allow cases to flow straight through if only one case erector is operating.

The Merge Conveyor can be operated as a "stand alone" on demand system. A PLC based control cabinet controls all functions and has the ability to communicate with other equipment on the line, if required.

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# Product Bulletin No. A-18

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

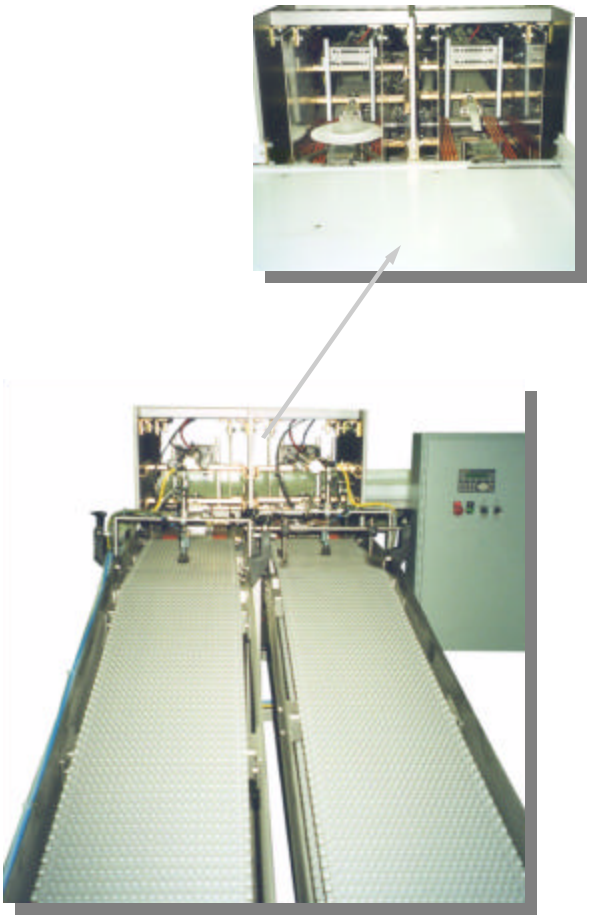
## Modular Stackers & Product Handling System

*Wrabacon* designed and manufactured two systems, such as the one shown here, for a company engaged in the manufacture and shipping of multiple styles of molded plateware.

Each system consists of two infeed conveyors, two modular stackers and a discharge platform (shown in outset). Collection systems were designed to receive product from four molders, assure proper orientation of the product and deposit on conveyor systems leading to the modular stackers. Product is stacked according to a predetermined amount and the counted stacks are placed on the discharge platform where they are pushed toward the company's existing downstream equipment for wrapping and placement in shipping containers.

Each modular stacker can be operated independently, thus allowing for processing of a total of four different product sizes, simultaneously at a rate of 60 per minute.

In accordance with the customer's request, construction consisted of heavy duty painted steel frames. All guides and platens are of stainless steel. All other parts are anodized aluminum or UHMW. Stacker modular units are mounted on unistrut members for each adjustment and removal. Electric/pneumatic controls have quick-disconnect fittings. The design follows S.M.E. D. recommendations for quick changeover.



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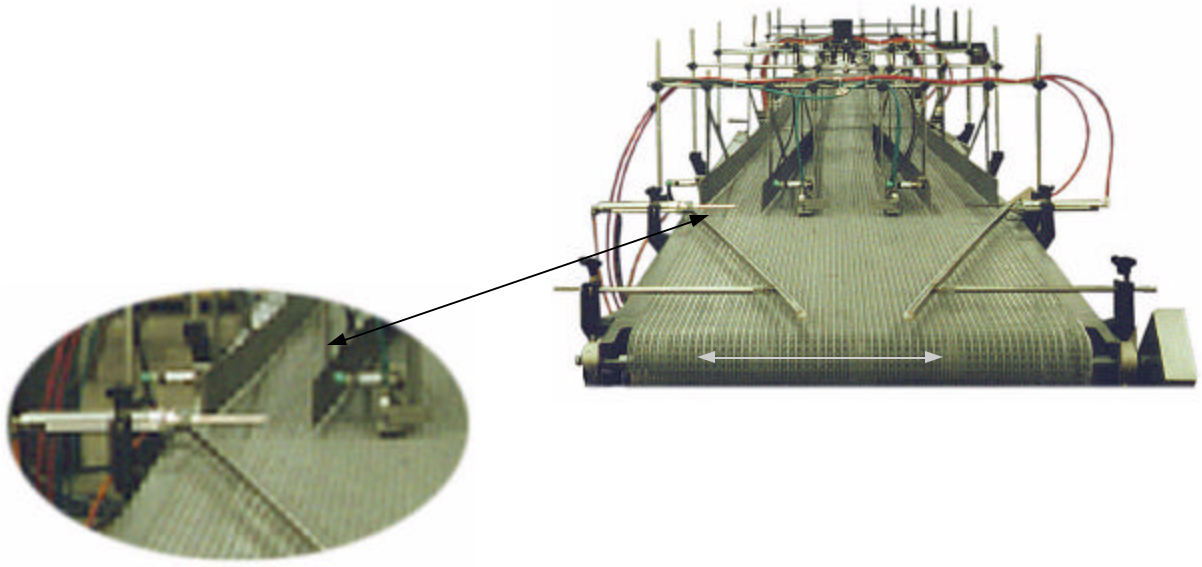
# Product Bulletin No. A-17

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207)465 7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## 3 to 1 Gate and Release Merge Conveyor



This unique Merge Conveyor is part of a Product Handling System designed and manufactured for a cookie baking company that was looking for ways to improve product-per-package-count accuracy and increase overall product output. This 3-lane conveyor has LED displays that accept data from a serial output from an upstream checkweigher, and multiple photo sensors that operate timed stop and release gates (shown in outset) to aid operators and control flow at the downstream end of the conveyor.

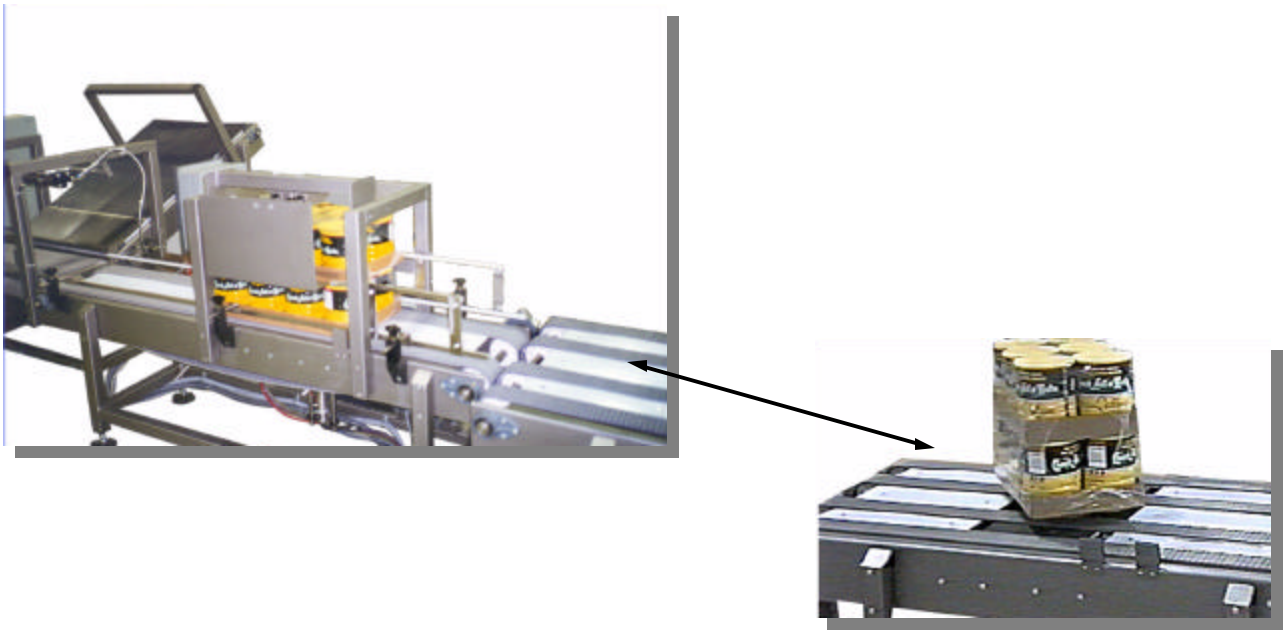
Cookie weight determines the count per box. If a box is of the correct weight, it leaves the checkweigher and is directed down the center lane of the conveyor. Underweight and overweight cartons are diverted to their designated outside lane for correction. The stop and release gates in these two lanes control the flow of cartons to operators to ensure they have adequate time to add or remove cookies. The number of cookies to be added or removed from each box is displayed in 3.5" numerals on the LEDs at each operator station for the particular box that is stopped in front of the operator. Cartons are released on a timed basis from the ends of the under and over lanes to maintain a smooth, constant flow.

As with every *Wrabacon* design, all commercial parts used on this system are reliable, high quality, heavy duty parts requiring low maintenance. The system design meets or exceeds applicable OSHA standards and the National Electrical Code for Industrial Machinery.

# Product Bulletin No. A-16

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Tray Stacker With Conveyors



*Wrabacon* can design and manufacture Tray Stacker Systems to fit most needs.

This system was designed to handle trays up to 25" long, 12-1/2" wide and 6-7/8" high. The system receives single shrink-wrapped trays down a decline conveyor and transfers them 90 degrees to the tray stacker conveyor.

Trays that are not to be stacked, simply pass through the stacker. Trays that are stacked enter the stacker, are stopped, then up-stacked and held above the conveyor with mechanical latches. When the second tray arrives, it is stopped, up-stacked to the bottom of the first tray, the latches are released and both trays are gently lowered to the conveyor. The stacker is controlled with a PLC and has a simple selector switch for stack/no stack mode.

Single or stacked trays exit the tray stacker conveyor onto a Custom Tray Turning System (inset) designed to lift and turn wrapped trays. The tray turning system receives a signal from a palletizer to activate a tray turn. The turning system is controlled by a PLC on the tray stacker. This particular lifting mechanism is a heavy duty air/oil rotary cylinder with a rated load of 200 pounds.

# Product Bulletin No. A-15

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Custom Product Handling System

*Wrabacon* has designed and manufactured Custom Product Handling Systems for products of varied shapes, sizes and weights, with each design tailored to fit into the curves, bends, raising or lowering of existing production lines. These systems can be stand alone units or integrated to respond and operate with a customer's in-use equipment.

Product input can be singular or multiple, and the systems are programmed to carry the products at speeds compatible with upstream or downstream components.

This particular system was designed to directly accept three lanes of 4.5" long X 3.5" wide pouches from a pouch machine onto the *Wrabacon* servo conveyor where they are counted into units of 10 and deposited into the flighted indexing conveyor cavities. After sensing the 10 count has been reached, the servo conveyor automatically reduces belt speed to allow time for the index to occur. Accurate counting of multiple products is important to the producer as well as the consumer.

Construction material options for these systems are many, depending on the needs or requirements of a customer to meet product handling regulations in both food and non-food environments. System designs will maintain applicable OSHA standards and the National Electrical Code for Industrial Machinery.

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# Product Bulletin No. A-14

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Automatic Container Denester System

This *Wrabacon* Automatic Container Denester System with accompanying conveyor was designed and manufactured to cut production losses for a company using a thermoformer in its manufacture of plastic trays. Prior to the *Wrabacon* system, when the thermoformer was down, the entire production line was down. The *Wrabacon* system was designed to fit between the thermoformer and the remainder of the down-stream system to provide continuous production capability.

The *Wrabacon* system was linked to the thermoformer in order to receive a signal to activate when that unit was down. From the fully adjustable supply hoppers that can hold a variation of tray sizes, vacuum equipped “pick arms” automatically maintain trays on a receiver plate. When signaled, the Denester System pushes the trays onto the conveyor, thus, ensuring downline production continues until the thermoformer is back in operation. The *Wrabacon* conveyor is equipped with a stop gate to ensure up-stream product is prevented from entering until the Denester has fully completed its last cycle. When the thermoformer is functioning normally, trays will be transported past the Denester.

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# Product Bulletin No. A-13

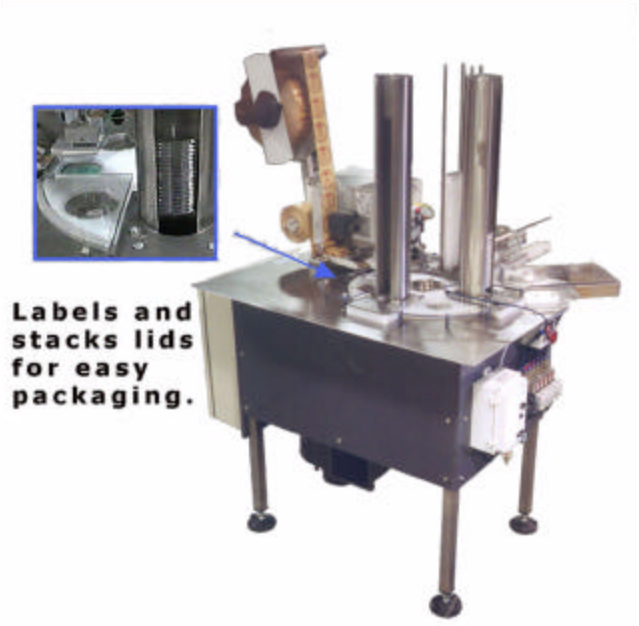
P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Automatic Denester, Labeler and Stacker System

Increased output, product appearance uniformity, exact product package count and ease of operation are a few of the benefits of an Automatic Denesting, Labeling and Stacker System that can be designed for any product shape or size.

The system shown is designed to denest plastic lids from an operator-filled hopper into pockets on the rotary table. Each lid is then indexed to the labeler where labels are applied uniformly. After the label is applied, the table rotates to twin stackers. When the first stacker is filled with a preprogrammed count of lids, the system automatically shifts to the alternate stacker while the operator slides a sleeve package over the filled stacker, removes the filled package, ties it and places it in its shipping carton. This particular system was designed to destack, label and stack 80 lids per minute as requested by the customer to permit the use of a single operator.

Systems controls include all hardwire devices being Allen Bradley 800T series; PLC-Allen Bradley Micro 1000; and Sick photo sensors. This particular system's pneumatics requirement is 60 to 75 psi @ .5cfm. Parts are easily accessible to clear product and conduct routine maintenance.The system design will maintain applicable OSHA standards and the National Electrical Code for Industrial Machinery.



Labels and stacks lids for easy packaging.

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# Product Bulletin No. A-12

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Metal Detector Conveyor

This custom Metal Detector Conveyor is the primary unit of a four-piece conveying system designed and manufactured for a large baking and distributing corporation. The Metal Detector Conveyor is 10 feet long, 24 inches wide and the frame is of stainless steel construction. The conveyor belt is durable, long-lasting Polypropylene.

The metal detector is an Advanced Detection Systems Series 1200 general purpose detector suitable for detection of ferrous and nonferrous metals in all types of food products, chemicals, plastics or other products where metal can have an unwanted consequence. *Wrabacon* also manufactures metal detector conveyors for all brands of metal detectors.

The other three units of this system include a 24-inch wide 90 degree conveyor with a heavy duty stainless steel flat wire belt; a 15-foot long, 24-inch wide conveyor with a non-skid belt that is flat for about 8 feet, then declines through a floor; and a 26-foot long, 24-inch wide conveyor with a non-skid belt that will be suspended from the overhead. The units are all of stainless steel construction and sturdy, adjustable foot pads are used on floor units.

The main Electrical Cabinet attached to the Metal Detector Conveyor controls motion and activity of all four conveyors. Each conveyor is driven by a totally enclosed fan motor (TEFC) with a reducer. This system will be able to run independently to any other existing systems. The system design will maintain applicable OSHA standards and the National Electrical Code for Industrial Machinery.

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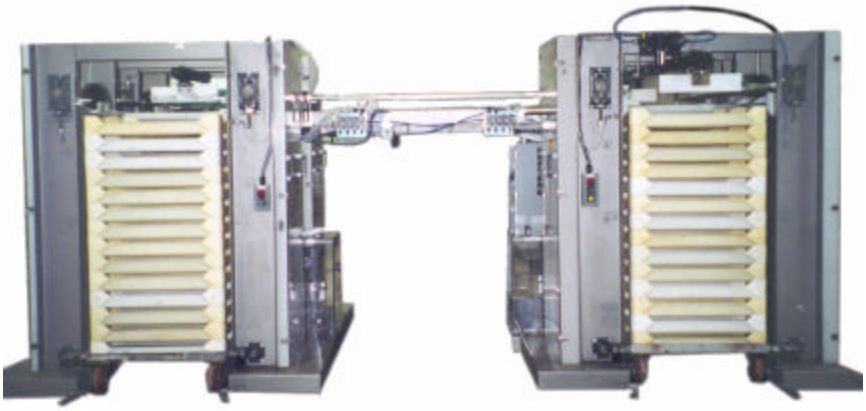
# Product Bulletin No. A-11

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## Tray Handling System

**(side view)**



This custom, automatic Tray Handling System was designed and manufactured to lift, transfer and stack 30-1/2" x 16" x 4" product trays. The system was designed to accommodate trays and transport dollies currently used by the customer. Each dolly, as shown, holds 28 trays (two stacks of 14). The opposite side of the system is identical to the side shown, allowing for a total of four dollies holding 112 trays. The system automatically transfers to the opposite side on both the input end when a dolly has been emptied, and the output end when a dolly has been filled.

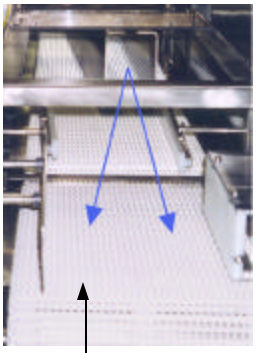
On the input end, the entire load of trays is raised one tray height. The top two trays are placed on transfer plates and indexed one at a time into the infeed conveyor. The conveyor transports a tray to a midway stopping point where another of the customer's systems fills the tray. It then is released and travels to the output end. As filled trays reach the output end, the first tray is indexed to the side where it awaits a second tray. When two trays are side-by-side, they are indexed down to the cart. The system automatically shifts to begin loading filled trays on the opposite side while the filled dolly is removed and an empty one put in place.

The equipment is built from heavy duty painted steel. All product surfaces are U.H. M.W. This system will be able to run independently to any other existing systems. Operational noise levels of this system will not exceed 85 dbs at 3 feet away from the equipment. The system design will maintain applicable OSHA standards and the National Electrical Code for Industrial Machinery.

# Product Bulletin No. A-10

P.O. Box 7, 150 Old Waterville Road, Oakland, ME 04963 (207) 465-7270 FAX (207) 465-2134
E-mail: Sales@Wrabacon.com Web-Site: www.Wrabacon.com

## 1 to 2 Product Diverter



This stainless steel, wash-down-capable system was designed and manufactured by *Wrabacon* for a company producing moist baby wipe products.

The system provides automated capability of receiving a single line of product and diverting to a side-by-side configuration for packaging.

The single line of stacked baby wipes enters the chute on the diverter conveyor. At the output end of the diverter chute (shown in outset) a single unit of wipes is dispensed and held until the chute moves to the opposite side and dispenses a second unit of wipes that stops exactly parallel to the first. The slide (to the right of the blue arrows) then activates to push the two bundles of wipes against the stop plate, forming a perfect rectangle bundle which is conveyed downstream for further processing. This system operates at 100 p.p.m.

Construction is one piece heavy duty stainless steel tubular frame complete with leveling foot pads. All potential pinch points are guarded with Lexan clear covers, which are interlocked into the unit's independent Emergency-Stop program.

As with all *Wrabacon* projects, these systems can operate with independent power source and controllers, or can be integrated into an existing production line and respond to signals from external sources.

WRABACON INC.
creative automation

Wrabacon specializes in designing quality and innovative product handling equipment. Most of our work is of a custom design nature. Over the years we've built up a solid reputation of providing quality equipment at reasonable cost.

The following is a partial list of our recent customers

**Balchem**
**Barber Foods**
**Bayer Diagnostics**
**Ben & Jerry's**
**Best Foods Bakery Group**
**Book of the Month Club**
**Boston Coffee Cake**
**Cabot Creamery**
**Chung's Gourmet Foods**
**Ciba**
**Convenience Foods**
**Estee Lauder**
**Fishery Products**
**Fujisawa Health Care**
**FMC Bio-Medical**
**General Mills**
**Golden Grain Corp.**
**International Salt**
**J.J. Nissen Bakeries**
**Josephs Pasta**
**Just Born**
**Konica**
**Kraft Foods**
**McCormick**
**Nabisco**
**Nypro**
**Ore-Ida Foods**
**Pepperidge Farms**
**Rich Seapak Corp.**
**Sara Lee**
**Schreiber Foods**
**SmithKline Beecham**
**Stillwell Foods**
**U.S. Surgical**
**U.S.D.A.**
**Quaker Oats Co.**
**Uno Foods**
**Wausau Paper**
**Whipple Co.**
**Yankee Candle**

Wrabacon manufactures to exacting specifications. We routinely fabricate in stainless steel as well as extruded aluminum and painted steel. We also manufacture to the food and meat industries' sanitary requirements. Every piece of equipment, every system, is pre-assembled and test run in our facility to assure a trouble-free installation. Wrabacon guarantees that every system will perform as specified.

We would certainly like to add your name to our list of satisfied customers.

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# ***Creative Packaging and Automation Equipment***

## *WRABACON designs and manufactures the following variety of quality and innovative product handling equipment*

**CONVEYORS:** Mat Top Conveyors, Belt Conveyors, Table Conveyors, Steel Mesh Conveyors, Metal Detector Conveyors, Retractable Conveyors, Line Dividers/Combiners, Assembly Conveyors, Pack Off Conveyors, Inspection Conveyors, Incline Bucket Conveyors, Vertical Power Merge Belts, Bucket Elevator Conveyors...

**MERGERS:** High-Speed Servo Merges, Gate & Release Merge, Vertical Power Merge Belts, Pivoting Belts...

**PRODUCT DIVERTERS:** Diverting one lane of product into multiple lanes.

**PRODUCT ACCUMULATORS:** Accumulator Tables, Rotary Accumulators/Unscramblers, Reversing Table Accumulators, Vertical Accumulators, Alpine Accumulators, Upstacking Accumulators, Bi-Flow Accumulators, Multi Level Bi-Flow Accumulators...

**TRAY STACKERS & DESTACKERS:** Vertical, Horizontal, Rotary, Tray Handling Systems...

**DENESTING:** Tray Denesters, Round Container & Pails, lid denester and closer...

**SPECIALTY EQUIPMENT:** Drum Conditioners, Pick & Place Systems, Bottle Orientation, Robotics, Custom Automation Systems...

**PRODUCT FEEDERS:** Servo controlled smart belt and cross feeder for feeding wrappers and cartoners at 200 products per minute or more. Also bulk counting and filling.

**SEMI-AUTOMATIC CASE ERECTOR:** Provides a very efficient packing station. The "Boxer" allows an operator to erect and secure a knock-down case in seconds.

**CONTROLS:** Full service panel shop with a staff of experienced control engineers and programmers who can design and build customized electrical control systems for most any application.

**COMPLETE SYSTEM INTEGRATION**

***** All products can be designed and manufactured to meet USDA Standards and Specifications *****