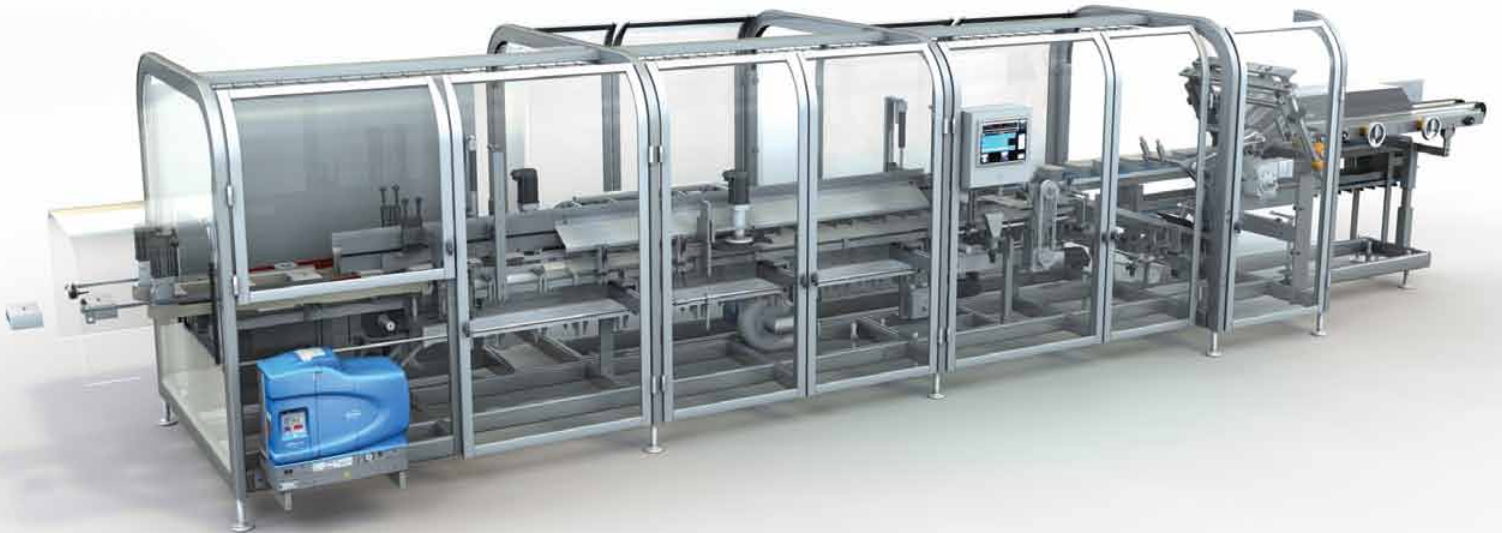


**Vectra Series**  
CARTONER



**Built to exacting Douglas Machine standards,** the flexible platform of the Vectra™ servo cartoner allows for either continuous or intermittent motion operation based on application requirements. The open architecture design allows for easy adaptation to variety of food and beverage plant conditions ranging from dry to hostile washdown areas requirements.

All servo driven technology ensures absolute product control in all machine phases from infeed to discharge. Each motion is precisely designed for your application, resulting in greater throughput, less waste and higher production efficiency.



## Automatic Infeed Systems

All our infeed product collation and timing solutions are offered to ensure gentle product handling and complete product control. Each infeed system is designed specifically for your application to achieve the highest level of efficiency. Some commonly used systems include:

- Random timing infeed – 2 correction belts
- Random timing infeed – 3 correction belts
- Overhead and reorienting sweeps
- Star-wheel infeeds (vertical and horizontal), single and multiple products per cycle
- Timing screw infeed
- Bag in box transfers
- Dual servo collation system (on demand)

## Product conditioning

- Overhead confinement for load
- Overhead compression at load
- Cammed funnels to protect raw carton edge to eliminate loading stub points

gentle  
product  
handling





## Carton Closing and Sealing

Tuck or glue for a wide range of carton styles

When closing and sealing your cartons, the Vectra uses live servo driven flap tuckers and compression. This technique consistently produces square cartons and proper adhesive compression. Cycle stop flap closing prevents unsealed cartons from exiting the Vectra. Tuck cartons use orbital motion closers for preparation of tuck, insertion and locking functions.

### Glue carton seals

- Econoseal
- FOL
- POL
- Z-View

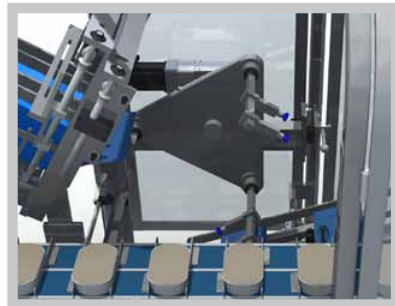
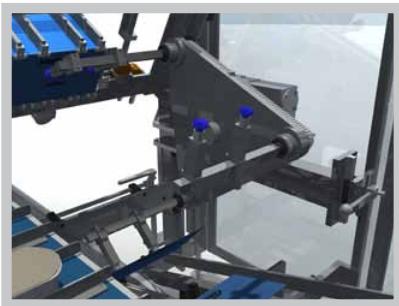
### Tuck cartons

- Reverse Tuck
- Straight Tuck

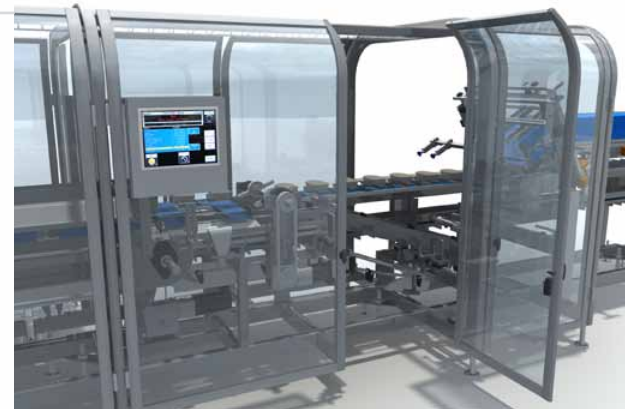
## Positive Placement Carton Set-up Modularity

Reciprocating, rotary or air-frame assisted methods are used for carton set-up. The appropriate technology is applied to meet the carton style and speed requirements.

- Low level rotary carton set-up with inclined carton delivery
- Low level rotary carton set-up with inclined carton delivery and air-frame
- Planetary rotary motion placer (practically zero velocity at pick up and placement). 120 degree or 240 degree with vacuum pre-brake
- Reciprocating (draw down, or top place) systems can be used on intermittent operations



## The VECTRA Advantage



- Walk-in frame design for easy access and maintenance
- All servo operation at the point of motion ensures overload protection at all machine functions
- Sanitation – fall through, balcony design, overhead wiring and servo cable mounting are ideal for dusty or wet environments. No through frame or under frame wiring is used
- Operator access – cantilevered design means less reach to the carton flights for easy jam clearing and adjustment
- More efficient and precise changeover adjustments than typical cartoners. Vectra utilizes menu driven servo adjustments and precise screw adjustments (rather than slotted adjustments). This includes magazine and glue gun positioning



## Offering Speed and Efficiency

Carton size and pitch dependent, the Vectra reliably handles speeds up to 300 cartons per minute.

The Vectra dramatically simplifies changeovers with servo driven flights, buckets and funnels. Manual adjustments are minimized and are tool-less.

### Automatic machine adjustments include:

- Leading flights (fig 1)
- Leading bucket sides and funnel sides (fig 2)

### Screw adjustments include:

- “D” dimension crank adjustment rack and pinion
- Vertical crank adjustment (carton hold down rail)
- Carton set up crank for height adjustment (fig 3)
- Carton magazine (fully screw adjustable, including back stop, fixed side flaps and vertical positioning) (fig 4)
- Glue gun positioning

Leading flights

FIG 1

Buckets

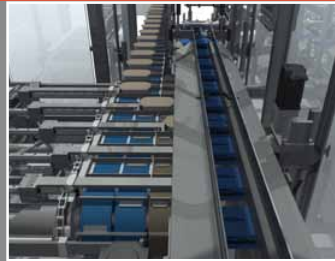
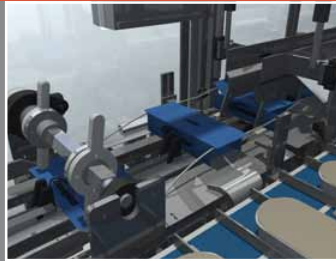
FIG 2

Setup crank

FIG 3

Magazine

FIG 4



*Intelligent design features answer the challenge of dynamic market demands and shortened product life cycles*

## Intuitive menu guide operators through the simple changeover process.

Most changeovers are accomplished through a simple menu-driven process on the HMI. Operators simply select from pre-programmed “recipes” for specific products, and servo motors precisely make the required adjustments.

By virtually eliminating changeover errors, a fast ramp-up is achieved.



There's a reason Douglas leads the industry in value-added offerings.  
It's not just our job... IT'S OUR COMPANY.

As a 100% employee owned company, you can rest assured that nobody works harder than Douglas to provide MORE for today's packagers.

As part of that commitment, we offer programs designed to keep your operation on the move and improve your bottom line.

Services like the **Reliability Assurance Program** provide comprehensive machine inspection, audit and analysis services to reach your maintenance goals and ensure maximum productivity.

Our **PartsDirect™ Program**, offers commercial OEM replacement parts at a guaranteed best price. See our web site for details and other value-add programs.

So when you choose Douglas, feel free to expect more. More knowledge, more innovation, more quality, more support. More of everything you need in a secondary packaging partner.



#### Vectra Series CARTONER

DRIVE:	Servo motors
PITCH:	Application dependent
FLIGHT CHAINS:	#60 series chain
SPEED:	Up to 300 cartons per minute (product and pack pattern dependent)
PRODUCT SIZE RANGE:	Per project specification
PACKAGE SIZE RANGE:	Per project specification
MAGAZINE CAPACITY:	8 ft.
FRAME:	Stainless steel tubular frame. Washdown construction (optional)
ADJUSTMENTS:	HMI recipe control of servo motions and glue. Threaded screws and other tool-less adjustments with digital set-points.
GLUE SYSTEM:	NORDSON ProBlue® or per project specification
FLAP CLOSING AND COMPRESSION:	Servo motors
GUARDING:	Full length radius polycarbonate with extruded anodized aluminum frames.
ELECTRICAL:	Allen Bradley ControlLogix motion and logic controller Allen Bradley Panelview NEMA 12 wiring and enclosures NEMA 4 or 4X wiring and enclosures (optional)
FINISH:	Stainless steel frame. Some parts are gray metallic epoxy powder coat. Other colors per project specification. All parts in contact with product are stainless steel, hard coat, and plastic. OEM parts are manufacturers' standard finish
INSTALLATION REQUIREMENTS	
POWER:	One main drop and one glue drop. 480 VAC, 50/60HZ, 3PH Other power sources available
AIR:	One drop 90 PSI (6.2 bar)

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More Than a Machine™