CUSTOMER DRIVEN

5



EMPLOYEE OWNED, CUSTOMER DRIVEN.



Much has changed around here since 1964.

And some things never will.

Customer Driven is more than a statement. It's a commitment that built our business, and a promise to every customer that trusts us with their partnership.

And as a 100% employee owned company, you can be confident there's an entire organization doing our best to ensure that promise is kept at every opportunity.

Absolutely nothing is taken for granted in our efforts to design, build and support superior equipment that exceeds your expectations. And everything we do is driven by the commitment to maximize success and minimize risk for your organization.

> Take a moment to browse our solutions. Then let us know how we can do more for you.



EMPLOYEE OWNED, CUSTOMER DRIVEN.

Interested in a quick look at our history? >

DOUGLAS

We're listening. That's a promise.

Horizontal Load Case & Tray Packing Combining the science of speed with the art of precise product control

For mid to high-speed case and tray packing applications, horizontal load solutions often provide efficiencies and speeds not attainable with other packing methods. At Douglas, we understand that efficient automation at this level requires innovative

design and precise control. We continually strive to develop and apply the most effective technology possible to control your product and packaging materials, delivering maximum performance and consistent operation shift after shift.



Intermittent Motion Machines

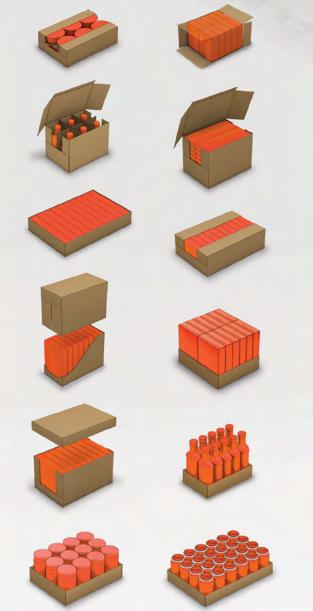
- Greater utilization through precise and repeatable changeovers
- Case forming and sealing systems engineered to produce optimal package quality
- Sanitary construction options to meet environmental and cleaning requirements
- Precise and repeatable machine motions velocity, speed and position control
- Engineered and proven product handling, collation and loading technology
- More speed, more control, more efficiency, more flexibility

CpONE®: Simply next-level performance. Our new generation design combines real world innovation and technology with over fifty years of product and material control experience. Simple operation. Simple maintenance. Pure performance.

Invex[®] IM: Unprecedented efficiency and economy. The Invex IM blends the perfect combination of technology and design to achieve high performance for mid-range case packing applications.

Axiom[®] IM: Maximum performance. The Axiom IM offers industry leading speed and efficiency, and is extremely adaptable to meet the most challenging applications and changing market demands.





Continuous Motion Machines

into the case.

leading speeds.

machines are preferred.



Axiom ARC

- Flexibility for high-speed food and beverage applications
- Automatic partition inserting for bottle applications
- High-speed product handling and grouping systems
- Continuous motion case forming, compression and sealing
- Axiom[®] DL: Compact continuous motion performance. The Axiom DL uses inline product flow and direct product loading
- Axiom[®] ARC: High-speed continuous motion case and tray packing. The loading system of the Axiom ARC is truly unique in the marketplace, providing the ultimate product control and efficiency at industry
- **OPTX**^{T-Series: Product collating and tray packing solution.} Ideal for applications without shrink wrapping or where standalone

Top or Bottom Load Case & Tray Packing Innovative solutions accommodate a wide variety of unique package designs



Top Load Case & Tray Packing

Our top loading and product collation technologies ensure optimum interaction between product, packaging materials and machinery to create the most effective solutions for your unique application.

TriVex[®] RL & RLi: Offering the flexibility of the TriVex RL case loader and the unique ability to seamlessly erect, load and seal top load cases with the integrated TriVex RLi, TriVex brings a new class of performance to automatic top load case packing.

- Collating systems for bags, pouches, cartons, trays, cups, cans, bottles and more
- Cartesian and vision guided Delta robot configurations for loading
- Flat and vertical pack casing for high-impact retail ready displays
- Case erecting, loading, sealing and lidding (tape or glue)

TriVex[®] SL & SLi: Providing the retail-ready packaging solution you've been looking for. The dual SCARA robotic solution combines the functionality of product infeed, pack pattern collation, and case loading into one mechanism. Simple design, simply effective.

- Designed to pack products upright with one or two product facings in retail-ready display cases
- Suitable for doy, pillow and flat bottom bags and pouches
- Capable of packing bags and pouches laying flat with 2 or 3 products per layer
- Rockwell Logix[®] controller and HMI for simple operation and maintenance
- Compact footprint requires less hardware and offers unparalleled machine accessibility

TriVex[®] CLi: Ideal for Individual Quick Frozen (IQF) products such as non-free-flowing frozen potatoes and vegetables, as well as pillow and gusseted bag applications requiring flat and vertical orientations. With the integrated case erector and large size range the TriVex CLi meets market demands for both retail and food service bags.

- Multi-bag collation and loading in the direction of travel, across machine, and vertically manages pack pattern density
- Pivoting cassette easily repositions for packing in horizontal or vertical bag orientation, reducing changeover time
- 15-minute changeover from vertical to flat pack
- Product maintains shape and condition throughout the full packaging cycle, ensuring exceptional package quality and proper bag positioning for retail display

Top load packages

THIS WAY



Triÿex SL





Trijex RL with DELTAIII Robotic Loader













Shrink Wrapping & Tray Packing Enhanced package quality delivered with next-level simplicity & efficiency



OPTX SPS 105 Tray/shrink system pictured

From the first look it's obvious we listened when you said simplicity and efficiency are priorities. With OPTX, every element was designed to enhance performance, simplify operation and reduce maintenance.

Intelligent and adaptable, OPTX solutions offer open, easy access, simplified control, advanced heat tunnel technology, superior efficiency and ultimate reliability.

OPTX systems were developed to meet all facets of today's accelerated production challenges, while ensuring your brand is consistently presented with industry-leading package appearance and durability.

Bottom line? With OPTX, producing the best looking packs on the shelf has never been easier.



Product wrapping and shrink tunnel





OPTX T Series Tray Packers: Product metering, grouping and tray packing



OPTX M Series Multiwrappers/Bundlers: Produce film only packs or packs with base pads



OPTX SPS Series Tray/Shrink Systems: Options include pad and film only capability



Innovations and Benefits

In addition to enhanced performance and simplicity, OPTX incorporates a host of innovative features that consistently deliver industry leading efficiency and package quality. Designed for exceptional reliability and low maintenance, Douglas listens, and continually strives to include features that make it easier and more profitable to produce exceptional packages.

Metering options offer simplicity & control

OPTX metering systems provide simplified design principles, exceptional visual and physical access, and accommodate a variety of products including shaped cans and bottles, cartons, and bundles with simplified changeover.

- Full-width grouping section conveyors optimize product stability and size range flexibility
- Controlled release and acceleration of product groupings for efficient transfer to sweep bars

Performance enhancing features are integrated into every element of OPTX film handling technology, contributing to operational simplicity, maximum uptime and exceptional finished package appearance and durability.

• High speed knife optimizes cutting performance











Simple, smart, accurate film handling technology

• Single nip roller innovations improve film cutting & transfer performance



Air Control Technology

Delivering enhanced package appearance & durability with next-level simplicity & efficiency

Precise recipe-driven control quickly and easily adjusts air temperatures and velocities, directing air exactly where it's needed for exceptional shrink performance in single or multi-stream operation.



- Wrapping wand profiles match pack size & optimize film positioning
- Auto belt tensioning & tracking provides increased belt life, reliability & less maintenance
- Full width belting & advanced roller design provides smoother transfers & positive film control

Cartoners/Sleevers/Multipackers Unmatched adaptability, exceptional efficiencies, maximum package appeal

Our paperboard cartoners, sleevers and multipackers

offer solutions for a wide variety of product types and sizes, carton and sleeve styles and pack configurations. Featuring servo technology and adaptable platforms, we deliver leading-edge results that will result in greater throughput, less waste and enhanced production efficiency.

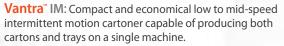
Innovations and Benefits

- Multiple infeed options available
- Cross push for single or multiple lane products with a pressure release surge at the load station, allowing a clean release of product to be loaded into a carton or tray
- Positive place conveyor (PPC) for form-filled sealed bags and pouches
- Vane collation for high speed handling of flat-flow wrapped products, bars and small pouches collated to single or multiple load stations
- Pick and place for product collation in buckets or at the load station
- Robotics for products received in mass or requiring manipulation prior to collation or loading
- Proven solutions for variety pack applications
- Choose a variety pack system with or without pattern rotation to produce additional pack varieties for applications with lower speed production rates
- Ideal solution available for applications requiring higher output and minimized labor requirements

Carton and sleeve packages



- Flexible machine platform with variable pitches available
- Speeds up to 300 cartons/min
- Open design allows for generous accessibility to setup and load areas while providing easy and efficient cleaning
- Plant conditions ranging from dry to hostile washdown



- Standard 11.25" pitch (customizable to non-standard pitches)
- Speeds up to 55 cartons/trays per minute
- Automated product collation or hand load options available
- Hygienic sheet metal frame structure with standoff bearing mounts

Spectrum: High-speed multipacker for cartoning beverage cans and bottles.

- 4 to 24 count cartons
- Knockdown and accordion style cartons
- Rotary and air assisted carton setups
- Multiple diameter capabilities
- Side-select and pinwheel metering systems
- Seating wheel loading
- Live overhead carton squaring
- Speeds up to 250 cartons/min





Vantra Im







Apex^{**}: High-speed, innovative sleeving solutions for wraparound, drop-through or neck-through sleeve configurations.

- Top, bottom or offset bottom seals
- Top or bottom gussets
- Retail ready product visibility
- Speeds up to 300 sleeves/min
- Corrosion resistant tubular stainless steel frame



Variety Pack Solutions High performance solutions for your most dynamic market demands



designed to offer the most flexible, efficient solutions available to meet the dynamic market demands of today, and tomorrow.

Available in multiple configurations to efficiently and reliably package cans or bottles in cartons, shrink bundles, cases and trays, Prisma systems utilize class-leading technology platforms with gentle product handling throughout the process. From simple systems with manual load infeeds to fully automated systems with high speed continuous motion packers, we integrate proven technologies in the ideal configuration for your application.

Variety pack combinations

•••	•••	•••	•••

Available on Vantra Cartoner only

Examples only.

Many more pack

patterns available.

	 -

Integrated Technologies

Douglas fully integrates multiple elements to produce your variety packs. Our full line of advanced automation solutions offer industry-leading performance for every step in the process. From unloading and delivery of product flavors, to routing of empty supply trays, to final packaging, Prisma solutions are designed and built to simply perform.

See Prisma in action! >

Automated Unloading

The Prisma unloader can be combined with any of the systems below to automate product infeed. Available for cans, bottles or both, Prisma automatically unloads trays and conveys them for downstream packing.

Low-Speed Cartoning

For low-speed automated cartoning, the Vantra IM cartoner can function as a standalone platform with manual infeed. Combine with a Prisma unloader to automate product infeeding as well as a TriVex tray reloader to automate downstream tray loading.

Mid to High-Speed Cartoning

For mid to high-speed automated cartoning, the Spectrum cartoner can function as a standalone platform with manual infeed. Combine it with a Prisma unloader to automate product infeeding as well as a TriVex tray reloader to automate downstream tray loading.

Tray Loading

OPTX SPS systems feature a wide range of automated tray packaging options, including tray-only, tray/film, pad/film and film-only packaging. Pair it with a Prisma unloader to automate product infeed.

Tray Re-Loading

As an automatic tray reloader, the TriVex RL system takes the original trays in which products are delivered and reloads the trays downstream to produce the final variety pack collation. Pair the TriVex RL with a Prisma unloader to automate product infeed.

Speed conforms to primary systems' speeds Flexibility up to 6 lanes

Speed up to 25 or 35 (12 packs) per minute Flexibility 4–24 packs, optional 30 packs,

2–6 flavors



Speed 100–150 (12 packs) per minute Flexibility 4–24 packs, optional 30 packs, 2-6 flavors



Speed 30, 60, 80 cycles per minute (1 pkg per cycle) Flexibility 12–36 packs, 2–6 flavors

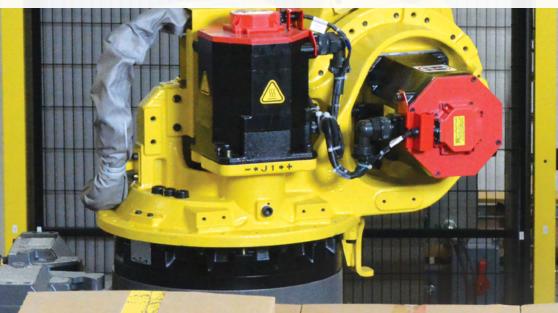


Speed 40 trays per minute Flexibility 12–24 packs, 2-6 flavors



Robotic Palletizers & Systems Creative solutions, modern automation, seamless integration

For end-of-line palletizing, the Douglas Stratum[™] Robotic Palletizer completes your packaging process. The Stratum system dispenses and conveys pallets, meters cases on the product infeed, and utilizes robotics to palletize cases and apply slip sheets. The Stratum easily combines with Douglas packaging and cartoning or other upstream and downstream equipment for seamless integration.



Integration Services for Secondary and End-of-Line Packaging

in the local day

We form a partnership with our customers. We listen to your needs and offer education on best practices, determining the most effective integration solution. Our engineering and manufacturing experts work closely with your team to customize a layout that meets your unique plant and process challenges while maximizing ROI.







Sinatum Robotic Palletizer Systems

- Pick and place of single or multiple cases, including an entire row to build pallet patterns efficiently dependent on pallet configuration and speed requirements
- Capable of single-in/single-out or multi-in/multi-out configurations
- Single or multiple infeed/discharge configurations available to match customer layout requirements
- Optional integration of third party ancillary equipment, supplying a complete end-of-line solution
- Allen-Bradley HMI interface
- Multiple robot models available based on speed, payload and reach
- Design configurations optimize robot utilization, case handling and pallet handling
- Slip sheet and tier sheet capability
- Guarding fence with integrated light curtains and safety switches
- Pallet dispenser and conveyance options



Experience + Innovation = Optimization

- Experienced in system engineering, factory needs and environment
- Customized, effective and creative solutions
- World class equipment and service

Customer Driven Service & Support It's not just what we do, it's who we are.



When you choose Douglas, you're getting more than a quality product, you're gaining a complete Customer Driven experience.

In every aspect of your relationship with us, our friendly and skilled employee owners are 100% committed to provide you with valuable and effective collaboration, innovative solutions, responsive support and more.

TANDARD component YEAR WARRANTY

Industry leading 3-year standard component with lifetime frame warranty. With total commitment to machine performance and the lowest cost of ownership in the business, nobody delivers like Douglas.





Our exclusive PartsDirect[™] program provides a single, convenient source for replacement parts. With this comprehensive program, you're ensured the guaranteed best price in addition to availability for all OEM replacement parts.

Maintenance Programs



The Douglas Reliability Assurance Program provides timely and comprehensive machine inspection, audit and analysis services to reach your maintenance goals and ensure maximum productivity.

Robot Maintenance Program

The Robot Maintenance Program provides you with an experienced technician who conducts visual inspections and preventative maintenance for your robot and equipment. We'll also provide basic adjustments, identify any worn or broken parts, and provide informal training to help increase machine efficiency.



Transform reactive maintenance into proactive control! With PartsPlus, our Replacement Parts Specialists review your machine history and offer recommendations for the appropriate kits, machine enhancements and any additional improvements you may benefit from. A customized floor plan and detailed instructions are included with every kit, and our skilled Service Technicians are standing by to assist you on a timeline that fits your schedule.

Training & Documentation

Our technical machine training and documentation helps our customers operate and maintain their machines efficiently and effectively.

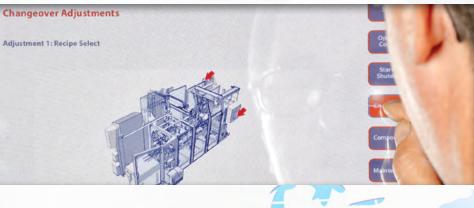
With a well-trained team, confident in knowing how to do their job well, your organization will benefit from increased performance and maintain its competitive edge.

Adjustment 1: Recipe Select

Remote Technical Support —

Douglas is proud to provide world-class service for all our customers' needs. Remote Service Technicians are located throughout the United States to offer the most responsive local support possible. With expertise in new, used and integrated machines, our team is dedicated to assisting you throughout the life of your equipment.







EMPLOYEE OWNED, CUSTOMER DRIVEN.