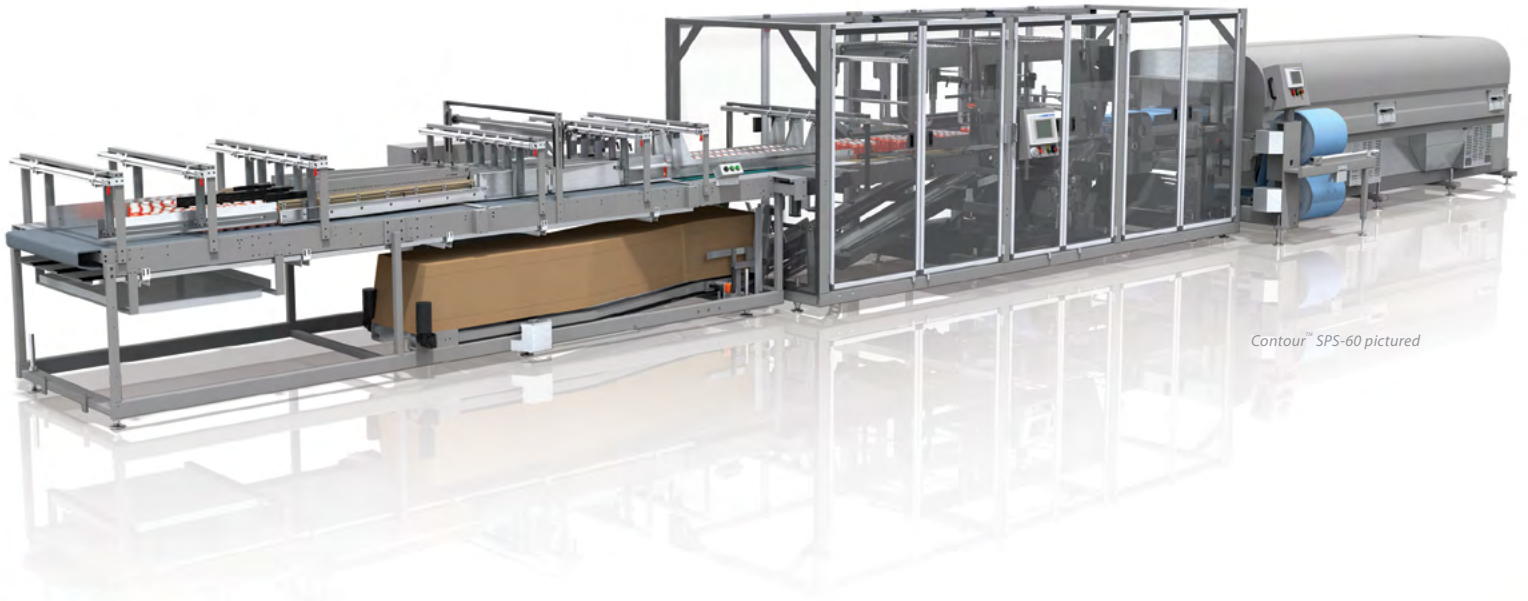


## *Contour™ 30/60 Series*

SHRINK WRAP SYSTEMS



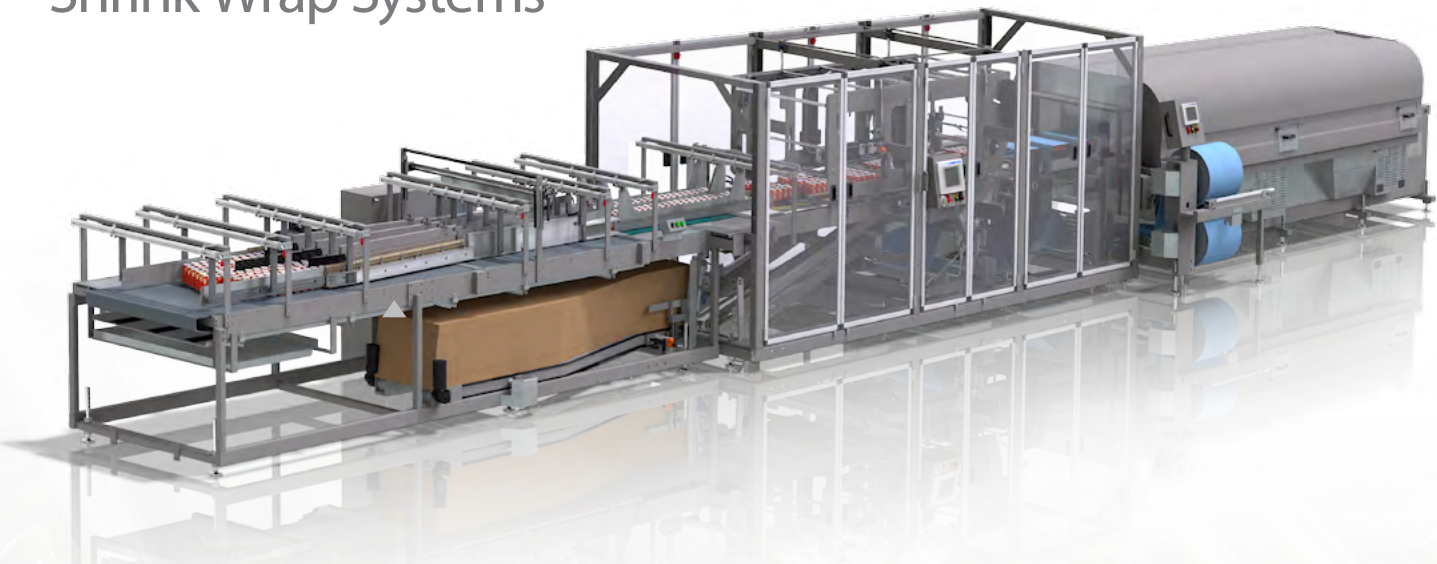
### **Higher performance through advanced solutions.**

Boldly at the forefront of packaging trends and market demands, the Contour™ Series continues to raise the standards for shrink wrap performance. With intelligent, adaptable and economical solutions offering advanced heat tunnel technology, superior efficiency and ultimate reliability, our shrink wrap systems meet all facets of today's accelerated production challenges while ensuring your brand is consistently presented with industry-leading package appearance and durability.

**DOUGLAS**



# Douglas Provides **More** with Contour™ Shrink Wrap Systems

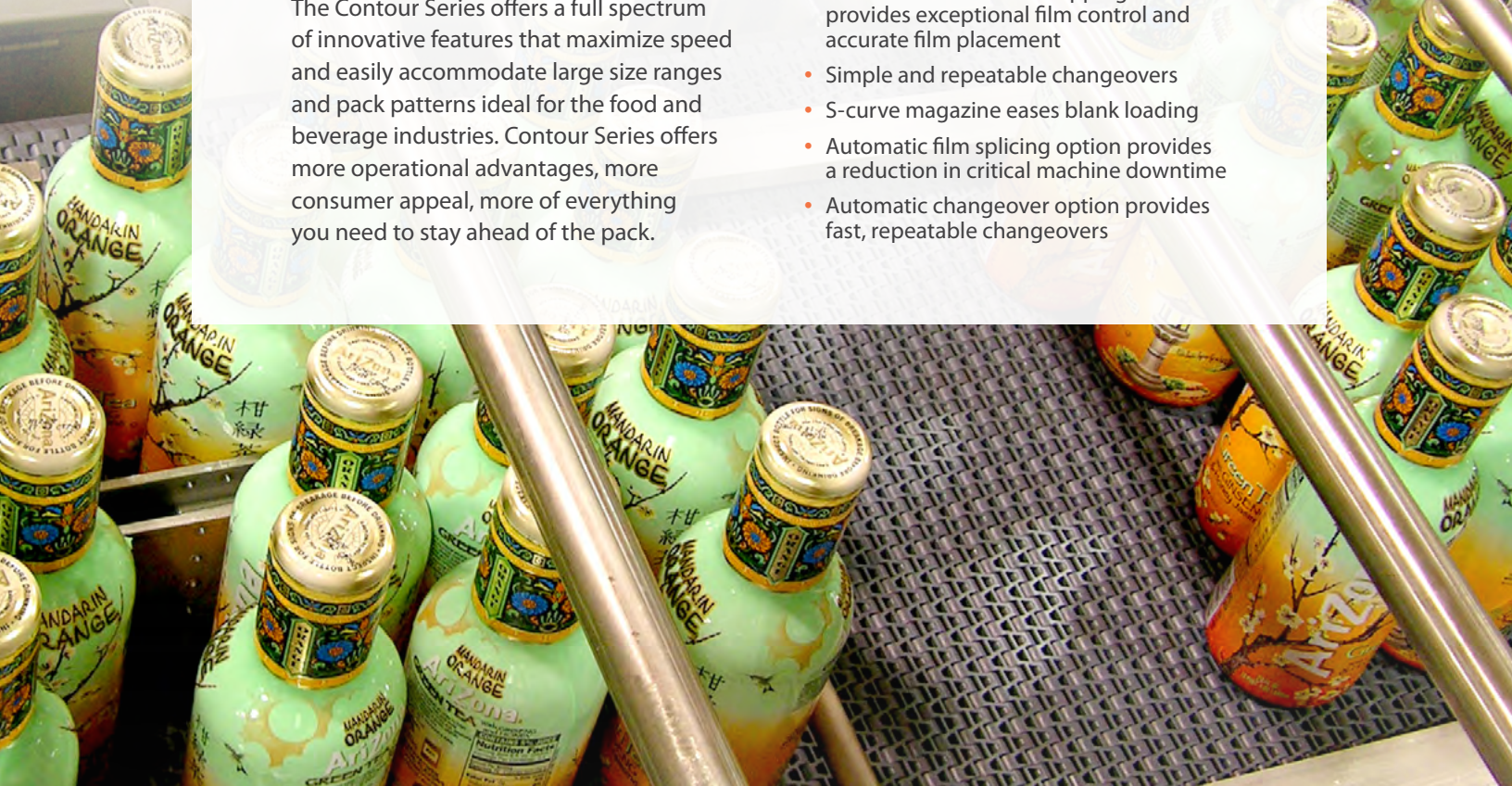


## Contour™ 30/60 Series

Contour Tray Packers and Shrink Wrappers are available as stand-alone units or fully integrated systems. These two versatile systems deliver exceptional performance and the best finished package appearance and durability available.

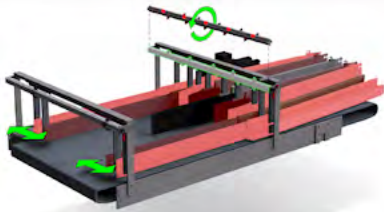
The Contour Series offers a full spectrum of innovative features that maximize speed and easily accommodate large size ranges and pack patterns ideal for the food and beverage industries. Contour Series offers more operational advantages, more consumer appeal, more of everything you need to stay ahead of the pack.

- Clear or printed film
- Film-only, pad, u-board and tray solutions
- Single stream and multi-stream capabilities
- Single or dual spindle side film stands assure proper ergonomics and add convenience for film loading and splicing
- Flexible servo driven wrapping wand provides exceptional film control and accurate film placement
- Simple and repeatable changeovers
- S-curve magazine eases blank loading
- Automatic film splicing option provides a reduction in critical machine downtime
- Automatic changeover option provides fast, repeatable changeovers





# Enhanced Productivity Through the Power of Innovation



**Smartrak®** Mass flow infeed design eliminates soft bottle bridging and removes gaps to ensure pack pattern accuracy and continuous product flow.

- Modulated conveyor speeds control product surge and aid flow
- Tool free clamps and pinned lane guide adjustments for stable operation and quick, accurate changeovers
- Single clamp design at each cross-member quickly lock-in multiple lanes



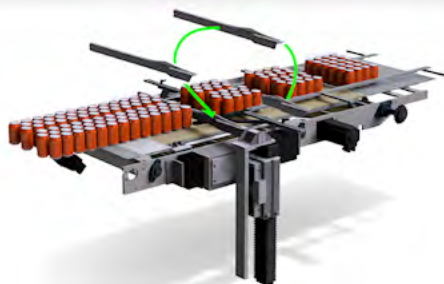
**SmartSelect™** Repeatable, pushbutton changeover reduces infeed changeover time to less than 5 minutes.

- Allows the placement of lanes where desired as opposed to centerline or fixed side adjustments
- More customer options for generating product-specific recipes
- Recipe-driven rail positions lock in place to within  $\pm 1/32"$
- Infeed rail's holding force withstands high product pressure



**Slipstream™** Mid-speed pinless metering offers highly accurate product registration for slower speed applications.

- Provides slip sheet grouping of pack patterns for tray packing
- Run bottled, cartoned, canned and other products without the use of tampers or escapement pins
- Tool free changeovers and preprogrammed settings increase productivity



**Variable Path Metering** Innovations to our patented Slipstream pinless metering system incorporate variable path registration bar technology and slip sheet technology.

- Gently groups and meters products into the machine
- Dynamic variable path motion registers products with less pressure and interruption to product flow



# Package Quality Requires Precision Film Control



## Precise Film Delivery

The single nip roller and vacuum belt film delivery combine with a servo driven cutting knife to provide efficient operation. Flexible servo driven wrapping wands use pre-cut cam tracks that enable the wand to match the product height and wand rotational speed. This results in increased film control and accurate film placement.

## Automatic Film Splicer (optional)

The ergonomically designed automatic film splicer delivers precise print registration and heat splicing, reducing critical machine downtime. The easy access side film stand enables operators to stage clear or printed film at their convenience, while the machine is running. Staging during operation maximizes production time and minimizes the occurrence of empty film faults. Once the film is staged, splicing occurs automatically, providing the additional benefit of greater workload flexibility for machine operators.



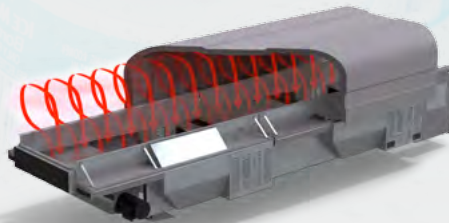


# Advanced Shrink Technology Enhances Your Brand

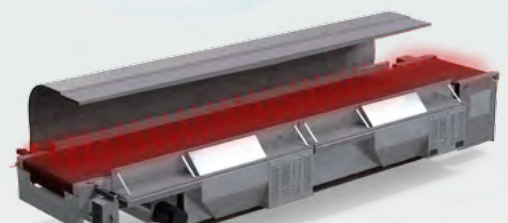
The Douglas Contour™ revolutionary patented heat tunnel is designed with the aesthetics of your product in mind. Whether your application calls for single or multiple lane production, unprecedented heat and airflow management ensures minimal graphic distortion, consistent bull's-eyes and a tighter, more durable wrap for maximum package integrity and appearance. Enhanced tunnel operations significantly reduce noise and exterior heat temperatures, contributing to a quieter, cooler plant environment.



The heat system is designed so the air supplied to the distribution system is perfectly uniform, eliminating film distortion due to hot or cold pockets. The Contour continuously recycles the air as it heats, decreasing the amount of energy required to reach operating temperature. A well insulated heat tunnel minimizes heat loss, which also maintains a safe outer surface temperature.



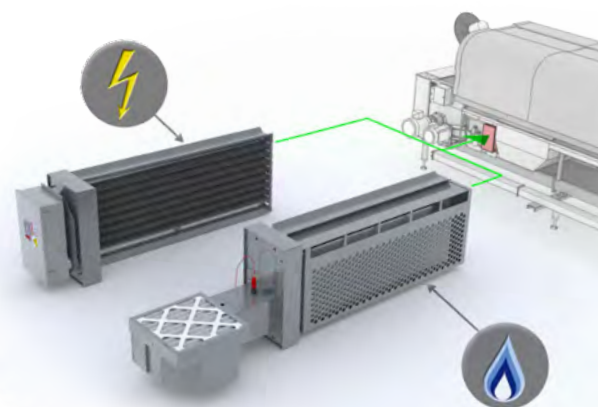
At the heart of this innovation is a unique combination of design features which result in "laminar" airflow, rather than "turbulent" airflow, which most shrink systems use today. Unlike turbulent airflow, which causes a multitude of shrinking inconsistencies, our proprietary laminar design precisely balances the heated air, perfectly "coating" the film from every direction, shrinking and sealing the film in an even, predictable manner.



Evenly heated air passing through the conveyor web contacts the film under the product resulting in consistent "air weld" of the film lap seam. Tunnel chain temperature and airflow are precisely adjusted through product specific recipe-driven changeovers. Poor lap sealing or holes melted in the seams are eliminated, resulting in strong and even seams that hold up to the rigors of distribution and stocking operations.

## Gas Powered Heat Tunnel (optional)

Reduce energy costs and improve production efficiency with a shorter heat-up time by using gas instead of electricity to heat the shrink wrap tunnel. Tunnels heat from 75°F to 360°F in just 15 minutes cutting the heat-up time by almost 30%. Depending on local energy costs and the type of machine used with the gas tunnel, it is estimated that companies could cut energy costs up to 75%. Contact Douglas to calculate your estimated cost savings.





## Specifications

SPEED	30 Series: up to 30 cycles/minute 60 Series: up to 60 cycles/minute
PACKAGE SIZE RANGE	Standard Minimum: 5" (130mm) x 3 1/2" (90mm) x 8 1/2" (215mm) Standard Maximum: 15 3/4" (400mm) x 12" (305mm) x 22" (560mm) * Direction of Travel x Vertical x Across Machine

Specification limits may not be available in all combinations and are subject to change without notice.

For custom specifications and information, contact a Regional Sales Manager today at: [320.763.6587](tel:320.763.6587) or [info@douglas-machine.com](mailto:info@douglas-machine.com).

## Typical Pack Patterns



## Customer Driven After Sale 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 local support as quickly as possible. We offer exceptional programs designed to keep your operation on the move and improve your bottom line. Machine inspection, audit, analysis, training and a solid warranty just to name a few. Our team is dedicated to assisting you throughout the life of your equipment.

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.

**more.** It's not just what we do, it's who we are.

To discover how **Customer Driven** means **more** to you, contact Douglas Machine at [320.763.6587](tel:320.763.6587) or [info@douglas-machine.com](mailto:info@douglas-machine.com) to discuss your packaging needs today.

Visit [douglas-machine.com](http://douglas-machine.com) for details about our company, our products/solutions and our service & support.



EMPLOYEE OWNED, CUSTOMER DRIVEN.



# *Contour* 80/105/150 Series

SHRINK WRAP SYSTEMS



**Boldly at the forefront**  
of packaging trends and market demands, the Contour® series continues to raise the standards for shrink wrap performance. With intelligent, adaptable solutions offering advanced heat tunnel technology, superior efficiency and ultimate reliability, Contour systems meet all facets of today's accelerated production challenges while ensuring your brand is consistently presented with industry-leading package appearance and durability.

Contour  
Contour  
Contour

**DOUGLAS**



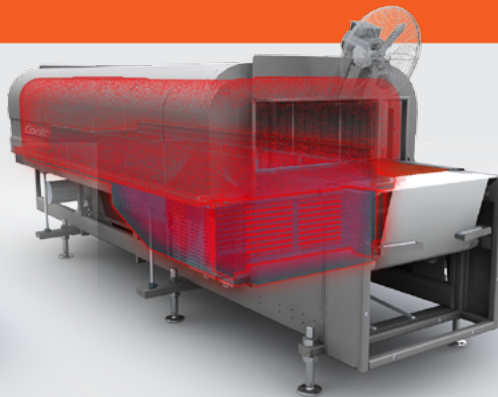
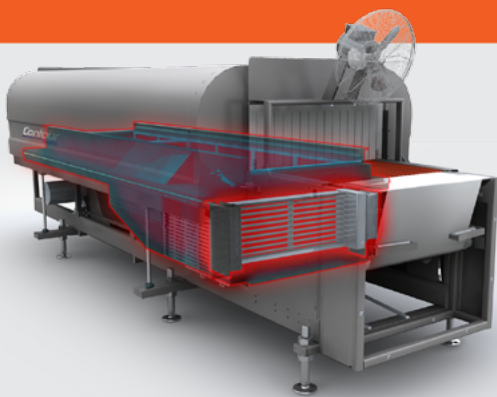
## Higher Productivity Through the Power of Innovation

Available as stand-alone or fully integrated systems for film-only, pad, u-board and tray applications, Douglas gives you more with Contour shrink wrap systems. More operational advantages, more consumer appeal, more of everything you need to stay ahead of the pack. The Contour Series offers a full spectrum of innovative features that maximize speed and easily accommodate large size ranges and pack-patterns for the food and beverage industries.



## Revolutionary Heat Tunnel Protects and Enhances Your Brand

The Douglas Contour® heat tunnel is designed with the aesthetics of your product in mind. Whether your application calls for single or multiple lane production, unprecedented heat and airflow management ensures minimal graphic distortion, consistent bull's-eyes and a tighter, more durable wrap. Enhanced tunnel operations significantly reduce noise and exterior heat temperatures, contributing to a quieter, cooler plant environment.



### 1 High Efficiency Heat Source

The heat system is designed so that the air supplied to the distribution system is perfectly uniform, eliminating film distortion due to hot or cold pockets. The Contour continuously recycles the air as it cools, decreasing the amount of energy required to reach operating temperature. A well insulated heat tunnel minimizes heat loss, which also maintains a safe outer surface temperature.

### 2 Balanced Laminar Airflow

At the heart of this innovation is a combination of design features, which result in “laminar” airflow, rather than “turbulent” airflow, which most shrink systems use today. Unlike turbulent airflow, which causes a multitude of shrinking inconsistencies, our proprietary laminar design precisely balances the heated air, perfectly “coating” the film from every direction, shrinking and sealing the film in an even, predictable manner.

### 3 Precision Lap Seam Welding

Evenly heated air passing through the conveyor web contacts the film under the product resulting in consistent “air weld” of the film lap seam. Tunnel chain temperature and airflow are precisely adjusted through product specific recipe-driven changeovers, optimizing performance. Poor lap sealing due to insufficient heat or holes melted in the seams due to overheating are eliminated, resulting in strong and even seams that hold up to the rigors of distribution and stocking operations.

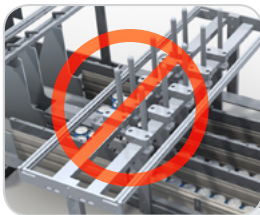




## Flexible, Low Pressure Conveying and Product Handling

All Douglas infeed conveying solutions are engineered to ensure gentle product handling and to maintain the highest package integrity. These versatile systems handle multiple product sizes and package configurations on demand, at high speeds.

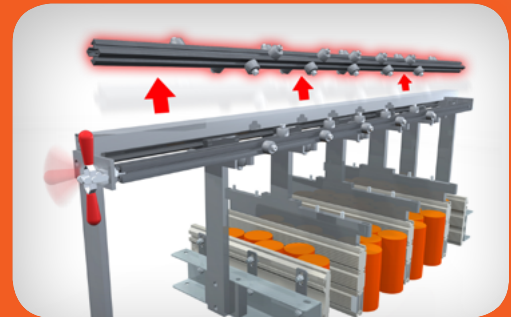
**Smartrak II** - Mass flow infeed design eliminates soft bottle bridging and removes gaps to ensure pack-pattern accuracy and continuous product flow. Distinguishing features include modulated speed control programming for surge pressure relief at the choke point, single solid adjustment cross-members, tool less clamps and pinned lane guide adjustment positions for stable operation and quick, accurate changeovers. By eliminating many mechanical changeover adjustments and replacing them with a one clamp design, changeovers are seamless and fast.



Single solid adjustment cross-members (right) eliminate many mechanical changeover adjustments (above).



Tool-free, single clamps further enhance changeover simplicity.



Bars are easily configured to accommodate up to 4 commonly run products.





## Efficient Pack-Pattern Collating and Loading

Douglas Machine redefines the role of pack pattern collating in high efficiency lines. Dramatic improvements to line throughput and product volume are realized, while providing maximum product handling stability with patented, proven technology.

**Slipstream™ HS / Slipstream™ SS** – pinless metering using slip sheet methodology and servo technology to gently meter bottled, cartoned, canned and other products in appropriate pack-patterns without the use of tampers or escapement pins. Remarkable stability control allows for faster handling than traditional metering methods. Tool free changeovers and the intuitive HMI control panel also increase productivity.

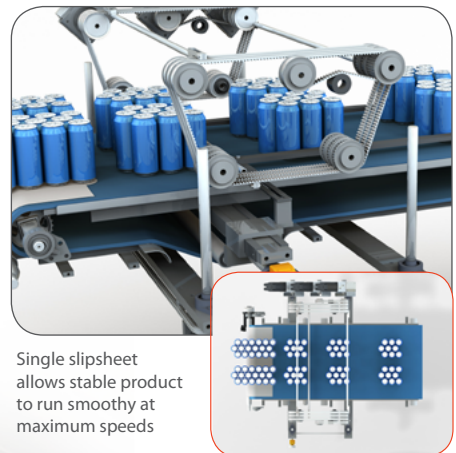
The appropriate technology is determined based on speeds and your product. Slipstream SS offers more stability as product moves faster, especially with unstable product or odd size/shaped packaging.

### Slipstream SS Speed Stabilized pinless metering



Smoother transitions and front/rear capture bars accommodate unstable product

### Slipstream HS High Speed pinless metering



Single slipsheet allows stable product to run smoothly at maximum speeds



## Maximizing Speed and Efficiency

From infeed, through product handling to our industry-leading shrink process, Contour offers innovative, common sense solutions that optimize performance throughout the process. Not satisfied with simply modifying existing technology, Douglas continually challenges conventional thinking to develop real-world advantages that deliver optimum throughput and unparalleled adaptability.

### Automated adjustment for maximum efficiency

Auto-adjust tunnel settings are fully recipe-driven tuned to each product and guaranteed repeatable.

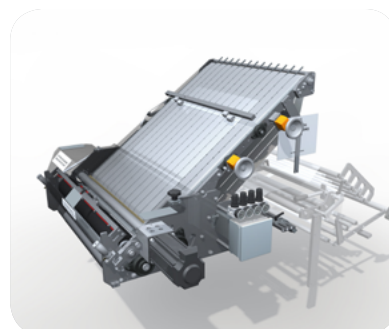
**Servo-controlled rotary pick-and-place** tray/pad feeding is suitable for production speeds of up to 150/min with the ability to handle a large size range.

**Film stands are side-mounted** to assure proper and productive ergonomics. The stand mounts outside the machine at the operator's waist level to ensure easy film roll loading. A second film spindle provides easy access to a spare film roll and convenient film splicing increases uptime.

**Revolutionary high speed cutter** offers options for a wide range of shrink materials. By efficiently cutting film as thin as .001 and maintaining the necessary speeds, production is increased while costs are reduced.

**Flexible servo-driven wrapping wands** use automated circular, elliptical or trapezoidal wand paths programmed to match the product size and pack speed. This results in increased film control and highly accurate film placement. Additional benefits include a large size range, the ability to accept randomly spaced products, and fewer parts to maintain.

**Wide belt, high speed wrapper tables** dramatically reduce or eliminate maintenance. Belt tracking loads are effectively absorbed, allowing faster continual speeds made possible by our advanced needle bearing design. Wrapper table nose bar assemblies have direct accessibility for replacing or repairing parts quickly and easily without removing tables.





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.

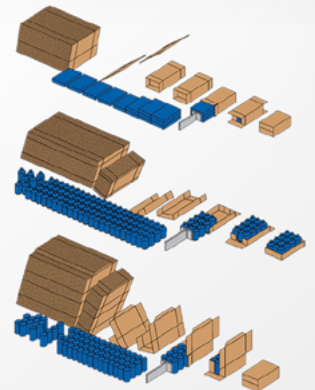


#### Contour 80/105/150 Series SHRINK WRAP SYSTEM

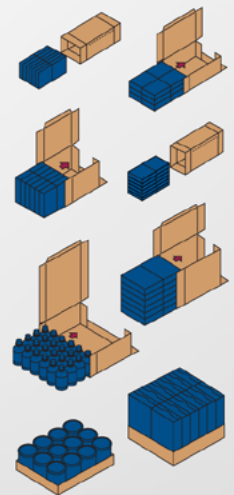
DRIVE:	Servo motors			
PITCH:	Application dependent			
FLIGHT CHAINS:	Application dependent			
SPEED:	Series 80 - Up to 80 cycles per minute			
	Series 105 – Up to 105 cycles per minute			
	Series 150 – Up to 150 cycles per minute			
PRODUCT SIZE RANGE:	Direction of Travel	Vertical	Across Machine	
	Minimum	5 in. (130mm)	3-1/2 in. (90mm)	8-1/2 in. (215mm)
	Maximum	15-3/4 in. (400mm)	12 in. (305mm)	22 in. (560mm)
FILM LENGTH:	Minimum: 18 in. (460mm) Maximum: 42 in. (1,070mm)			
FILM THICKNESS:	Printed or non-printed: 1 mil. to 3 mil.			
FILM WIDTH:	30 in. (760mm) standard Model dependent			
LEGS:	Threaded			
ADJUSTMENTS:	Threaded screws, handwheels and handknobs with position pointers and scales. Digital scales, phase adjustments and optional auto-adjust packages			
GUARDING:	Polycarbonate guarding. Other guard packages per project specification (optional)			
ELECTRICAL:	Allen Bradley ControlLogix motion and logic control or per project specification NEMA 12 wiring and enclosures NEMA 4 or 4X wiring and enclosures (optional)			
FINISH:	Gray metallic baked-on epoxy powder coat. Other colors per project specification. All parts in contact with product are stainless steel, anodized aluminum, and plastic. OEM parts are manufacturers’ standard finish			
INSTALLATION REQUIREMENTS				
POWER:	One main drop and one glue drop (if required). 480 VAC, 50/60HZ, 3PH Other power sources available			
AIR:	Per project specification			

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Typical Process Diagrams



Typical Pack Patterns



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